НАЦІОНАЛЬНИЙ УНІВЕРСИТЕТ ЦИВІЛЬНОГО ЗАХИСТУ УКРАЇНИ

Кафедра мовної підготовки

GLOSSARY OF CIVIL PROTECTION TERMS

СЛОВНИК ТЕРМІНІВ СФЕРИ ЦИВІЛЬНОГО ЗАХИСТУ

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Glossary of Civil Protection Terms : [Словник термінів сфери цивільного захисту] / Укл. І. Є. Богданова та ін. ; за заг. ред. В. П. Садкового. — Х. : НУЦЗУ, 2015. — 293 с.

Запропоноване видання є універсальним словником-довідником, який містить близько 3000 термінів та абревіатур із галузі знань «Цивільний захист» із розгорнутим тлумаченням, поданим на матеріалі міжнародних стандартів і наукових праць світового масштабу. У глосарії узагальнено багатогранний досвід розуміння й класифікації ключових понять сфери цивільного захисту, накопичений в англомовному світі, передусім у США, Великобританії та Австралії, окреслено провідні організації, які забезпечують управління в цій галузі на міжнародному рівні.

Словник буде корисним для працівників служби цивільного захисту, курсантів, студентів і викладачів вищих навчальних закладів відповідного профілю.

A

Absorbing capacity. The ability to absorb the free energy of an event without sustaining a loss of essential functions of the affected society. Absorbing capacity is a part of the overall resilience of a society.

Acceleration coefficient. An index related to the expected severity of **earthquake** ground motion.

Acceptable risk. Risk tolerance. Given that the provision of absolute safety is impossible, there is great sense in trying to determine the level of risk which is acceptable for any activity or situation. Thus, when a hazard is being managed, the financial and other resources allocated to the task should theoretically match the degree of threat posed by the hazard, as indicated by the rank of the risk. One must always specify acceptable to whom and that implies a conscious decision based on all the available information. The 1993 floods in the upper Mississippi river basin had an estimated return period of more than one in 200 years, yet some people who were flooded asserted that this event should now be regarded as an unacceptable risk. Such arguments ignore both the economic and social benefits derived by those communities from their floodplain location over the previous 100 years or so, when few flood losses occurred, and the cost to the taxpayer implied in protecting floodplain basins against a flood of the 1993 magnitude.

Accepted volunteer. Volunteers who have been fully registered and credentialed, rostered into the volunteer management system, and assigned to an incident task.

Accident rate. The number of reportable accidents related to the number of persons working, or the total number of hours worked, or to units, produced in an installation, company, etc. This enables, within limits, a comparison of the safety performance of various installations, companies, etc. Provided exactly the same definitions for the accident rate are used.

Accident. The word ‘accidental’ carries with it the connotations of both something that occurs by chance and something non-essential or incidental. The thesis that ‘accidents will happen’ and that therefore nothing can be done to prevent their occurrence reaches its logical fulfillment in the thesis of Charles Perrow that accidents are so inevitable and therefore non-preventable that we are even justified in calling them ‘normal’.

Accreditation. Empowerment provided to an organization through legislation, statute or regulation from an appropriate local, State, Tribal or Federal government agency authorizing the organization to credential personnel for incidents in which the organization participates. According to the NIMS Integration Center, accreditation refers to the empowerment of certifying/qualifying organizations with the authority to declare an individual capable of performing critical tasks and capabilities.

Act of God. An unintentional hazard event (usually a natural hazard) whereby society feels that no individual or organization is responsible for the hazard occurrence or its impact, i.e., an accident. This is an increasingly narrow category of hazards in the U.S., as society has begun to view almost all hazards or their impact as predictable, and that mitigation actions could be undertaken. In

particular, risk management has presented the view that technological hazards are expected outcomes of planned risk behavior, and even that technological failure from a natural hazard is usually predictable and could have been avoided. For example, almost all motor vehicle crashes are now viewed as expected outcomes of speed, substance use, distracted drivers or other behavior, failure of mechanical equipment or road design, and are now referred to as crashes rather than motor vehicle accidents.

Action plans. Written or verbal plans that reflect the overall incident goal (control objectives) and incident strategy, objectives for the designated operational period, specific tactical actions and assignments, and supporting information for the designated operational period. They provide designated personnel with knowledge of the objectives to be achieved and the strategy and steps to be used for achievement, hence improving coordination across different levels of government and intrastate jurisdictional borders. Actions plans not only provide direction, but also provide a metric for measuring achievement of objectives and overall system performance.

Activate. Emergency management definition): To begin the process of mobilizing a response team, or to set in motion an emergency response or recovery plan, process, or procedure for an exercise or for an actual hazard incident.

Activation. A notification category that provides urgent information about an unusual occurrence or threat of occurrence, and orders or recommends that the notified entity activate its emergency response (usually via its emergency operations plan). An activation may be partial (stipulating the components of the EOP to activate, or some other indication of the level of commitment to be made by the notified entity) or full (stipulating full activation of the notified entity's EOP). It usually includes actionable information directing the notified entity on initial actions for mobilization, deployment, and/or response.

Active fault. A fault along which slip has occurred in historical (or holocene) time, or on which earthquake foci are located.

Activity. Any operational process, system, structure, equipment, or group that fulfills a programmatic purpose. Examples include, but are not limited to, storage areas, radioactive waste disposal and processing systems, burial grounds, environmental restoration projects, tank farms, characterization and decontamination projects, and analytical laboratories.

Actor. Individual simulating a victim, victim family, media, perpetrator, or other person within the exercise scenario to prompt realistic action/reaction from the exercise players.

Actors/Role-Players. Controllers who simulate members of non-participating organizations, and role play key individuals such as injured personnel. They may come in face-to-face contact with the responders, functioning semi-independently as media reporters, next-of-kin, or injured personnel. They may be members of a control cell with telephone communication being the only interaction with responders.

Actual Event. A disaster (natural or man-made) that has warranted action to protect life, property, environment, public health or safety. Natural disasters include earthquakes, hurricanes, tornadoes, floods, etc.; man-made (either intentional or accidental) incidents can include chemical spills, terrorist attacks, explosives, biological attacks, etc.

Acute dose. A total radiation dose received at one time over a period so short that biological recovery cannot occur.

Acute exposure. Radiation exposure of short duration.

Acute respiratory disease. Several acute, mild to severe infections of the respiratory tract, caused by a variety of viruses and bacteria. It ranges from the common cold to influenza, bronchitis, even fatal pneumonia. A major cause of illness and mortality in disaster situations.

Acute Toxicity. The ability of a substance to cause poisonous effects resulting in severe biological harm or death soon after a single exposure or dose. [Union Pacific Railroad Environmental Terms Glossary]

Adapt. To make suitable for a purpose; become adjusted to new conditions.

Adaptation. The adjustment of an organism or population to a new or altered environment.

Adequate. An adjective that denotes the quality or quantity of a system, process, procedure, or resource that will achieve the relevant incident response objective. See definition for effective.

Advance burn. A prescribed fire that reduced fuel through a forest area before felling operations. It is intended to improve the safety of timber harvesting operations and as a silvicultural tool to protect lignotubers and standing trees.

Advance Element of the Emergency Response Team (ERT-A). The portion of the Emergency Response Team (ERT) that is the first group deployed to the field to respond to a disaster incident.

Advance readiness activities (NRF). There are times when we are able to anticipate impending or emergent events that will require a national response, such as an upcoming hurricane season, a potential pandemic, or a period of heightened terrorist threat. We must capitalize on this critical window of opportunity to increase readiness activities. For example, we can pre-identify needs and fill gaps in our current capabilities or resources that will be required to address the specific nature of the forthcoming incident. We also will pre-position commodities such as water, ice, emergency meals, tarps, and other disaster supplies so they will be readily available for use. Additional advance readiness activities include establishing contracts with the private sector prior to an incident and developing pre-negotiated agreements with Federal departments and agencies to ensure that appropriate Federal resources are available during a crisis.

Advanced life support. Interventions to protect the airway, assist breathing, relieve pain and suffering, and maintain circulation (includes the use of laryngoscope and/or magill's forceps, defibrillation and drug therapy).

Advisory Committee on Earthquake Hazards Reduction. This Committee is charged with assessing trends and developments in the science and engineering of earthquake hazards reduction; the effectiveness of NEHRP; the need to revise NEHRP; and the management, coordination, and implementation of NEHRP.

Advisory. A notification category that provides urgent information about an unusual occurrence or threat of an occurrence, but no activation of the notified entity is ordered or expected at that time. An advisory can be used for notification that something has occurred or is anticipated, and provide actionable information for notified personnel even though the response entity is not being activated. For example, a weather advisory that includes recommended actions for individuals.

Advocacy. the act of pleading or arguing in favor of something, such as a cause, an idea, or a policy; active support.

Advocate. A person who publicly supports or recommends a particular cause or policy.

Aerial fuel. The standing and supporting combustibles not in direct contact with the ground and consisting mainly of foliage, twigs, branches, stems, bark and creepers.

Aerial ignition. The igniting of fine fuels for prescribed purposes by dropping incendiary devices or materials from aircraft.

Aerial observer. A person specifically assigned to discover, locate, and report fires from an aircraft, and to observe and describe conditions at a fire scene.

Aerodynamic Equivalent Diameter (AED). The diameter of a sphere of density 1g-cm that exhibits the same terminal velocity as the particle in question.

Affiliated volunteer. Volunteers who possess a pre-disaster association with an agency or organization that is incorporated in the disaster response, but their pre-event training, registration information, and skills verification may vary. Rostering of affiliated volunteers by the volunteer management system during an incident may be expedited by transfer of the information for each affiliated volunteer from their volunteer organization.

After Action Report (AAR) process. A focused, post-incident or post-exercise activity to capture objective observations, both positive as well as negative, related to response system performance. Its product is commonly referred to as lessons learned, but a comprehensive process goes beyond the collection of lessons learned to accomplish objective improvements in procedures, assignments, equipment, training, and personnel to attain true organizational learning. This term AAR process is used by SEMS to describe the activity related to developing and conducting the After-Action Review, including meetings and documentation review and developing the after action report.

After Action Report Meeting. The gathering of incident or exercise participants and observers in a tightly moderated effort to discuss the incident response and/or recovery for the purpose of obtaining system performance information useful to the AAR process.

After Action Reports. Reports that summarize and analyze performance in both exercises and actual events. The reports for exercises may also evaluate achievement of the selected exercise objectives and demonstration of the overall capabilities being exercised.

After Action Review. The process of reviewing an incident or exercise response to assess response performance. This can be considered to be one component of the After Action Report process.

Aftershock. Earthquakes that follow the largest shock of an earthquake sequence. They are smaller than the mainshock and can occur over a period of weeks, months, or years. In general, the larger the mainshock, the larger and more numerous the aftershocks and the longer they will continue.

Agency field commander. The officer responsible for commanding the activities of an agency in the field.

Agency representative. A person assigned by a primary, assisting, or cooperating Federal, State, local, or tribal government agency or private entity that has been delegated authority to make decisions affecting that agency's or organization's participation in incident management activities following appropriate consultation with the leadership of that agency.

Agency, supporting. An agency providing suppression or other support and resource assistance to a protecting [fire] agency.

Agency. A division of government with a specific function, or a nongovernmental organization (e.g., private contractor, business, etc.) that offers a particular kind of assistance. In ICS, agencies are defined as jurisdictional (having statutory responsibility for incident mitigation) or assisting and/or

cooperating (providing resources and/or assistance). See Assisting Agency, Cooperating Agency, and Multi-agency.

Agroterrorism. Agroterrorism is the deliberate introduction of a chemical or a disease agent, either against livestock/crops or into the food chain, for the purpose of undermining stability and/or generating fear.

AHA. American Hospital Association.

Air attack. The direct use of aircraft in the suppression of wildfire.

Air inversion. A meteorological condition in the earth's atmosphere in which the air some distance from earth surface is higher in temperature than that at ground level. Such a condition traps air and released vapours near the earth surface, thereby impeding dispersion.

Airborne Release Fraction (ARF). The coefficient used to estimate the amount of a radioactive material suspended in air as an aerosol and thus available for airborne transport under a specific set of physical stresses. The ARF is a fraction of the material affected for a discrete event.

Airborne Release Rate (ARR). The coefficient used to estimate the amount of radioactive material that can be suspended in air and thus available for airborne transport under a specific set of physical stresses as a function of time. The ARRs are often longer-term averages due to the non-discrete nature of the release.

Aircraft incident. An occurrence, other than an accident, associated with the operation of an aircraft, which affects or could affect continued safe operation if not corrected. An incident does not result in serious injury to persons or substantial damage to aircraft.

Airline coordinator. A representative authority delegated by an airline to represent its responsibilities during an emergency involving its aircraft or property

Airport control tower. A facility established to provide air traffic control service for airport traffic.

Airport emergency plan. Procedures for coordinating the response of airport services with other agencies in the surrounding community which could assist in responding to an emergency occurring on, or in the vicinity of, the airport.

Airway management administration of airway structures to ensure clear passage for the flow of gases into and out of the body. It may involve simple postural changes such as jaw thrust or lateral positioning, or advanced techniques such as oropharyngeal intubation.

Airway. The passage by which air enters and leaves the lungs.

Alert phase. A situation wherein apprehension exists as to the safety of a vessel or aircraft and of the persons on board.

Alert. A notification category between advisory and activation that provides urgent information and indicates that system action may be necessary. An alert can be used for initial notification that incident activation is likely, and for ongoing notification throughout an incident to convey incident information and directed or recommended actions.

Algorithm. A process or set of rules used for calculation or problem solving.

All-agencies approach. Arrangements for dealing with emergencies and disasters involving an active partnership between commonwealth, state and territory, and local levels of government, statutory authorities, and voluntary and community organisations. Syn. The 'integrated approach'.

All-hazard. Any incident or event, natural or human caused, that requires an organized response by a public, private, and/or governmental entity in order to protect life, public health and

safety, values to be protected, and to minimize any disruption of governmental, social, and economic services.

All-hazards approach. Emergency management must be able to respond to natural and manmade hazards, homeland security-related incidents, and other emergencies that may threaten the safety and well-being of citizens and communities. An all-hazards approach to emergency preparedness encourages effective and consistent response to any disaster or emergency, regardless of the cause.

All-hazards focus. Employ an all-hazards focus. Hospitals must be prepared to respond to any type of emergency or disaster facing their communities, not just bioterrorism. Therefore, the title of and provisions in the law regarding how hospital readiness funding may be used should reflect this all-hazards planning focus.

All-hazards preparedness. The term 'all-hazards preparedness' refers to preparedness for domestic attacks, major disasters, and other emergencies.

All-hazards. A descriptor that denotes a specific strategy for managing activities in an emergency management program. Throughout the four phases of EM, management structure, processes and procedures are developed so they are applicable to every significant identified hazard. The remaining hazard specific interventions are layered on top of the basic components as indicated and presented through incident annexes in the emergency operations plan (EOP). For example, the procedures for notifying appropriate personnel during EOP activation would use the same process across all hazard types, even though the types of personnel notified and mobilized may vary by hazard.

Allocated resources. Resources working at an incident.

Alluvial Fan. An area at the base of a valley where the slope flattens out, allowing the floodwater to decrease in speed and spread out, dropping sediment over a fan-shaped area.

Alpha Particle. A positively charged particle ejected spontaneously from the nuclei of some radioactive elements. It is equal in mass and charge to a helium nucleus and has low penetrating power and short range. The most energetic alpha particle from radioactive decay will generally fail to penetrate the skin. Alphas are hazardous when an alpha-emitting nuclide is introduced into the body.

Alpha radiation. A helium nucleus emitted spontaneously from radioactive elements. It is dissipated in a few centimeters of air or less than 0.005 mm of aluminum.

Amateur Radio Disaster Services (ARDS). Previously Amateur Radio Emergency Services.

Ambulance controller. Usually a senior ambulance officer, located distant from the disaster site at a medical or ambulance control centre, responsible for controlling all ambulance operations at a disaster. Receives input from the on-site ambulance commander and liaises with the medical controller.

Ambulance holding point. An area which may be set aside at which ambulances and other patient transport vehicles are marshalled until required to collect patients from the patient treatment post. Prevents congestion at the ambulance loading point.

American Homeland. 'American homeland' or 'homeland' means the United States, in a geographic sense.

American Red Cross. The American Red Cross is a humanitarian organization, led by volunteers, that provides relief to victims of disasters and helps people prevent, prepare for, and respond to emergencies. It does this through services that are consistent with its Congressional Charter and the Principles of the International Red Cross Movement.

American Society for Testing and Materials (ASTM). ASTM International is one of the largest voluntary standards development organizations in the world originally known as the American Society for Testing and Materials (ASTM), was formed over a century ago. Today, ASTM continues to play a leadership role in addressing the standardization needs of the global marketplace. Known for its best in class practices for standards development and delivery, ASTM is at the forefront in the use of innovative technology to help its members do standards development work, while also increasing the accessibility of ASTM International standards to the world.

Amplitude. The difference between zero level and peak of any wave such as a seismic wave.
An occurrence or event, natural or human-caused that requires an emergency response to protect life or property. Incidents can, for example, include major disasters, emergencies, terrorist attacks, terrorist threats, wildland and urban fires, floods, hazardous materials spills, nuclear accidents, aircraft accidents, earthquakes, hurricanes, tornadoes, tropical storms, war-related disasters, public health and medical emergencies, and other occurrences requiring an emergency response.

Anabatic wind. An upslope wind, it usually applies only to the wind blowing up a hill or mountain as the result of strong surface heating of the slopes.

Analysis. A method of studying the nature of something or of determining its essential features and their relationships.

Anemometer. Instrument which measures wind speed or wind speed and direction.

Anomaly (emergency management application): a deviation from baseline surveillance statistics or reporting characteristics, sufficient enough to prompt some form of rapid investigation. In medicine and public health, this would be a rapid epidemiological investigation. An anomaly in public health should prompt a rapid epidemiological investigation. See case of concern and index case

Anticyclone. Region of the atmosphere where the pressures are high relative to those in the surrounding region at the same level. It is represented on a synoptic chart by a system of isobars at a specific level, or of contours at a specific pressure, which enclose relatively high value of pressure or contour height/' syn. 'area of high pressure', 'high' and 'high pressure system'.

Antidote. A treatment for chemical over-exposure which is specific (more or less' to the chemical or class of chemicals, in contrast to supportive treatment which maintains body functions.

Antiterrorism. Programs and activities, defensive in nature, used to reduce the vulnerability and attractiveness of people and property as targets of terrorism.

APA. American Planning Association.

APHS/CT. Assistant to the President for Homeland Security and Counterterrorism (also serves as the National Continuity Coordinator).

Applied Technology Council (ATC). An organization which develops engineering resources for use in mitigating the effects of natural and other hazards on the built environment.

Appraisal and Assessment Programs. Programs intended to ensure that emergency capabilities are sufficient to implement emergency plans and that appropriate and timely improvements are made in response to needs identified through coordinated emergency planning, resource allocation, training, drills, and exercises.

Appraisal. The formal process by which external or oversight organizations evaluate the ability of an organization or facility to comply with DOE and other applicable regulations, orders, plans, and procedures.

Approach, all-hazards. A strategy that addresses the commonalities of incident identification, assessment, and response to natural, technological, and intentional hazards. It provides a common emergency operations plan for use in response to and recovery from all emergencies and disasters.

Area Command (Unified Area Command). An organization established (1) to oversee the management of multiple incidents that are each being handled by an ICS organization or (2) to oversee the management of large or multiple incidents to which several Incident Management Teams have been assigned. Area Command has the responsibility to set overall strategy and priorities, allocate critical resources according to priorities, ensure that incidents are properly managed, and ensure that objectives are met and strategies followed. Area Command becomes Unified Area Command when incidents are multijurisdictional. Area Command may be established at an emergency operations center facility or at some location other than an incident command post.

Area Command. An element of the Incident Command System. If necessary, an Area Command may be established to oversee the management of multiple incidents being handled by separate Incident Command Posts or to oversee management of a complex incident dispersed over a larger area. The Area Command does not have operational responsibilities and is activated only if necessary, depending on the complexity of the incident and incident management span- of-control considerations. The Area Command or Incident Command Post provides information to, and may request assistance from, the local emergency operations center.

Area Emergency Manager (AEM). A field representative of the VA's Emergency Management Strategic Healthcare Group (EMSHG) whose functions include oversight and management of the National Disaster Medical System (NDMS) program in selected areas to which they are assigned. In addition, specific AEMs are assigned as VISN (Veterans' Integrated Service Network) liaisons to assist VISN Directors, staffs and medical centers in the development of comprehensive emergency management programs and planning to meet external mission requirements in regard to support of other federal departments and agencies such as the Department of Defense.

ARES. Amateur Radio Disaster Services.

Artifact, exercise. Artificialities that occur during exercises of all types that affect tasks, processes, outputs and outcomes in either a positive or negative fashion. They should be recognized and addressed by exercise controllers during the exercise event, or by exercise evaluators and after-action report managers during the exercise analysis.

Artificiality, exercise. An assumption, accepted for the sake of the exercise, which allows the scenario and participants' play to evolve so that the exercise objectives can be achieved. For example, a skip forward in time during the exercise, or an unrealistic hazard effects to stress specific components of a response system could be injected as exercise artifacts.

ASCE. American Society of Civil Engineers.

Aseismic. Non-seismic; used to designate an area free from seismic activity or a tectonic deformation process not accompanied by seismic events.

ASFPM. Association of State Floodplain Managers.

Ash flow. Pyroclastic flow including a liquid phase and a solid phase composed mainly of ashes.

Asphyxiant. A vapor or gas which can cause unconsciousness or death by suffocation (lack of oxygen). Most simple asphyxiants are harmful to the body only when they become so concentrated

that they reduce oxygen in the air (normally about 21 percent) to dangerous levels (18 percent or lower). Asphyxiation is one of the principal potential hazards of working in confined spaces.

Assess. To estimate the size or quality of.

Assessment, needs. A specific form of evaluation, distinct from performance evaluation, that focuses upon needs rather than upon system performance. It is conducted with commonly used evaluation methodology: surveys, interviews, meeting reports and others.

Assessment. The product obtained from assessing; An interdisciplinary process that involves the collation, evaluation, and interpretation of information from various sources concerning both direct and indirect losses, and short-and long- term effects.

Assignments. Tasks given to resources to perform within a given operational period that are based on operational objectives defined in the IAP.

Assistance evaluation. An assessment that provides guidance during transition to compliance with new requirements. In addition, these evaluations may look at specific areas requested by the evaluated organization. Evaluation reports contain no findings, only identification of issues and recommendations.

Assistance to Firefighters Grant Program. The purpose of these grants is to enhance the safety of the public and firefighters with respect to fire and fire-related hazards. The primary goal of the AFG Program's Fire Prevention and Safety Grant is to reach high-risk target groups in order to mitigate the high incidences of death and injuries. Additionally, the authorization remains that includes funding for Firefighter Safety Research and Development.

Assistant. Title for subordinates of principal Command Staff positions. The title indicates a level of technical capability, qualifications, and responsibility subordinate to the primary positions. Assistants may also be assigned to unit leaders.

Association of Contingency Planners. ACP is a non-profit trade association dedicated to the advancement of business continuity professionals. ACP provides peer-to-peer networking and learning environment for its members through chapters across the country.

Association of State Floodplain Managers (ASFPM). The Association of State Floodplain Managers is an organization of professionals involved in floodplain management, flood hazard mitigation, the National Flood Insurance Program, and flood preparedness, warning and recovery. ASFPM has become a respected voice in floodplain management practice and policy in the United States because it represents the flood hazard specialists of local, state and federal government, the research community, the insurance industry, and the fields of engineering, hydrologic forecasting, emergency response, water resources, and others.

Assumptions (management definition): Statements of conditions accepted as true and that have influence over the development of a system. In emergency management, assumptions provide context, requirements and situational realities that must be addressed in system planning and development, and/or system operations. When these assumptions are extended to specific operations, they may require re-validation for the specific incident.

Assumptions, preparedness. Operationally relevant parameters that are expected and used as a context, basis or requirement for the development of response and recovery plans, processes, and procedures. For example, the unannounced arrival of patients to a healthcare facility occurs in many mass casualty incidents. This may be listed as a preparedness assumption in designing initial response procedures. Similarly, listing the assumption that funds will be available to train personnel on a new procedure may be important to note.

Assumptions, response. Operationally relevant parameters that if not valid for a specific incident's circumstances, the EOP-provided guidance may not be adequate to assure response success. Alternative methods may be needed. For example, if a decontamination capability is based upon the response assumption that the facility is not within the zone of release, this assumption must be verified at the beginning of response.

ASTM. American Society for Testing and Measurement.

Attenuate. Reduce in force, value, or virulence; to lessen.

Audit. investigations that compare what was done or is being done with the actions prescribed by established standards or objectives.

Authentication. Security measure designed to establish the validity of a transmission, message, station or originator, or a means of verifying an individual's eligibility to receive specific categories of classified or controlled information; or Certification that a document contains Top Secret Information (Document Accountability).

Authority Having Jurisdiction (AHJ). The phrase authority having jurisdiction, or its acronym AHJ, is used in NFPA documents in a broad manner, since jurisdictions and approval agencies vary, as do their responsibilities. Where public safety is primary, the authority having jurisdiction may be a federal, state, local, or other regional department or individual such as a fire chief; fire marshal; chief of a fire prevention bureau, labor department, or health department; building official; electrical inspector; or others having statutory authority. For insurance purposes, an insurance inspection department, rating bureau, or other insurance company representative may be the authority having jurisdiction. In many circumstances, the property owner or his or her designated agent assumes the role of the authority having jurisdiction; at government installations, the commanding officer or departmental official may be the authority having jurisdiction.

Authority. The power or right to give orders and/or to make decisions. Authority may be delegated from one entity to another. See responsibility to contrast terms.

Authorization Basis. Those aspects of the facility design basis and operational requirements relied upon by DOE to authorize operation. These aspects are considered to be important to the safety of facility operations. The authorization basis is described in documents such as the facility Safety Analysis Report and other safety analyses; Hazard Classification Documents, the Technical Safety Requirements, DOE-issued safety evaluation reports, and facility-specific commitments made in order to comply with DOE rules, Orders or policies.

Authorized Derivative Classifier. An individual authorized to determine that documents or material are (a) unclassified or (b) classified as Restricted Data, Formerly Restricted Data, or National Security Information in accordance with existing guidance or source documents.

Auto-ignition temperature. The minimum temperature at which the material will ignite without a spark or flame being present. Along with the flashpoint, auto-ignition temperature gives an indication of relative flammability.

Automatic real-time mapping system (arms). A computer-based system that superimposes grid reference data from a global positioning system onto a mapping system to facilitate the plotting of the perimeter of a fire or other phenomena requiring the plotting of a perimeter or path. The data can be transmitted via radio to a control room to provide an accurate real time picture of the extent of a situation.

Available resources. Resources at an incident and available for allocation at short notice.

Avalanche. Mass of snow and ice falling suddenly down a mountain slope and often taking with it earth, rocks and rubble of every description.

Awareness. The continual process of collecting, analyzing, and disseminating intelligence, information, and knowledge to allow organizations and individuals to anticipate requirements and to react effectively.

B

Bacillary dysentery. An acute, severe, intestinal disease due to the shigella bacillus, type 1, characterised by bloody stools and fever, associated with poor personal hygiene and sanitation in crowded closed communities (ships, refugee camps, jails). Especially frequent in children and often occurring as sudden outbreaks. Transmitted via the faecal route or water-borne through contaminated water supply, either directly through hand contact or indirectly through contaminated food. The term 'dysentery' is often used in a general sense for many non-specific cases of gastro-enteritis and diarrhoea.

Back bearing. The direction from an object back to the point of observation; the opposite to a **bearing.**

Back burn. A fire started intentionally from a prepared line or other barrier to burn an area of flammable material in the path of an advancing fire in order to control that fire.

Badging. The act of providing an identification badge to physically identify personnel who have been privileged to access a specific incident or to access a specific incident location.

Barometric pressure. The pressure exerted by the atmosphere as a consequence of the force of gravity.

Barrage. Barrier across a stream provided with a series of gates or other control mechanisms to control the water surface level upstream, to regulate the flow or to divert water supplies into a canal.

Barrier challenged. A barrier should be considered threatened or challenged if the events in progress may result in a barrier failure.

Barrier failure. A barrier is considered to have failed when it no longer provides the protection to facility and site personnel, the general public, and the environment afforded by design or operational controls. Failure of a barrier can usually be recognized by the readings or output from plant instruments such as valve position indicators, failed fuel monitors, pressure sensors, or stack effluent monitors.

Barrier. The various layers of protection afforded facility and site personnel, the general public and the environment by the design and operational controls of each facility.

Base Flood Elevation (BFE). The elevation of the crest of the base or 100-year flood, which is the level of flood that has a 1 % chance of being equaled or exceeded in any given year. Also referred to as BFE.

Base Flood. A term used in the National Flood Insurance Program to indicate the minimum size flood to be used by a community as a basis for its floodplain management regulations; presently required by regulation to be that flood which has a one-percent chance of being equaled or exceeded in any given year. Also known as a 100-year flood or one-percent chance flood.

Base of dam. The general foundation area of the lowest portion of the main body of the dam.

Base program. The planning and preparedness requirements that must be considered based on the description of the potential impacts of the events or conditions identified in the Hazards Survey. The Hazards Survey is the formal mechanism to determine the scope and extent of the Base Program.

Base. The location at which primary Logistics functions for an incident are coordinated and administered. There is only one Base per incident. (Incident name or other designator will be added to the term Base.) The Incident Command Post may be co-located with the Base.

Basic life support. The provision of basic interventions to protect the airway, assist breathing and maintain the circulation without the use of drugs, defibrillation or advanced techniques. Normally refers to a combination of expired air resuscitation and external cardiac compression to provide cardiopulmonary resuscitation

Basic societal functions. Major functional components of a society that may be affected either directly or indirectly by an event resulting in a disaster: (1) Medical; (2) Public health; (3) Sanitation and water supplies; (4) Shelter and clothing; (5) Food; (6) Energy supplies; (7) Search and rescue; (8) Public works and engineering; (9) Environment; (10) Logistics and transport; (11) Security; (12) Communications; (13) Economy; and (14) Education. Each of these functional components is composed of many elements. All of the basic societal elements are linked together by a Coordination and Control function provided by the respective governments.

Beaufort scale. A numerical scale for indicating the force or velocity of wind, ranging from 0 for calm to 12 for hurricane, or velocities above 120 kilometres/hour.

Becquerel (Bq). The radioactivity unit of the international system of units. One becquerel equals one nuclear disintegration per second.

Benchmark. Similar to a standard, but more broadly described and, consequently, less specific and objectively measurable. HRSA has used benchmarks to establish metrics for healthcare system performance in its emergency preparedness funding program.

Benefit. Whatever is for the good of a person or thing; a favorable or helpful factor or circumstance.

BENS. Business Executives for National Security.

BFE. Base Flood Elevation.

Beta particle. A charged particle emitted from a nucleus during radioactive decay. The beta particle, with a mass equal to 1/1837 that of a proton, is similar to an electron. Large amounts of beta radiation may cause skin burns, and beta emitters are harmful if they enter the body. Beta particles from radioactive decay are easily stopped by a thin sheet of metal or plastic.

Beta radiation. A charged particle emitted from a radioactive atomic nucleus. Beta particles are charged either negative (electrons) or positive (positrons). They travel farther than alpha particles, but the skin can be protected by a thin sheet of metal from these products.

Beyond design basis accidents (BDBAs). Accidents of the same type as a design basis accident (e.g., fire, earthquake, etc.), but defined by parameters that exceed in severity the parameters defined for the design basis accident.

Biodefense for the 21 century (HSPD-10). We conducted a comprehensive evaluation of our biological defense capabilities to identify future priorities and actions to support them. The results of that study provide a blueprint for our future biodefense program, Biodefense for the 21st century, that fully integrates the sustained efforts of the national and homeland security, medical, public health, intelligence, diplomatic, and law enforcement communities.

Biological agent. A microorganism which causes disease in man, plants, or animals or causes the deterioration of material.

Biological disaster. Disaster caused by the exposure of living organisms to germs and toxic substances.

Biological exposure index. An index providing a warning level of biological response to a substance or agent, or warning levels of the substance or agent or its metabolite(s) in the tissues, fluids or exhaled air of an exposed person.

Biological hazard. Includes infectious and cytotoxic waste.

Biosurveillance. The term biosurveillance means the process of active data-gathering with appropriate analysis and interpretation of biosphere data that might relate to disease activity and threats to human or animal health — whether infectious, toxic, metabolic, or otherwise, and regardless of intentional or natural origin — in order to achieve early warning of health threats, early detection of health events, and overall situational awareness of disease activity.

Biota. The total animal and plant life of a region, or sometimes a period, as seen collectively and interdependently.

Bioterrorism. A bioterrorism attack is the deliberate release of viruses, bacteria, or other germs (agents) used to cause illness or death in people, animals, or plants. These agents are typically found in nature, but it is possible that they could be changed to increase their ability to cause disease, make them resistant to current medicines, or to increase their ability to be spread into the environment. Biological agents can be spread through the air, through water, or in food. Terrorists may use biological agents because they can be extremely difficult to detect and do not cause illness for several hours to several days. Some bioterrorism agents, like the smallpox virus, can be spread from person to person and some, like anthrax, can not.

Blast effect. A pulse of air in which the pressure increases sharply at the front, accompanied by winds, propagated from an explosion.

Blister agent. A general body tissue irritant such as mustard gas that burns or blisters the skin and the lung tissue if inhaled.

Blizzard. Violent winter storm, lasting at least three hours, which combines below freezing temperatures and very strong wind laden with blowing snow that reduces visibility to less than 1 kilometre.

Blocking anticyclone. Slow-moving anticyclone of middle latitudes which has the appearance on a synoptic chart of an obstacle blocking the normal west-to-east movement of migratory extra-tropical depressions.

Blood agent. A chemical that interferes with cell respiration after entering the lungs through inhalation.

Blood volume expander. Sterile solution administered by intravenous injection to counteract the physiological complications of blood loss.

Blow up. A sudden increase in fire intensity and rate of spread, sufficient to preclude immediate control, or to upset existing suppression plans. It is often accompanied by powerful convection.

Boiling liquid expanding vapour explosion (bleve). A bleve occurs when liquids are stored under pressure at a temperature above their boiling points. A bleve is a major container failure, into two or more pieces, at the moment in time when the contained liquid is well above its normal boiling at atmospheric temperature.

Boom. A floating mechanical device designed to control or divert oil.

Branch. The organizational level having functional or geographical responsibility for major aspects of incident operations. A branch is organizationally situated between the section and the

division or group in the Operations Section, and between the section and units in the Logistics Section. Branches are identified by the use of Roman numerals or by functional area.

Breach the opening in a **dam** resulting from partial or total physical failure of a **dam.** The breach process is modelled by postulating certain breach shapes and rates of breach development.

Breathing apparatus. A personal respirator worn to provide protection from the hazards of gases, vapours, fumes and dusts. Breathing apparatus may be of the cartridge or canister type, self-contained air supply, remote air supply or dust mask type.

Breeder reactor. A reactor that produces fissionable fuel as well as consuming fuel, especially one that creates more than it consumes. The new fissionable material is created by capture in fertile materials of neutrons from fission. The process by which this occurs is known as 'breeding'.

Briefing. The process of advising personnel of the details of the incident or event with which they will dealing.

BTCDP. Bioterrorism Training and Curriculum Development Program.

Buffer Zone Protection Program (BZPP). A Department of Homeland Security program which provides funding to protect and secure areas surrounding critical infrastructure and key resource sites such as chemical facilities, dams, and nuclear plants across the country. The Buffer Zone Protection Program (BZPP) provides targeted funding through states to local jurisdictions to purchase equipment that will extend the zone of protection beyond the gates of these critical facilities.

Buffering capacity. The ability of a society to cope with the damage sustained from an event and to function in spite of damage. It is the ability of a society to minimize the change in an essential function or functions for a given change in available resources (goods and/or services).

Building codes. Ordinances and regulations controlling the design, construction, materials, alteration and occupancy of any structure, for the protection of public health, safety, and welfare. Building codes include technical standards for electrical, heating, plumbing and sanitary work.

Building Performance Assessment Teams (BPAT) and Process. In response to hurricanes, floods, earthquakes, and other disasters, the Federal Emergency Management Agency (FEMA) often deploys Building Performance Assessment Teams (BPATs) to conduct field investigations at disaster sites. The members of a BPAT include representatives of public and private sector entities who are experts in specific technical fields such as structural and civil engineering, building design and construction, and building code development and enforcement. BPATs inspect disaster induced damages incurred by residential and commercial buildings and other manmade structures; evaluate local design practices, construction methods and materials, building codes, and building inspection and code enforcement processes; and make recommendations regarding design, construction, and code issues. With the goal of reducing the damage caused by future disasters, the BPAT process is an important part of FEMA's hazard mitigation activities.

Building Seismic Safety Council (BSSC). The BSSC was established in 1979 as a Council of the National Institute of Building Sciences. Developed as an entirely new type of instrument, the BSSC deals with the complex regulatory, technical, social, and economic issues involved in developing and promulgating building earthquake risk mitigation regulatory provisions that are national in scope. By bringing together all of the needed expertise and relevant public and private interests, it was believed that issues related to the seismic safety of the built environment could be resolved and jurisdictional problems overcome through authoritative guidance and assistance backed by a broad consensus.

Built environment. An area in which buildings or other structures (canals, pylons, etc.) have been constructed. That part of the environment, which is predominantly constructed, as distinguished from the natural environment.

Burn plan. The plan which is approved for the conduct of prescribed burning. It contains a map identifying the area to be burnt and incorporates the specifications and conditions under which the operation is to be conducted.

Burn. A chemical or thermal burn, the former caused by corrosive substances and the latter by cryogenic liquids or hot substances.

Bushfire danger period. A period of the year, either established by legislation or declared by the relevant agency, when restrictions are placed on the use of fire due to dry vegetation and the existence of conditions conducive to the spread of fire.

Bushfire. A fire involving grass, scrub or forest.

Business area analysis. An investigation of an organization to identify, assess, and analyze the business' functions and processes, the interdependencies amongst them, and their vulnerability to disruption. The Business Area Analysis (BAA) varies from the Hazard Vulnerability Analysis (HVA) in its orientation: the BAA starts with a focus on the Business itself (people, property, management and operations) itself, while the HVA starts with a focus on hazards and their impact and consequences. The Business Impact Analysis (see below) is more analogous to the HVA.

Business Continuity Planning. Business continuity planning involves ensuring that a business is sustainable through a period of significant business interruption caused by a disaster or any other unforeseen disruptive event. It is essential for all types of scenarios ranging from system or component failure caused by a software upgrade to a man-made or natural disaster that broadly impacts a firm's physical assets, buildings and/or people.

Business Continuity Program. An ongoing process supported by senior management and funded to ensure that the necessary steps are taken to identify the impact of potential losses, maintain viable recovery strategies and recovery plans, and ensure continuity of services through personnel training, plan testing and maintenance.

Business Continuity. An ongoing process supported by senior management and funded to ensure that the necessary steps are taken to identify the impact of potential losses, maintain viable recovery strategies, recovery plans, and continuity of services.

Business Continuity..the term business continuity encompasses the gamut of mechanisms that maintain continuity in business, including all forms of problem resolution and preventive mechanisms like quality assurance and security.

Business Executives for National Security (BENS). Business Executives for National Security, a nationwide, non-partisan organization, is the primary channel through which senior business executives can help enhance the nation's security. BENS members use their business experience to drive our agenda, deliver our message to decision makers and make certain that the changes we propose are put into practice. BENS has only one special interest: to help make America safe and secure.

Business Impact Analysis. A method of identifying the effects of failing to perform a function or requirement.

Business Process Analysis. A method of examining, identifying, and mapping the functional processes, workflows, activities, personnel expertise, systems, data, and facilities inherent to the execution of a function or requirement.

Business. Any organization in any sector (public, private, or not-for-profit) that provides a product or service to a specific customer or group of customers.

C

CAEIAE. Centers of Academic Excellence in Information Assurance Education.

Calamity. A massive or extreme catastrophic disaster that extends over time and space. Notes the Black Death of the 14 century as an example.

Capabilities. Competencies or human abilities, of a personal, institutional, managerial or empirical nature that can reduce a designated population, structures, or a physical environment to severe loss or damage from the effects of a hazards or combination of hazards.

Capabilities-based planning. capabilities-based planning in described in the National Preparedness Goal as, planning, under uncertainty, to provide capabilities suitable for a wide range of threats and hazards while working within an economic framework that necessitates prioritization and choice. Capabilities-based planning addresses uncertainty by analyzing a wide range of scenarios to identify required capabilities. This approach seeks to provide a means for the Nation to answer three fundamental questions: How prepared do we need to be?', How prepared are we?, and How do we prioritize efforts to close the gap? At the heart of this capability-based planning process is the Target Capabilities List (TCL) (version 2.0). The TCL identifies 36 national preparedness capabilities, provides a description of each capability, and presents guidance on the levels of capability that Federal, State, local, and tribal entities will be expected to develop and maintain.

Capabilities-based preparedness process. The Capabilities-Based Preparedness process involves homeland security partners in a systematic and prioritized effort to accomplish the following: Convene working groups; Determine capability requirements; Assess current capability levels; Identify, analyze, and choose options; Update plans and strategies; Allocate funds; Update and execute program plans; and Assess and report. The process emphasizes collaboration to identify, achieve, and sustain target levels of capability that will contribute to enhancing overall national levels of preparedness. The core of the Capabilities-Based Preparedness approach is the comparison of current capabilities with risk- based target capability levels.

Capabilities-Based Preparedness Working Groups. The preparedness process should begin with formation of a chartered, representative working group. It is strongly encouraged that, wherever possible, previously established working groups be used for this process. The working group should be multi-disciplinary, multi-agency, and multi-jurisdictional. Where appropriate, working groups should include the private sector and nongovernmental partners. The intent is to bring together regional practitioners from across disciplines so that they can be effective advisors to the senior decision-makers who formulate strategies, set priorities, and allocate funds.

Capabilities-Based Preparedness. Capabilities-Based Preparedness encourages flexibility and requires collaboration. More importantly, it helps to ensure that operations planners and program managers across the Nation can use common tools and processes when making planning, training, equipment, and other investments, and can produce measurable results.

Capabilities-Based Preparedness. Capabilities-Based Preparedness is a form of all-hazards planning. Capabilities-Based Preparedness is defined as preparing, under uncertainty, to provide

capabilities suitable for a wide range of challenges while working within an economic framework that necessitates prioritization and choice. Capabilities-Based Preparedness is a way to make informed choices about how to manage the risk and reduce the impact posed by potential threats. It focuses decision making on building and maintaining capabilities to prevent and protect against challenges (e.g., intelligence analysis, critical infrastructure protection, etc.) and to respond and recover when events occur (e.g., onsite incident management, medical surge, emergency public information, and economic recovery). The process rests on a foundation of multi-disciplinary, cross-governmental, and regional collaboration to determine measurable capability targets, to assess current levels of capabilities, and to find ways to close the gaps. As entities make choices in preparedness programs and activities, they will be able to improve their own preparedness, focus available assistance on areas of greatest need, and collaborate with others using a common reference framework.

Capabilities-Based Preparedness. The Guidelines establish a capabilities-based approach to preparedness. Simply put, a capability provides the means to accomplish a mission. The Guidelines address preparedness for all homeland security mission areas: prevention, protection, response, and recovery.

Capability, surge. The ability to manage patients requiring unusual or very specialized medical evaluation and care. Surge requirements span the range of specialized medical and health services (expertise, information, procedures, equipment, or personnel) that are not normally available at the location where they are needed (e.g., pediatric care provided at non-pediatric facilities or burn care services at a non-burn center). Surge capability also includes patient problems that require special intervention to protect medical providers, other patients, and the integrity of the medical care facility.

Capacity building. The concept of capacity building is currently widely used, in many different domains, especially in the United Nations and other international development organizations. In general, capacity building efforts aim to provide a defined target group or an organization with skills, resources, both human and financial, or technology needed to enable it to perform to its full potential.

Capacity. A combination of all the strengths and resources available within a community, society or organization that can reduce the level of risk, or the effects of a disaster. Capacity may include physical, institutional, social or economic means as well as skilled personal or collective attributes such as leadership and management. Capacity may also be described as capability.

Capacity, surge. The ability to evaluate and care for a markedly increased volume of patients— one that challenges or exceeds normal operating capacity. The surge requirements may extend beyond direct patient care to include such tasks as extensive laboratory studies or epidemiological investigations.

Carcinogen. An agent which is responsible for the formation of a cancer.

Carcinogenic. Capable of causing cancer.

Care area. Location where first medical care is given to injured.

Case definition. A description of the type of case (i.e., patient) that public health surveillance or patient care providers are to identify and report as part of an epidemiological investigation. The description may include signs and symptoms, clinical and laboratory findings, travel or exposure history, and other historical or demographic data. Case definitions may be categorized as suspected,

probable versus confirmed to expedite the early reporting of these patients of interest while confirmatory evaluation results are pending.

Case of concern. A single suspected, probable, or confirmed patient illness or injury that meets the jurisdiction's defined trigger for a rapid epidemiological (and perhaps law enforcement) investigation to determine the etiology of the case. Examples include paralysis from botulism, unexplained radiation illness, unexplained chemical burns.

Case. A person in the population identified as having a particular disease, health disorder, or condition under investigation.

Case, sentinel. The first recognized case in a public health outbreak. In traditional public health, this usually means a confirmed case.

Casualty collecting area. A safe area close to the disaster incident site to which casualties are brought by rescuers. May be the same as the patient treatment post or an intermediate staging area from which casualties are collected by ambulance personnel not involved directly in rescue.

Casualty. Any human accessing health or medical services, including mental health services and medical forensics/mortuary care (for fatalities), as a result of a hazard impact.

Catastrophe. An event in which a society incurs, or is threatened to incur, such losses to persons and/or property that the entire society is affected and extraordinary resources and skills are required, some of which must come from other nations. When we have a major event, whether it be a terrorism event or a natural disaster, that causes a lot of people to move out of a particular area, they're going to go someplace. And a lot of them are going to go to your cities or your towns, and you're going to have to be able to deal with that challenge. So one dramatic change we've made in the wake last year's hurricanes and in anticipation of this hurricane season and whatever else is coming in the course of this coming year, is we're looking now at planning not only for managing the emergency in the location where the emergency occurs, but managing the emergency all over the country. An example would be the 1985 Earthquakes in Mexico City and other Mexican cities. Thousands of people—estimates vary markedly—died and tens of thousands were injured. At least 100,000 building units were damaged; reconstruction costs exceeded five billion dollars (with some estimates running as high as $10 billion). Over sixty donor nations contributed to the recovery through programs coordinated by the League of Red Cross and Red Crescent Societies.

Catastrophic Disaster Planning Initiative. The FEMA Catastrophic Disaster Response Planning Initiatives are currently focused on four specific geographic areas: Southeast Louisiana, New Madrid Seismic Zone (NMSZ), the State of Florida, and the State of California.

Catastrophic Disaster Response Group (CDRG). The Catastrophic Disaster Response Group (CDRG) — represents all FRP signatory departments and agencies at the senior headquarters policy level.

Catastrophic Disaster Response Group (CDRG). The national-level group of representatives from the federal departments and agencies under the Federal Response Plan. The CDRG serves as a centralized coordinating group that supports the on-scene federal response and recovery efforts. Its members have access to the appropriate policy makers in their respective parent organizations to facilitate decisions on problems and policy issues.

Catastrophic Disaster. An event that results in large numbers of deaths and injuries; causes extensive damage or destruction of facilities that provide and sustain human needs; produces an overwhelming demand on State and local response resources and mechanisms; causes a severe long-term effect on general economic activity; and severely affects State, local, and private-sector

capabilities to begin and sustain response activities. Note: the Stafford Act provides no definition for this term.

Catastrophic Disaster. The term implies an event or incident, which produces severe and widespread damages of such a magnitude as to result in the requirement for significant resources from outside the affected area to provide the necessary response. It results in large numbers of deaths and injuries; causes extensive damage or destruction of facilities that provide and sustain human needs; produces an overwhelming demand on state and local response resources and mechanisms; causes a severe long-term effect on general economic activity; and severely affects state, local, and private sector capabilities to begin and sustain response activities.

Catastrophic emergency. Any incident, regardless of location, that results in extraordinary levels of mass casualties, damage, or disruption severely affecting the U.S. population, infrastructure, environment, economy, or government functions.

Catastrophic event. For purposes of this plan [NRP 2004], a catastrophic event is any natural or manmade incident, including terrorism, which leaves extraordinary levels of mass casualties, damage and disruption severely affecting the population, infrastructure, environment, and economy. A catastrophic event results in sustained national impacts over a prolonged period of time; exceeds resources normally available in the local, State, Federal, and private sectors; and significantly interrupt governmental operations and emergency services to such an extent that national security could be threatened. In contrast to a Major Disaster or Emergency as defined in the Stafford Act, a catastrophic event is characterized as an incident of low or unknown probability but extremely high consequences.

Catastrophic health event. The term catastrophic health event means any natural or manmade incident, including terrorism, that results in a number of ill or injured persons sufficient to overwhelm the capabilities of immediate local and regional emergency response and health care systems.

Catastrophic Incident Annex (NRP 2004), Federal Response Guiding Principles. Guiding principles for a proactive Federal catastrophic incident response include the following: 1) the primary mission is to save lives, protect property and critical infrastructure, contain the event, and protect the national security; 2) standard procedures regarding requests for assistance may be expedited, or under extreme circumstances, suspended in the immediate aftermath of an event of catastrophic magnitude; 3) pre-identified Federal response resources deploy and begin necessary operations as required to commence life-safety activities; and 4) notification and full coordination with States will occur, but disruptions in the coordination process will not delay or impede the rapid deployment of critical resources.

Catastrophic Incident Annex (National Response Plan, July 2004), Planning Assumptions: 1. A catastrophic event will result in large quantities of casualties and/or displaced persons, possibly in the tens of thousands. 2. A catastrophic mass casualty/mass evacuation incident will trigger a Presidential disaster declaration, immediately or otherwise. 3. The Secretary of Homeland Security will immediately designate the event and Incident of National Significance and direct implementation of the NRP-CIA. 4. The nature and scope of such an event may include chemical, biological, radiological, nuclear or high-yield explosive (CBRNE) attacks, disease epidemics, major earthquakes/major hurricanes in densely populated areas, and/or other natural or manmade hazards. 5. Multiple events may occur simultaneously or sequentially in contiguous and/or noncontiguous areas. Some incidents, such as a biological WMD attack, may be dispersed over a large geographic

area, and lack a defined incident site. 6. A catastrophic incident may occur with little or no warning. Some incidents, such as rapid disease outbreaks, may be well underway before being detected. 7. The event will cause significant disruption of the area's critical infrastructure to power, transportation, utilities, and communications systems. 8. The response capabilities and resources of the local jurisdiction (to include mutual aid from surrounding jurisdictions and response support from the State) may be insufficient and quickly overwhelmed. Many local emergency personnel who normally respond to incidents will be among those affected and unable to perform their duties. 9. A detailed and credible common operating picture may not be achievable for 24- 38 to 48 hours (or longer) after the incident. As a result, response activities must begin without the benefit of a detailed or complete situation and critical needs assessment. 10. Federal support must be provided in a timely manner to save lives, prevent human suffering, and mitigate severe damage. This may require deploying assets before they are requested via normal NRP protocol. 11. Large-scale evacuations, organized or self-directed, may occur. More people initially will flee and seek shelter for attacks involving CBRN agents than for natural events. The health- related implications of an incident will aggravate attempts to implement a coordinated evacuation management strategy. 12. Large numbers of people may be left temporarily or permanently homeless and may require prolonged temporary housing. 13. A catastrophic incident may produce environmental impacts (e.g., persistent chemical, biological, or radiological contamination) that severely challenge the ability and capacity of governments and communities to achieve a timely recovery. 14. A catastrophic incident will have unique dimensions/characteristics requiring that response plans/strategies be flexible enough to effectively address emerging needs and requirements. 15. A catastrophic incident may have international dimensions. These include potential impacts on cross-border trade, transit, law enforcement coordination and other areas. 16. If the incident is the result of terrorism, the Homeland Security Advisory System (HSAS) level will likely be raised regionally, and perhaps nationally. Elevation of the HSAS level carries additional local, State, and Federal security enhancements that may affect the availability of certain response resources.

Catastrophic Incident Annex (NRF, July 2007 Comment Draft), Planning Assumptions: A catastrophic incident may result in large numbers of casualties and/or displaced persons, possibly in the tens to hundreds of thousands. During an incident response, priority is given to human life-saving operations. The nature and scope of a catastrophic incident may immediately overwhelm State, tribal, and local response capabilities and require immediate Federal support. A detailed and credible common operating picture may not be achievable for 24 to 48 hours (or longer) after the incident. As a result, response activities must begin without the benefit of a detailed or complete situation and critical needs assessment. A catastrophic incident will trigger a Presidential disaster declaration, immediately or otherwise. The Secretary of Homeland Security or a designee implements the NRF-CIA/CIS. The nature and scope of the catastrophic incident may include chemical, biological, radiological, nuclear, or high-yield explosive attacks, disease epidemics, cyber attacks, and major natural or manmade hazards. A catastrophic incident has unique dimensions/characteristics requiring that response plans/strategies be flexible enough to effectively address emerging needs and requirements. A catastrophic incident may occur with little or no warning. Some incidents, such as rapid disease outbreaks, may be well underway before detection. Multiple incidents may occur simultaneously or sequentially in contiguous and/or noncontiguous areas. Some incidents, such as a biological WMD attack, may be dispersed over a large geographic area and lack a defined incident site. A catastrophic incident may produce environmental impacts (e.g., persistent chemical,

biological, or radiological contamination) that severely challenge the ability and capacity of governments and communities to achieve a timely recovery. Federal support must be provided in a timely manner to save lives, prevent human suffering, and mitigate severe damage. This may require mobilizing and deploying resources before they are requested via normal NRF protocols. Large-scale evacuations, organized or self-directed, may occur. More people initially are likely to flee and shelter outside of areas involving chemical, biological, radiological, or nuclear agents than for natural events. The health related implications of these incidents may aggravate attempts to implement a coordinated evacuation management strategy. Large numbers of people may be left temporarily or permanently homeless and may require prolonged temporary housing. A catastrophic incident may have significant international dimensions. These include impacts on the health and welfare of border community populations, cross-border trade, transit, law enforcement coordination, and other areas.

Catastrophic Incident Planning Strategic Goals. The SCIP shall accomplish the following goals: Creation of an ongoing operational framework consisting of collaborative partnerships among all FEMA directorates, other NRF agencies, non-governmental organizations (NGOs and private sector entities at the National, Regional, State, metropolitan, local and tribal levels. Development on a continuing basis of comprehensive catastrophic planning solutions for selected natural hazards by working with the other Federal agencies, regions, and other Federal partners and under the auspices of the Post-Katrina Emergency Management Reform Act of 2006. In addition to the current planning efforts already underway, review additional scenarios for catastrophic planning development including all 15 National Planning Scenarios. Establishment of clear-cut legal authorities, roles and responsibilities, lines of communication and coordination at all levels of government. Implementation of state-of-the-art technology providing information management and document control for the dissemination, exchange, and transfer of plans, lessons learned, best practices, workshop schedules and related products. Creation of an integrated, scenario-driven catastrophic planning methodology that combines planning and exercise phases. Implementation of standardized plan templates and a planning developmental methodology at the National, Regional, State, metropolitan, local, and tribal levels. Development of a Joint Catastrophic Disaster Steering Group (JCDSG) of representatives from key directorates (Disaster, Operations, Disaster Assistance, Mitigation, National Preparedness) that develops and revises goals, policies, doctrines, funding, and long-range plans, and provides integration and coordination with new initiatives within FEMA and with other Federal agencies, as well as NGOs. Creation of an annual national conference fro all stakeholders to provide a forum for the reporting of research results and planning efforts in order to support, inform, integrate and enhance catastrophic plans. Creation of a five-year plan, developed by the JCDSG (in conjunction with other stakeholders). This plan will address the identified goals and objectives, funding, selected metropolitan areas, scenarios, and specific target dates for local jurisdictions to achieve self-sustaining programs.

Catastrophic Incident Planning Strategy. Achieving a robust and sustainable national capability to rapidly and successfully meet the immense challenges posed by an incident of catastrophic magnitude will require a unified strategy supported by aggressive leadership, joint collaboration, innovative thinking, significant funding, and national resolve. To that end, this Strategy for Catastrophic Incident Planning (SCIP) establishes a comprehensive and ambitious set of unified goals and objectives, and will provide a baseline against which to identify, validate, align and prioritize necessary capability-building initiatives.

Catastrophic Incident Planning Vision. By end of fiscal year 2013, functional planning annexes will prepare the nation to respond to the unique characteristics of all-hazard catastrophic events on a national level and for 21 regional locales around the nation. These will facilitate a coordinated national preparedness and response capability which integrates operations and resources at all levels of government and the private sector.

Catastrophic Incident Planning. Planning for major catastrophic events sponsored by FEMA is underway [Florida, New Madrid Seismic Zone, California South, California North, Hawaii]. Subject matter experts, planners and operators are deployed at the Federal, Regional, and State levels. Their mission is to identify capability assessments, identify planning seams, and achieve solutions. FEMA is developing and will continue to enhance scenario-driven catastrophic planning that combines planning and exercises that are realistic and reasonable and that simulate the conditions and demands responders would face following a catastrophic disaster.

Catastrophic Incident. Any natural or manmade incident, including terrorism, which results in extraordinary levels of mass casualties, damage, or disruption severely affecting the population, infrastructure, environment, economy, and national morale and/or government functions. A catastrophic event could result in sustained national impacts over a prolonged period of time; almost immediately exceeds resources normally available to State, local, tribal, and private sector authorities; and significantly interrupts governmental operations and emergency services to such an extent that national security could be threatened. All catastrophic incidents are considered Incidents of National Significance.

According to DHS National Response Plan: A catastrophic incident results in large numbers of casualties and/or displaced persons; the incident may cause significant disruption of the area's critical infrastructure, including transportation, telecommunications, and public health and medical systems; response activities may have to begin without the benefit of a detailed or complete situation and needs assessment because a detailed, credible operating picture may not be possible for 24 to 48 hours of longer after the incident; the federal government may have to mobilize and deploy assets before local and state governments request them via normal protocols because timely federal support may be necessary to save lives, prevent suffering, and mitigate severe damage; and, large numbers of people may be left temporarily or permanently homeless and require temporary or longer-term interim housing.

Category of emergency. One of three types of emergencies: operational, energy, and continuity of government.

Causal analysis. A review of an activity to determine the root cause, to identify less than adequate contributing systemic factors, and to prevent further concerns.

CBDRM. Community Based Disaster Risk Management.

CBRNE. Chemical, Biological, Radiation, Nuclear and Explosive Weapons.

Ceiling (C). The maximum allowable human exposure limit for an airborne substance, not to be exceeded even momentarily.

Center for Domestic Preparedness (Anniston, Alabama.). The Center for Domestic Preparedness (CDP) provides a unique environment and opportunity to offer specialized advanced training to state and local emergency responders in the management and remediation of incidents of domestic terrorism, especially those involving chemical agents and other toxic substances. The Center was created by a Congressional directive to establish a National, State, and Local Public Training Center for First Responders to domestic terrorist acts at Fort McClellan. The Center will

serve as a training facility for all relevant federally supported training efforts that target state and local law enforcement, firefighters, emergency medical personnel, and other key agencies such as public works and state and local emergency management agencies. The focus of the training is to prepare relevant state and local officials to deal with chemical, biological, or nuclear terrorist acts and handle incidents dealing with hazardous materials**.**

Central HAZUS Users Group (CHUG). The CHUG (Central HAZUS Users Group) provides a means of collaboration between HAZUS-MH users within FEMA Region 5. This group looks at software challenges, HAZUS-MH projects, and the overall general use of HAZUS-MH software. The main goal of the CHUG is to maximize the potential of HAZUS-MH within the region. Sharing the successes and challenges between users helps bring the entire region together in planning for natural disasters.

Central Nervous System. The body's organ system that originates, sends, and receives electrical signals to control movement and action. Acute exposures of over 2,200 R cause death within hours by damage to this organ system.

Central United States Earthquake Consortium. The Central U.S. Earthquake Consortium is a partnership of the federal government and the eight states most affected by earthquakes in the central United States. Those states are: Alabama, Arkansas, Illinois, Indiana, Kentucky, Mississippi, Missouri, and Tennessee. Established in 1983 with funding support from the Federal Emergency Management Agency, CUSEC's primary mission is, '. the reduction of deaths, injuries, property damage and economic losses resulting from earthquakes in the Central United States.' CUSEC serves as a 'coordinating hub' for the region, performing the critical role of coordinating the multi-state efforts of the central region. Its coordinating role is largely facilitative and not as the primary implementer of emergency management functions which is the responsibility of each individual state.

CERT. Citizen Emergency Response Team.

Certification. Certification entails authoritatively attesting that individuals meet professional standards for the training, experience, and performance required for key incident management functions.. Certification, in other words, involves measuring an individual's competence through a testing or evaluation process. Personnel are certified by their discipline's relevant certifying authority. In ICS, the term certification may also be applied to equipment (verifying its appropriateness and adequacy for the intended use).

CFDA. Catalog of Federal Domestic Assistance.

CFR. Code of Federal Regulations.

Chain of command. A series of command, control, executive, or management positions in hierarchical order of authority.

Chain reaction. A process in which one nuclear transformation sets up conditions which permit a similar nuclear transformation to take place in another atom. Thus, when fission occurs in uranium atoms, neutrons are released which in turn produce fission in neighbouring uranium atoms.

Challenge examination. An examination designed to establish the capabilities of a worker with respect to radiation safety and provide an exception to the required training. Challenge examinations should be based on the objectives stated for the training program, and are an approved form of proficiency testing.

Check-in. The process through which resources first report to an incident. Check-in locations include the incident command post, Resources Unit, incident base, camps, staging areas, or directly on the site. This is a critical procedure in maintaining resource accountability during an incident.

Checklist. Written (or computerized) enumeration of actions to be taken by an individual or organization, meant to aid memory rather than provide detailed instruction.

Chemical abstract service number. A number assigned to a single chemical by the chemical abstracts service (a us-based reference service) which serves to identify that chemical. Some mixtures, but not many, are assigned a cas number. This is the only 'one chemical — one number' system covering all publicly-known chemicals.

Chemical abstracts. A collection of abstracts that includes references to chemical literature world-wide produced by the american chemical society and the principle store of

Chemical dispersion model. A brand name for a model.

Chemical model. Model used to calculate the dispersion of non-radioactive hazardous material. The Chemical Model was developed by the Software Giant Company for use in hazardous material emergency planning and response. It makes use of a straight-line Gaussian dispersion model.

Chemical radiological response team (CRRT). A department of defence team with a capability to deal with chemical warfare agents and radiological incidents.

Chemical Stockpile Emergency Preparedness Program (CSEPP). The Chemical Stockpile Emergency Preparedness Program (CSEPP) is a unique partnership between FEMA and the U.S. Army, given FEMA's long-standing experience in preparing for and dealing with all types of emergencies and the U.S. Army's role as custodian of the U.S. chemical stockpile. Since 1988, FEMA and the U.S. Army have assisted communities surrounding the eight chemical stockpile sites to enhance their abilities to respond to the unlikely event of a chemical agent emergency.

Chemical warfare agent. A chemical causing toxic damage to living tissue that is used as a weapon, including blister agents, blood agents, choking agents, and nerve agents.

Chemical/Biological Incident Response Force (CBIRF) Background. In 1995, then Commandant of the Marine Corps, General Krulak provided planning guidance that stated the need for a strategic organization to respond to the growing chemical/biological threat. The Commandant's Warfighting Laboratory developed the concept for the establishment of CBIRF in 1996. As a result of this concept development, CBIRF was formed during the spring of 1996. CBIRF is currently located 26 miles from the District of Columbia.

Chemical/Biological Incident Response Force (CBIRF) Mission. When direct, forward-deploy and/or respond to a credible threat of a Chemical, Biological, Radiological, Nuclear, or High Yield explosive (CBRNE) incident in order to assist local, state, or federal agencies and Unified Combat Commanders in the conduct of consequence management operations. CBIRF accomplishes this mission be providing capabilities for agent detection and identification; casualty search, rescue, and personnel decontamination; and emergency medical care and stabilization of contaminated personnel.

Chemical/Biological Incident Response Force. In the event of a chemical or biological incident, the Emergency Services Sector (ESS) can obtain support from the Chemical/Biological Incident Response Force (CBIRF), an element of II Marine Expeditionary Force (II MEF), U.S. Marine Forces Command (MARFORCOM). Located in Indian Head, MD, CBIRF forward- deploys and/or responds by land, sea, or air worldwide to credible threats of chemical, biological, radiation, and nuclear (CBRNE) events on short notice. Once on scene, CBIRF activities include reconnaissance (detecting and identifying threats), rescue and extraction (confined space rescue, trench rescue, vehicle and advanced rope rescue, and collapsed structure stabilization and rescue), medical care in hot zones, decontamination, explosive ordnance disposal (render Improvised

Explosive Devices safe), command and control (critical network communications), and logistics (self-contained, self-sufficient task-organized unit).

To receive the Force's assistance at the local level, the senior elected official (e.g., mayor) must contact the governor, who formally requests CBIRF. CBIRF personnel also have performed hundreds of evaluations of commercial off-the-shelf items that enhance personal protection equipment, detection, and decontamination of agents. CBIRF interacts with all standards-writing organizations, and works on an ongoing basis to improve research, development and acquisition of new equipment.

Chemsafe. The plastics and chemicals industries association (PACIA) offers two services under the chemsafe emergency management program:

CHEMTREC. The Chemical Transportation Emergency Center, 24-hour contact number 1-800424-9300 in CONUS, 202-483-7616 outside the continental United States. A service, sponsored by the chemical industry, which provides two stages of assistance to responders dealing with potentially hazardous materials. First, on receipt of a call providing the name of a chemical judged by the responder to be a potentially hazardous material, CHEMTREC provides immediate advice on the nature of the chemical product and the steps to be taken in handling it. Second, CHEMTREC promptly contacts the shipper of the material involved for more detailed information and on-scene assistance when feasible. **(DOT** 1993)

CHER-CAP. Community Hazards Emergency Response-Capability Assurance Process. **(FEMA,** Community Hazards Emergency Response-Capability Assurance Process, 8May2007)

Chief Executive Officer. A common title for the senior-most decision maker (other than a board of directors or equivalent) in private and non-governmental organizations.

Chief Executive Official. The official of the community who is charged with authority to implement and administer laws, ordinances, and regulations for the community. He or she may be a mayor, city manager, etc. (FEMA State and Local Guide 101)

Chief. The ICS title for individuals responsible for management of functional Sections: Operations, Planning, Logistics, Finance/Administration, and Intelligence/Investigations (if established as a separate Section). **(FEMA,** NIMS (FEMA 501/Draft), August 2007, p. 148)

Chief. The ICS title for individuals responsible for management of functional sections: Operations, Planning, Logistics, Finance/Administration, and Intelligence (if established as a separate section).

Choking agent. An irritant such as phosgene that irritates and damages lung tissue.

Cholera. A severe acute infection of the intestines, characterised by profuse watery diarrhoea, vomiting, dehydration, muscle cramps and collapse. It is spread by the ingestion of foods and water contaminated by the faeces of infected (symptomatic or asymptomatic) persons. Several diarrhoeal diseases are diagnosed as cholera, but the latter is caused by the vibrio cholerae. It is subject to international quarantine regulations.

Chronic exposure. Radiation exposure occurring over long periods of time.

Chronic toxicity. A toxic effect which occurs after repeated or prolonged exposure. Chronic effects may occur some time after exposure has ceased. syn. Chronic poisoning.

CHUG. Central HAZUS Users Group.

CIA. Catastrophic Incident Annex (to the National Response Plan, 2004) **CII.** Critical Infrastructure Information. **(DHS,** NIPP, 2006, p. 101) **CI/KR.** Critical Infrastructure/Key Resources. **(DHS,** NIPP, 2006, Preface) **CIS.** Critical Incident Supplement (Federal Response Plan, 2005)

CIPAC. Critical Infrastructure Partnership Advisory Council. **(DHS,** NIPP, 2006, p. 101)

Cities Readiness Initiative (CRI). The Cities Readiness Initiative (CRI) is a federally funded effort to prepare major US cities and metropolitan areas to effectively respond to a large scale bioterrorist event by dispensing antibiotics to their entire identified population within 48 hours of the decision to do so [The CRI]: Aids state and local officials in developing plans that support mass dispensing drugs to 100 % of the identified population within 48 hours of a decision to do so; provides funding to states, whose CRI jurisdictions cover 500 counties. This means that 56 % of the US population lives within a CRI jurisdiction. The CRI project started in 2004 and has grown each year thereafter: 2004: CRI stared with 21 cities 2005: CDC funded 15 additional cities. 2006: CDC funded an additional 36 cities, for a total of 72 participating cities. In addition, the United States Postal Service (USPS) is working with select CRI cities to develop Postal Plans, in which mail carriers will deliver antibiotics to the homes in selected zip codes. This option is only available to jurisdictions with an approved USPS Dispensing Plan.

Citizen Corps. Citizen Corps, administered by DHS, is a community-level program that brings government and private sector groups together and coordinates the emergency preparedness and response activities of community members. Through its network of community, tribal and State councils, Citizen Corps increases community preparedness and response capabilities through public education, outreach, training and volunteer service.

Citizen Emergency Response Team (CERT). Community Emergency Response Team (CERT) training is one way for citizens to prepare for an emergency. CERT training is designed to prepare people to help themselves, their families and their neighbors in the event of a catastrophic disaster. Because emergency services personnel may not be able to help everyone immediately, residents can make a difference by using the training obtained in the CERT course to save lives and protect property.

Citizens radio emergency service teams (CREST). A group of trained, accredited volunteer radio operators that monitor the emergency frequencies on the citizens band radio service (cb), relaying calls for assistance from the public to the relevant emergency service. Crest also provides communications support to other services during times of need.

Civil defence. The performance of some or all of the undermentioned humanitarian tasks intended to protect the civilian population against the dangers, and to help it recover from the immediate effects, of hostilities or disasters and also to provide the conditions necessary for its survival. These tasks are: warning; evacuation; management of shelters; management of blackout measures; rescue; medical services including first aid and religious assistance; fire-fighting; detection and marking of danger areas; decontamination and other protective measures; provision of emergency accommodation and supplies; emergency assistance in the restoration and maintenance of order in distressed areas; emergency repair of indispensable public utilities; emergency disposal of the dead; assistance in the preservation of objects essential to survival; and, complementary activities necessary to carry out any of the tasks mentioned above, including but not limited to planning and organisation.

Civil disorder. A riot, violent protest, demonstration, or illegal assembly, that may affect public safety.

Civil disturbances. Group acts of violence and disorders prejudicial to public law and order within the 50 States, District of Columbia, Commonwealth of Puerto Rico, U.S. possessions and territories, or any political subdivision thereof. As more specifically defined in DoD Directive

3025.12 (Military Support to Civil Authorities), civil disturbance includes all domestic conditions requiring the use of Federal Armed Forces.

Civil disturbances. Group acts of violence and disorders prejudicial to public law and order within the 50 States, District of Columbia, Commonwealth of Puerto Rico, U.S. possessions and territories, or any political subdivision thereof. As more specifically defined in DoD Directive 3025.12

Civil emergency. Any natural or manmade disaster or emergency that causes or could cause substantial harm to the population or infrastructure. This term can include a major disaster or emergency as those terms are defined in the Stafford Act, as amended, as well as consequences of an attack or a national security emergency. Under 42 U.S.C. 5121, the terms major disaster and emergency are defined substantially by action of the President in declaring that extant circumstances and risks justify his implementation of the legal powers provided by those statutes. (Title 32 CFR 185)

Civil protection. The phrase 'civil protection' has gradually come into use around the world as a term that describes activities which protect civil populations against incidents and disasters (Mauro, 1996). Civil protection has gradually and rather haltingly emerged from the preceding philosophy of civil defense.

Civil search and rescue (Civil SAR). Search operations, rescue operations, and associated civilian services provided to assist persons and property in potential or actual distress in a non-hostile environment.

Civil society. Public forms of organisation or activity within a society, which are not military or ecclesiastical in nature.

Classification category. One of three kinds of classified information: Restricted Data, Formerly Restricted Data, or National Security Information.

Classification guide. A document issued or approved by an authorized original classification authority or the senior agency official and containing explicit classification guidance for the use of Authorized Classifiers and Derivative Declassifiers in making classification, declassification, and appropriate downgrading determinations.

Classification level. A designation assigned to specific elements of information based on the potential damage to national security if disclosed to unauthorized persons. The three classification levels in descending order of potential damage are Top Secret, Secret, and Confidential.

Classification review. If the relevant site/facility/activity is generating classified or Unclassified Controlled Nuclear Information (UCNI), or is conducting operations that are classified or UCNI, then all emergency preparedness documents, such as plans, procedures, scenarios, and assessments, shall be reviewed for classified and UCNI by an Authorized Derivative Classifier or UCNI reviewing official.

Classified information reviews. All reports and press releases shall be reviewed for classified or Unclassified Controlled Nuclear Information prior to being provided to uncleared personnel, entered into unclassified data bases, or transmitted using non-secure communications equipment.

Classified material. Chemical compounds, metals, fabricated or processed items, machinery, electronic equipment, and other equipment or any combination thereof containing or revealing classified information: a. Chemical compounds, metals, fabricated or processed items, machinery, electronic equipment, and equipment or any combination thereof that has been assigned a

classification level and classification category. b. Any combination of documents, products, substances, or materials that have been assigned a classification either individually or as a group.

Climate change. The climate of a place or region is changed if over an extended period (typically decades or longer) there is a statistically significant change in measurements of either the mean state or variability of the climate for that place or region. Changes in climate may be due to natural processes or to persistent anthropogenic changes in atmosphere or in land use. Note that the definition of climate change used in the United Nations Framework Convention on Climate Change is more restricted, as it includes only those changes which are attributable directly or indirectly to human activity**.**

Climate variability. Description of deviations using climate statistics for a given period of time (such as a month, season, year) from the long-term statistics relating to the same calendar period.

Cloud cover. The amount of sky covered or obscured by cloud, expressed in eighths (often called ‘oktas’) with eight eighths being complete cloud cover.

Cognizant Secretarial Officer. Head of a Departmental Element who has responsibility for a specific program or facility (ies). These include the Assistant Secretaries for Defense Programs, Energy Efficiency and Renewable Energy, Environmental Management, and Fossil Energy; and the Directors of the Offices of Civilian Radioactive Waste Management, Energy Research, and Nuclear Energy; and a Cognizant Secretarial Officer is a DOE official at the Assistant Secretary level who is responsible for the assignment of work, the institutional overview of any type of facility, or both, and the management oversight of a laboratory.

Cold chain. System of refrigeration with appropriate apparatus and transport facilities to ensure the cold or frozen conservation of vaccines and medicaments throughout the transfer, from the place of manufacture and expedition to the point of arrival and use.

Cold zone. This area contains the command post and such other support functions as are deemed necessary to control the incident.syn. ‘clean zone’ or ‘support zone’.

Collaborative (Core Principle of Emergency Management). Collaborative: emergency managers create and sustain broad and sincere relationships among individuals and organizations to encourage trust, advocate a team atmosphere, build consensus, and facilitate communication.

Collect. To bring or come together.

Collection area. Location where seriously injured are collected initially.

Collective effective dose. A measure of the total **radiation** exposure of a group of people which is obtained by summing their individual effective doses.

Co-located Facility Worker. Co-located facility workers are those that do not have hands-on activities (i.e, administrative workers.)

Color-coded Threat Level System. Used to communicate with public safety officials and the public at-large through a threat-based, color-coded system so that protective measures can be implemented to reduce the likelihood or impact of an attack. Raising the threat condition has economic, physical, and psychological effects on the nation; so, the Homeland Security Advisory System can place specific geographic regions or industry sectors on a higher alert status than other regions or industries, based on specific threat information.

Combat agency. The agency identified as being primarily responsible for responding to a particular emergency. syn. ‘combating agency’, ‘combating authority’, ‘lead combat agency’, and ‘lead combat authority’.

Combat. To take steps to eliminate or reduce the effects of an incident upon the community.

Combating terrorism. Programs and activities, both defensive and offensive, applied against terrorism, domestically and abroad.

Combustible dust. Dust that is combustible or ignitable in mixtures with air.

Combustible liquid. A liquid having a flash point and which is not a flammable liquid.

Combustible. Capable of burning with a flashpoint between 100 degrees — 200 degrees Fahrenheit (F).

Combustion. The process of burning; consumption of fuels by oxidation, giving out heat, and generally flame and/or incandescence.

Command and control. The exercise of authority and direction by a properly designated commander over assigned and attached forces in the accomplishment of the mission. Command and control functions are performed through an arrangement of personnel, equipment, communications, facilities, and procedures employed by a commander in planning, directing, coordinating, and controlling forces and operations in the accomplishment of the mission.

Command post (CP). An ad hoc location established at or as near as possible to a disaster site, from which the incident commander (IC) functions. It contains the command, control, coordination and communications elements necessary to direct and manage the initial response to the event.

Command staff. In an incident management organization, the Command Staff consists of the Incident Command and the special staff positions of Public Information Officer, Safety Officer, Liaison Officer, and other positions as required, who report directly to the Incident Commander. They may have an assistant or assistants, as needed.

Command. The direction of members and resources of an organisation in the performance of the organisation’s role and tasks. Authority to command is established in legislation or by agreement with an organisation. Command relates to organisations and operates vertically within an

Commander. A single-agency term. A commander has authority only within that agency. Responsibilities include the direction and coordination of the activities of that agency. A commander operates vertically within that agency and cannot command members of another agency.

Commensurable risk. Risk that is measurable by the same standards as others.

Committed Dose Equivalent (CDE)($H_{T,50}$). The dose equivalent calculated to be received by a tissue or organ over a 50-year period after the intake of a radionuclide into the body. It does not include contributions from radiation sources external to the body. Committed dose equivalent is expressed in units of rem.

Committed effective dose. The effective dose which a person is committed to receive from an intake of **radioactive** material.

Common communication plan (CCP). A plan designed to be utilized across multi-agency and multi-jurisdictional incident management operations. It applies standards called for under the ICS. The IC manages communications at an incident, using a CCP and an incident-based communications center established solely for use by the command, tactical, and support resources assigned to the incident. All entities involved in managing the incident will utilize common terminology, prescribed by the NIMS, for communications.

Common hazardous material. The material is commonly used by the general public. This includes any substance used for personal, family, or household purposes or is present in the same form and concentration as a product packaged for distribution and use by the general public (e.g., motor oil, gasoline, diesel fuel). Common hazardous material also is composed of material in such small quantities (end user quantities) that the hazard can be qualitatively determined to be a local (e. g., worker) concern only.

Common mode failure. The coincident failure of two or more independent components as the result of a single cause; of particular concern in an instrument system incorporating redundancy where an event causes coincident failure of two or more of the normally independent channels.

Common operating picture. Collating and gathering information—such as traffic, weather, actual damage, resource availability—of any type (voice, data, etc.) from agencies/organizations in order to make decisions during an incident. A common operating picture is established and maintained by the gathering, collating, synthesizing, and disseminating of incident information to all appropriate parties involved in an incident. Achieving a common operating picture allows on- scene and off-scene personnel (e.g., those at the Incident Command Post, an Emergency Operations Center, and within a multi-agency coordination group) to have the same information about the incident, including the availability and location of resources, personnel, and the status of requests for assistance. Additionally, a common operating picture offers an overview of an incident thereby providing incident information which enables the Incident Commander (IC), Unified Command (UC), and supporting agencies and organizations to make effective, consistent, and timely decisions. In order to maintain situational awareness, communications and incident information must be updated continually. Having a common operating picture during an incident helps to ensure consistency for all emergency management/response personnel engaged in an incident.

Common terminology (IM). Normally used words and phrases—avoids the use of different words/phrases for same concepts, consistency, to allow diverse incident management and support organizations to work together across a wide variety of incident management functions and hazard scenarios.

Commonwealth government disaster response plan (comdisplan). A contingency plan for the provision of commonwealth government assistance to the Australian states and territories in an emergency or disaster.

Commonwealth scientific and industrial research organisation (CSIRO). An independent statutory authority whose work covers scientific aspects and research in a broad range of areas of economic or social value to the nation, including agriculture, minerals and energy, manufacturing, communications, construction, health and the environment.

Communicable disease. A disease caused by germs such as bacteria and viruses that can be spread from one person to another. syn. ‘infectious disease’.

Communications interoperability. Communications interoperability allows emergency management/response personnel and their affiliated organizations to communicate within and across agencies and jurisdictions via voice, data, or video on demand, in real time, when needed, and when authorized. It is essential that these communications systems be capable of interoperability, as successful emergency management and incident response operations require the continuous flow of critical information among jurisdictions, disciplines, organizations, and agencies.

Communications unit. An organizational unit in the Logistics Section responsible for providing communication services at an incident or an EOC. A Communications Unit may also be a facility (e.g., a trailer or mobile van) used to support an Incident Communications Center.

Communications. All forms used for interchange of information. Communications includes all public and private communication facilities (e.g., fire, police, military, government, private radio operators (HAM), newspapers, other news media, television, telephone and telex, facsimile, the Internet, satellite, and other facilities that can be used in time of disaster. It is a basic societal function.

Community Awareness and Emergency Response (CAER). A program developed by the Chemical Manufacturers Association providing guidance for chemical plant managers to assist them in taking the initiative in cooperating with local communities to develop integrated (community/industry) hazardous materials emergency plans.

Community Based Disaster Risk Management (CBDRM). Once a community has assessed the risks it faces and an action plan has been developed, disaster risk reduction measures need to be taken. These measures might include practical disaster mitigation measures, such as building dams or dykes, forming emergency response committees, developing community based early warning systems and practicing response and evacuation, advocating at the local or national government level for policy change in favour of preventive action, or even measures to reinforce the livelihoods of the poorest in the community, hence their resources for self-protection. Community Hazards Emergency Response-Capability Assurance Process (CHER-CAP): The Community Hazards Emergency Response-Capability Assurance Process (CHER-CAP) is offered by Regional Offices of the Department of Homeland Security's Federal Emergency Management Agency (FEMA) to assist local communities and tribal l governments in obtaining a greater understanding of community hazard risks, identifying planning deficiencies, updating plans, training first responders, and stimulating and testing the system for strengths and needed improvements. CHER-CAP is offered as an additional tool for state and local governments to use as they develop and enhance preparedness and response capabilities that will address any hazards that communities will face throughout our Nation.

Community preparedness and participation. There is a structure and a process for ongoing collaboration between government and nongovernmental organizations at all levels; volunteers and nongovernmental resources are incorporated in plans and exercises; the public is educated, trained, and aware; citizens participate in volunteer programs and provide surge capacity support; nongovernmental resources are managed effectively in disasters; and there is a process to evaluate progress.

Community preparedness. Preparedness is everyone's job. Not just government agencies but all sectors of society — service providers, businesses, civic and volunteer groups, industry associations and neighborhood associations, as well as every individual citizen — should plan ahead for disaster. During the first few hours or days following a disaster, essential services may not be available. People must be ready to act on their own.

Community Rating System (CRS). The National Flood Insurance Program's (NFIP) Community Rating System (CRS) is a voluntary incentive program that recognizes and encourages community floodplain management activities that exceed the minimum NFIP requirements. As a result, flood insurance premium rates are discounted to reflect the reduced flood risk resulting from the community actions meeting the three goals of the CRS: (1) reduce flood losses; (2) facilitate accurate insurance rating; and (3) promote the awareness of flood insurance. For CRS participating

communities, flood insurance premium rates are discounted in increments of 5 %; i.e., a Class 1 community would receive a 45 % premium discount, while a Class 9 community would receive a 5 % discount (a Class 10 is not participating in the CRS and receives no discount). The CRS classes for local communities are based on 18 creditable activities, organized under four categories: (I) Public Information, (II) Mapping and Regulations, (III) Flood Damage Reduction, and (IV) Flood Preparedness.

Community Risk Assessment. Community Risk Assessment (CRA) uses participatory action research methods to place communities in the lead role for the assessment, active planning, design, implementation and evaluation of activities aimed at reducing the community's risk to disaster. Whether they are rural, urban or semi-urban neighborhoods, it is crucial that communities exposed to hazards can contribute to the risk assessment and planning process. CRA focuses on identifying the most vulnerable groups in a community, and explores what local capacities can be used to enhance the resilience of the community members. The risks facing a community can include natural hazards, such as hurricanes, floods, earthquakes and droughts, as well as other threats such as environmental health risks, epidemics or conflict.

Community. 1. A group with a commonality of association and generally defined by location, shared experience, or function. 2. A social group which has a number of things in common, such as shared experience, locality, culture, heritage, language, ethnicity, pastimes, occupation, workplace, etc.

Competency. A specific knowledge element, skill, and/or ability that is objective and measurable (i.e., demonstrable) on the job. It is required for effective performance within the context of a job's responsibilities, and leads to achieving the objectives of the organization.

Complex Incident Management (CIM). Management of a complex or the management of a major incident that includes multiple operational periods and usually more than 1000 personnel assigned. CIM may include the establishment of branches on the incident. (The National Interagency Complex Incident Management Organization Study)

Complex Incidents. Events where the victims have unusual medical needs or require medical care that is not readily available. These medical needs may be very difficult to adequately define or address without specialized expertise, even with only a few casualties.

Complex medical incidents. Incidents where the victims have unusual medical needs or require medical care that is not readily available. These medical needs may be very difficult to adequately define or address without specialized expertise, even with only a few casualties.

Complex. A complex is two or more individual incidents located in the same general proximity assigned to a single Incident Commander or Unified Command to facilitate management. (The National Interagency Complex Incident Management Organization Study)

Comprehensive (Core Principle of Emergency Management). Comprehensive: emergency managers consider and take into account all hazards, all phases, all stakeholders and all impacts relevant to disasters.

Comprehensive Assistance Evaluation. An assessment of the status of the facility Hazards Assessment and the emergency management functional areas, and identifies objectives. The status is based on a limited sample of the current state of a functional area and the related program objectives.

Comprehensive Emergency Management (CEM). CEM fosters a federal-state-local operating partnership**.** CEM should be distinguished from comprehensive emergency preparedness, a term now generally in use, which emphasizes, in practice if not legislative intent, the preparedness

and response phases of emergency management almost exclusively. In keeping with the concept of a full federal-state-local partnership in the consolidation of all- risk emergency management, state and local governments should adopt consistent nomenclature, using the words emergency management. Concept of Operations (For an EOP): The audience for the Basic Plan needs to picture the sequence and scope of the planned emergency response. The concept of operations section explains the jurisdiction's overall approach to an emergency situation, i.e., what should happen, when, and at whose direction.

Topics should include: division of local, State, Federal, and any intermediate interjurisdictional responsibilities; activation of the EOP; action levels and their implications.; general sequence of actions before, during, and after the emergency situation; who requests aid and under what conditions (the necessary forms being contained in tabs); and, for States, who appoints a State Coordinating Officer (SCO) and how the SCO and the State response organization will coordinate and work with Federal response personnel in accordance with the FRP. The concept of operations will touch on direction and control, alert and warning, or continuity of operations matters that may be dealt with more fully in annexes.

Comprehensive Emergency Management (CEM). CEM refers to a state's responsibility and unique capability to manage all types of disasters by coordinating wide-ranging actions of numerous agencies. The 'comprehensive' aspect of CEM includes all four phases of disaster activity: mitigation, preparedness, response and recovery for all risks — attack, man-made, and natural — in a federal-state-local operating partnership.

Comprehensive Emergency Management System. The framework for development, coordination, control, and direction of all emergency planning, preparedness, readiness assurance, response, and recovery actions. DOE sites/facilities, including DOE transportation activities, Operations/Field Offices, and DOE Headquarters offices shall develop and participate in an integrated and Comprehensive Emergency Management System to ensure that the Department can respond effectively and efficiently to Operational Emergencies and Energy Emergencies, and can provide Emergency Assistance so that appropriate response measures are taken to protect workers, the public, the environment, and the national security; emergencies are promptly recognized and classified, and parameters associated with the emergency are monitored to detect changed or degraded conditions; emergencies are reported and notifications are made; and reentry activities are properly and safely accomplished, and recovery and post-emergency activities commence properly.

Concept of Operations. A verbal or graphic statement, in broad outline, of a commander's assumptions or intent in regard to an operation or series of operations. The concept of operations frequently is embodied in campaign plans and operation plans; in the latter case, particularly when the plans cover a series of connected operations to be carried out simultaneously or in succession. The concept is designed to give an overall picture of the operation. It is included primarily for additional clarity of purpose. Also called commander's concept.

Concept of operations. A document that explains how a system and its components function through the successive stages of emergency response and recovery. The Concept of Operations complements the System Description.

Concept. A general notion, idea, or mental picture; ability to imagine; a set of ideas or combination of theories logically linked together.

Concern. A negative performance statement, derived from subjective or objective evidence during oversight appraisal or surveillance activities. Concerns are classified as closed, open, or

resolved. A Closed Concern is a concern whose corrective action has been completed. An Open Concern is one that exists without resolution or agreement. A Resolved Concern is a concern whose corrective action has been agreed upon but not yet corrected or verified.

Condition. Any as-found state, whether or not resulting from an event, that may have adverse safety, health, quality assurance, security, operational or environmental implications. A condition is usually programmatic in nature; for example, an error in analysis or calculation; an anomaly associated with design or performance; or an item indicating a weakness in the management process are all conditions.

Conditional probability. The probability of one variable given the value of another. For example, given that a flood has reached the crest of an embankment dam, the probability of the dam failing is a conditional probability.

Confidential. The lowest classification level that is applied to information, the unauthorized disclosure of which could reasonably be expected to cause damage to the national security that the appropriate official is able to identify or describe. [

Conflagration. A particularly intense fire with a heat output of 60,000 — 250,000 kilowatts per metre along the fire front.

Conflict (inter-human). Inter-human conflicts consist of disagreements between two or more parties that have the potential to inflict harm upon one, both, or all of the parties involved.

Conflict hazards. War, acts of terrorism, civil unrest, riots, and revolutions.

Congregate care management. Manage conventional and nonconventional mass shelter facilities in support of State, tribal, 3 and local government and host States when traditional mass care systems are overwhelmed. Coordinate Federal resources and provide technical support to State, tribal, and local 7 governments for shelter-in-place activities. Nonconventional sheltering may include: 1. Hotels, motels, and other single-room facilities. 2. Temporary facilities such as tents, prefab module facilities, trains, and ships. Specialized shelters and functional and medical support shelters. Support for other specialized congregate care areas that may include respite centers, rescue areas, and decontamination processing centers.

CONOPS. Concept of Operations.

CONPLAN (NRF). Concept plan.

Consequence analysis. The estimation of the effect of potential hazardous events.

Consequence assessment. The process used to evaluate the impacts of a release of radioactive or other hazardous materials. The assessment of consequences is the evaluation and interpretation of all available information concerning an actual or potential release of hazardous materials to the environment for the purpose of estimating personnel exposure/dose.

Consequence management. Per the National Strategy for Homeland Security, July 2002, the NRP will consolidate existing federal government emergency response plans into one genuinely all-discipline, all-hazard plan and thereby eliminate the crisis management and consequence management distinction. Traditionally, consequence management has been predominantly an emergency management function and included measures to protect public health and safety, restore essential government services, and provide emergency relief to governments, businesses, and individuals affected by the consequences of terrorism. The requirements of consequence management and crisis management are combined in the NRP.

Consequence. 1. The outcome of an event or situation expressed qualitatively or quantitatively, being a loss, injury, disadvantage or gain. 2. The outcome of an event or situation expressed

qualitatively or quantitatively. In the emergency risk management context, consequences are generally described as the effects on persons, society, the environment and the economy.

Contact case. Person living in proximity to a contagious patient, likely to have been contaminated and likely to suffer or transmit the disease, thus necessitating surveillance and prophylactic measures.

Containment. A structure found at nuclear power plants designed to contain any radioactive materials that may be released from the nuclear reactor fuel and cooling systems.

Contaminated Area. Any area meeting the definition of Contamination Area, High Contamination Area.

Contamination. 1. Invasion of a person or animal by pathogenic germs (contaminants). 2. Presence of an infectious agent on inanimate articles such as clothes, surgical instruments, dressings, water, milk, or food. 3. Transfer and propagation of a contaminant.

Contamination. The undesirable deposition of a chemical, biological, or radiological material on the surface of structures, areas, objects, or people. (FEMA State and Local Guide 101)

Contingency Plan. Proposed strategy and tactics (often documented) to be used when a specific issue arises or event occurs during the course of emergency or disaster operations.

Contingency Planning. Developing plans to prevent, minimize, respond to and/or recover from an identified contingency. This is a component of preparedness planning during the preparedness phase of CEM, and it is also an important task of the incident plans section during incident response and recovery.

Contingency plans. Plans to meet a crisis made with the assumption that an event will happen in a specific location; just in case.

Contingency. A future event that is likely but not certain to happen. The consequences of the occurrence are such that one must address the likelihood of occurrence and the projected impact if it occurs. (VHA Emergency Management Guidebook 2005)

Continuing flood hazard. The hazard a community is exposed to after floodplain management measures have been put in place. For a town protected by levees, the continuing flood hazard is the consequences of the levees being overtopped. For an area without any floodplain management measures, the continuing flood hazard is simply the existence of flood liability.

Continuity Advisory Group (CAG). The NCC [National Continuity Coordinator] will establish a Continuity Advisory Group (CAG) as a sub-PCC group focused on interagency implementation of continuity programs. It will be comprised of Continuity Coordinators, or their designees, from Category I, II, III, and IV (identified in NSPD-51/HSPD-20 Annex A and in Appendix B of this Plan) executive departments and agencies. Key State and local government representatives from the National Capital Region (NCR), and representatives from the legislative and judicial branches may be invited as appropriate. The CAG shall represent the interests of departments and agencies from Categories I-IV before the CPCC.

The CAG will assist its member departments and agencies in implementing directives within its scope by performing the following functions: Providing the forum to address issues ultimately requiring commitment of department and agency resources; Facilitating the exchange of information, including lessons learned, and a sensing of the member community's views; Facilitating the overall coordination and decision process and the initial coordination among departments and agencies of plans and procedures for shared responsibilities; Identifying, prioritizing, and undertaking initiatives to explore options and make recommendations; and Assisting in resolving conflicts as required.

Continuity Capability. The ability of an organization to continue performance of Essential Functions, utilizing Continuity of Operations and Continuity of Government programs and integrated, day-to-day operations with a primary goal of ensuring the preservation of our form of government under the Constitution and the continuing performance of National Essential Functions under all conditions. Built from the foundation of continuity planning and continuity program management, the key pillars of continuity capability are Leadership, Staff, Communications, and Facilities.

Continuity Communications Architecture. An integrated, comprehensive, interoperable information architecture, developed utilizing the OMB-sanctioned Federal Enterprise Architecture Framework, that describes the data, systems, applications, technical standards, and underlying infrastructure required to ensure that Federal executive branch departments and agencies can execute their Primary Mission Essential Functions and Mission Essential Functions in support of National Essential Functions and continuity requirements under all circumstances.

Continuity coordinators. Representatives of the executive branch departments and agencies at the Assistant Secretary (or equivalent) level.

Continuity of Government (COG). Activities that address the continuance of constitutional governance. COG planning aims to preserve and/or reconstitute the institution of government and ensure that a department or agency's constitutional, legislative, and/or administrative responsibilities are maintained. This is accomplished through succession of leadership, the predelegation of emergency authority, and active command and control during response and recovery operations.

Continuity of Government Readiness Conditions (COGCON). In order to provide a coordinated response to escalating threat levels or actual emergencies, the Continuity of Government Readiness Conditions (COGCON) system establishes executive branch continuity program readiness levels, focusing on possible threats to the National Capital Region. The President will determine and issue the COGCON Level. Executive departments and agencies shall comply with the requirements and assigned responsibilities under the COGCON program. During COOP activation, executive departments and agencies shall report their readiness status to the Secretary of Homeland Security or the Secretary's designee.

Continuity of Operations (COOP) Program. The collective activities of individual departments and agencies and their sub-components to ensure that their essential functions are performed. In terms of FPC 65, the term COOP refers primarily to continuity of government,and is differentiated here from continuity planning, which may be more comprehensive.

Continuity of Operations and Continuity of Government (Public Sector). An ongoing process supported by senior management and funded to ensure that the necessary steps are taken to identify the impact of potential losses, maintain viable recovery strategies, recovery plans, and continuity of services.

Continuity of Operations Plans (COOP). Planning should be instituted (including all levels of government) across the private sector and nongovernmental organizations (NGOs), as appropriate, to ensure the continued performance of core capabilities and/or critical government operations during any potential incident.

Continuity Planning. Specific areas to consider in continuity plans include the following: 1. Succession: To ensure that the leadership will continue to function effectively under emergency conditions. When practical, there is a designation of at least three successors for each position. Provisions have been made to deal with vacancies and other contingencies such as absence or

inability to act. 2. Pre-delegation of emergency authorities: To ensure that sufficient enabling measures are in effect to continue operations under emergency conditions. Emergency authorities have been enacted that specify the essential duties to be performed by the leadership during the emergency period and that enable the leadership to act if other associated entities are disrupted, and to redelegate with appropriate limitations. 3. Emergency action steps: Actions that facilitate the ability of personnel to respond quickly and efficiently to disasters/emergencies. Checklists, action lists, and/or standard operating procedures (SOPs) have been written that identify emergency assignments, responsibilities, and emergency duty locations. Procedures should also exist for alerting, notifying, locating, and recalling key members of the entity. The SOPs and notification procedures should be integrated. 4. Primary and alternate emergency operations centers: A facility or capability from which direction and control is exercised in an emergency. This type of center or capability is designated to ensure that the capacity exists for the leadership to direct and control operations from a centralized facility or capability in the event of an emergency. 5. Alternate operating or backup facilities: Provisions also exist for alternate site(s) for departments or agencies having emergency functions or continuing operations. 6. Vital records: The measures that are taken by the entity to protect the entity's vital records— for example, financial, data, personnel records, and engineering drawings — that the entity should have to continue functioning during emergency conditions and to protect the rights and interests of the entity. Procedures have been put in place to ensure the selection, preservation, and availability of records essential to the effective functioning of the entity under emergency conditions and to maintain the continuity of operations. Protection of records should comply with applicable laws. 7. Protection of resources, facilities, and personnel: The measures that are taken to deploy resources and personnel in a manner that will provide redundancy to ensure the entity can continue to function during emergency conditions. Plans and procedures are in place to ensure the protection of personnel, facilities, and resources so the entity can operate effectively. The entity should have the ability to allocate needed resources and restore functions during and after disasters/emergencies. Plans should address deployment procedures to relocate/replicate resources or facilities, increase protection of facilities, and inform and train personnel in protective measures. Preparedness should be increased based on the threat level.

Continuity Policy Coordination Committee (CPCC). A committee led by HSC established to comprehensively address national level continuity program coordination, integration, oversight, and management. This forum institutionalizes national security policy development, implementation, and oversight for continuity programs. The Committee serves in a continuity oversight and management role with membership at the Assistant Secretary level from the following organizations: the Office of the Vice President; the Homeland and National Security Councils; the White House Military Office; the Office of Management and Budget; the Office of Science and Technology Policy; the Departments of State, Treasury, Defense, Justice, and Homeland Security; the Director of National Intelligence; the Central Intelligence Agency; the Federal Bureau of Investigation; the United States Secret Service; the Federal Emergency Management Agency; and the Joint Chiefs of Staff. Other observers may be invited to attend.

Contracting Officer. A federal Government official who, in accordance with DOE or agency procedures, currently is designated as a contracting officer with the authority to enter into and administer contracts, financial assistance awards, and sales contracts and make determinations and findings with respect thereto, or any part of such authority. The term also includes the designated representative of the contracting officer acting within the limits of his/her authority.

Contracting Officers Representative. A federal government employee formally designated to act as an authorized representative of the contracting officer for specified functions, such as technical monitoring, which do not involve a change in the scope, price, terms, or conditions of a contract or financial assistance instrument.

Contractor. A non-federal party to a DOE contract, engaging in activities or operations involving hazards which could potentially affect the health and safety of employees or the public or the quality of the environment.

Control agency. An agency nominated to control the response activities to a specified type of emergency.

Control area. A declared area in which defined conditions apply to the movement into, out of, and within, of specified animals or things. Conditions applying in a control area are of lesser intensity than those in a **restricted area.** The limits of a control area and the conditions applying therein may be varied rapidly according to need.

Control Cell. A simulation center located away from the responders. It is staffed by experienced controllers (and/or actors) who simulate or role-play non-participating organizations by providing input to responders, via telephone, on behalf of any non-participating individuals, companies, agencies, or ERO members who would normally be involved in responding to an emergency. Role-players in a control cell are subject to evaluation of their performance just like any other exercise controller.

Control equipment. Equipment used to control or restrict the spread of oil spilt on the water.

Control Objective. Set by the Incident Commander, the control objectives are not limited to any single operational period but will consider the total incident situation. These objectives control the operational period objectives, strategy, tactics and assignments: Tactics (work assignments) [set by the Operations Chief] must be specific and must be within the boundaries set by the IC's general control objectives (strategies). (NIMS Appendix A, The Incident Command System).

Control rod. A rod made of neutron absorbing material which, when inserted into a nuclear reactor, reduces the number of free neutrons available to cause the uranium atoms to fission.

Control zone. The designation of areas at dangerous goods incidents based upon safety and the degree of hazard, often defined as the hot zone, warm zone, and cold zone.

Control. The overall direction of emergency management activities in an emergency situation. Authority for control is established in legislation or in an emergency plan, and carries with it the responsibility for tasking and coordinating other organisations in accordance with the needs of the situation. Control relates to situations and operates horizontally across organisations.

Controlled burn. A man-made and controlled bushfire for the purposes of hazard reduction or forest regeneration.

Controller, master exercise. The individual charged with the responsibility for ensuring that the exercise is conducted according to the exercise plan, objectives, scenario and the Master Sequence of Events List (MSEL).

Controller, safety. Controller/s designated to perform the safety function during the exercise.

Controller. That person designated by the control agency to be the controller for a particular emergency.

Controller/control staff. Individuals assigned to exercise locations as required to accomplish the responsibilities of the Master Exercise Controller under his/her direction. They provide the

scenario injects (MSELS) and facilitate player (see below for definition of these terms) information and actions as indicated by the type of exercise and the exercise plan.

Controllers. Individuals who provide direction and control of the exercise. They monitor the sequence of events as they unfold, and are responsible for exercise safety within their span of control. Individual controllers may initiate certain actions in order to ensure the continuity of events described in the exercise scenario. It is their responsibility to ensure that responders do not respond in a manner that might jeopardize safety and that responders remain focused on exercise play that demonstrates the exercise objectives. The control organization will vary in number depending on the exercise scope and may include the following controller positions.

Convection column. The rising column of smoke, ash, burning embers and other matter generated by a fire.

Convergence. The propensity for emergency services personnel and others to be physically drawn to an emergency site, and the over-use of communications near the site.

Cooling tower. A heat exchanger used to cool the water used to condense exhaust steam exiting the turbines of a power plant. Cooling towers transfer exhaust heat into the air instead of into a body of water.

COOP event. Any event that causes an Agency or Department to relocate operations to an alternate site to assure continuance of its essential functions.

COOP. Continuity of Operations.

Cooperative assistance. Mutual aid or other assistance during emergencies and disasters that is provided through an arrangement that includes reimbursement of costs to the assisting organization.

Coordinate (incidence management). To advance systematically an analysis and exchange of information among principals who have or may have a need to know certain information to carry out specific incident management responsibilities.

Coordinate. To advance systematically an analysis and exchange of information among principals who have or may have a need to know certain information to carry out specific incident management responsibilities.

Coordinated (core principle of emergency management). Coordinated: emergency managers synchronize the activities of all relevant stakeholders to achieve a common purpose

Co-ordination and control. The process that directs and coordinates all activities encumbered in the responses to a disaster. Co-ordination and Control provides the structure for all of the disaster management functions. Its main role is to assure that responses meet identified needs of the affected society.

Coordination. The bringing together of organizations and elements to ensure an effective response, primarily concerned with the systematic acquisition and application of resources (organisation, manpower and equipment) in accordance with the requirements imposed by the threat or impact of an emergency. Coordination relates primarily to resources, and operates, vertically, within an organisation, as a function of the authority to command, and horizontally, across organizations, as a function of the authority to control.

COP. Common Operating Picture.

Coping capabilities. A combination of all the strengths and resources available to humans in a particular location that are useful in solving, handling, or managing a problem or a task. Coping capacity is the capacity of humans to cope with a given situation or task.

Coping Capacity. The means by which people or organizations use available resources and abilities to face adverse consequences that could lead to a disaster. In general, this involves managing resources, both in normal times as well as during crises or adverse conditions. The strengthening of coping capacities usually builds resilience to withstand the effects of natural and human-induced hazards.

Coping. The manner in which people and organisations act, using existing resources within a range of expectations of a situation, to achieve various ends. In general, this involves managing resources, both in normal times, as well as during unusual, abnormal, and adverse conditions of a disaster event or process.

Corporation for National and Community Service. Provides teams of trained National Service Participants (including AmeriCorps members, Learn and Serve America volunteers, and Retired and Senior Volunteer Program volunteers) to carry out a wide range of response and recovery support activities emphasizing disadvantaged communities and special needs residents, including: canvassing, needs assessment, and information distribution; shelter and feeding support; and distribution of water, food, ice, and other emergency goods; debris clearance, temporary roof repair, and elimination of identified health/safety hazards; unaffiliated volunteer support and warehousing assistance; registration and call center support; case management assistance.

The mission of the Corporation for National and Community Service is to improve lives, strengthen communities, and foster civic engagement through service and volunteering. As we pursue our goals, we are guided by the following principles: 1. Put the needs of local communities first. 2. Strengthen the public-private partnerships that underpin all of our programs. 3. Use our programs to build stronger, more efficient, and more sustainable community networks capable of mobilizing volunteers to address local needs, including disaster preparedness and response. 4. Measure and continually improve our programs' benefits to service beneficiaries, participants, community organizations, and our national culture of service. 5. Build collaborations wherever possible across our programs and with other Federal programs. 6. Help rural and economically distressed communities obtain access to public and private resources. 7. Support diverse organizations, including faith-based and other community organizations, minority colleges, and disability organizations. 8. Use service-learning principles to put volunteer and service activities into an appropriate context that stimulates life-long civic engagement. 9. Support continued civic engagement, leadership, and public service careers for our programs' participants and community volunteers. 10. Exhibit excellence in management and customer service.

Corrective Action Program System. The Corrective Action Program (CAP) System is a web-based application that allows Federal, State, and local emergency response and homeland security officials to track and analyze Improvement Plans. The Department of Homeland Security is developing this system as part of a larger effort to systematically translate Homeland Security Exercise and Evaluation Program (HSEEP) outputs—including findings, areas for improvement, recommendations, lessons learned, and best practices—into meaningful inputs for homeland security plans, programs, and budgets.

Corrective Action Program. There are eight components in the Corrective Action Program: 1. Develop a problem statement that states the problem and identifies its impact. 2, Review the past history of corrective action issues from previous evaluations and identify possible solutions to the problem. 3. Select a corrective action strategy and prioritize the actions to be taken, as well as an associated schedule for completion. 4. Provide authority and resources to the individual assigned to

implementation so that the designated change can be accomplished. 5. Identify the resources required to implement the strategy. 6. Check on the progress of completing the corrective action. 7. Forward problems that need to be resolved by higher authorities to the level of authority that can resolve the problem. 8. Test the solution through exercising once the problem is solved.

Corrective Actions. Those measures taken to terminate or mitigate the consequence of an emergency at or near the source of the emergency.

Corrosive substance. Substance, which, by chemical action, will cause severe damage in contact with living tissue, or will damage or even destroy other materials, especially metals (dangerous goods class 8).

Cost effectiveness. A measure of effectiveness expressed in terms of the cost per unit of benefit. For example, in **risk analysis** the expenditure incurred per life saved is a measure of cost effectiveness.

Cost. A loss or sacrifice; an expenditure of resources.

Cost-benefit. The benefit derived from the response relative to the costs of gaining this benefit.

Cost-effectiveness. The measure of how effective the response was in terms of achieving its stated goals and objectives. Cost-effectiveness is useful in comparing the results from one response with those achieved by another.

Cost-efficiency. A measure of the efficiency with which the response was carried out. It is useful for comparing activities within one system.

Counter measures. All measures taken to counter and reduce disaster risk. They most commonly refer to engineering (structural) measures but can also include non-structural measures and tools designed and employed to avoid or limit the adverse impact of natural hazards and related environmental and technological disasters.

Counterterrorism Security Group (CSG). The CSG is an interagency body convened on a regular basis to develop terrorism prevention policy and to coordinate threat response and law enforcement investigations associated with terrorism. This staff-level group evaluates various policy issues of interagency import regarding counterterrorism and makes recommendations to Cabinet and agency deputies and principals for decision. As appropriate, the chair of the National Security Council and Cabinet principals will present such policy issues to the President for decision. The CSG has no role regarding operational management during an actual incident.

Counterterrorism. Programs and activities, offensive in nature, taken to prevent, deter, and respond to terrorism.

Courier. A DOE employee or member of the Armed Forces assigned to and performing duties under the direction and control of the DOE, who is specifically designated for armed protection in transit of Top Secret or other matter, that requires such protection.

Credentialing. According to the NIMS: Credentialing involves providing documentation that can authenticate and verify the certification and identity of designated incident command staff and emergency responders. This system helps ensure that personnel representing various jurisdictional levels and functional disciplines possess a minimum common level of training, currency, experience, physical and medical fitness, and capability for the incident management or emergency responder position they are tasked to fill.

Creeping disaster. A disaster of insidious onset and slow progress, such as famine, drought, desertification, health deterioration or epidemic, that does not become manifest until damage and

suffering reach extensive proportions and need massive emergency response. syn. ‘slow onset disaster’.

Crest of dam. Frequently used to denote top of dam. However, the term ‘crest’ is usually applied to the level at which water may overflow the spillway section of the dam. Term top of dam is preferred to denote uppermost surface of the dam proper, excluding parapets, handrails, etc. see spillway crest.

CRI. Cities Readiness Initiative (CDC).

Crisis action planning. Crisis action planning is a third key principle in our approach to incident management. This planning process takes existing contingency plans and procedures and rapidly adapts them to address the requirements of the current crisis or event of concern in a compressed timeframe.

Crisis Management. Key to crisis management is an accurate and timely diagnosis of the criticality of the problems and the dynamics of events that ensue. This requires knowledge, skills, courageous leadership full of risk-taking ability; and vigilance. Successful crisis management also requires motivation, a sense of urgency, commitment, and creative thinking with a long-term strategic vision. In managing crises, established organizational norms, culture, rules and procedures become major obstacles: administrators and bureaucrats tend to protect themselves by playing a bureaucratic game and hiding behind organizational and legal shelters. A sense of urgency gives way to inertia and organizational sheltering and self-protection by managers and staff alike. Successful crisis management requires: (1) sensing the urgency of the matter; (2) thinking creatively and strategically to solving the crisis; (3) taking bold actions and acting courageously and sincerely; (4) breaking away from the self-protective organizational culture by taking risks and actions that may produce optimum solutions in which there would be no significant losers; and (5) maintaining a continuous presence in the rapidly changing situation with unfolding dramatic events.

In the literature that exists so far, the term crisis management has been widely employed. But this terminology is ambiguous. Crisis management can be taken to refer either to managing a crisis after it has arisen—that is, intervening in a crisis situation—or managing in such a way that a crisis does not arise in the first place. The blanket term crisis management is thus a conceptual blanket that covers a multitude of sins. It is best to avoid the usage of such a label, since the inclusion of the word management in such a label implies that the process so labeled is envisioned as a solution to the problem of crises in general. This, however, is not really the case. At best, so-called crisis management addresses only crises that have already arisen and usually only when such crises have become either imminent or already actualized disasters. Since crisis management is used in the literature to refer for the most part to either how one responds to an existent crisis or how one might anticipate crises and therefore be able to respond to them, crisis management most often connotes crisis intervention management whether after the onset of the disaster or in anticipation of a disaster. In either of these two modes, it is nevertheless a band-aid approach since it either comes into effect after the wound or primarily addresses itself to having a band-aid ready to cover the wound immediately so that the wound does not bleed overly much.

Crisis. Crises involve events and processes that carry severe threat, uncertainty, an unknown outcome, and urgency. Most crises have trigger points so critical as to leave historical marks on nations, groups, and individual lives. Crises are historical points of reference, distinguishing between the past and the present. Crises come in a variety of forms, such as terrorism (New York World Trade Center and Oklahoma bombings), natural disasters (Hurricanes Hugo and Andrew in Florida, the

Holland and Bangladesh flood disasters), nuclear plant accidents (Three- Mile Island and Chernobyl), riots (Los Angeles riot and the Paris riot of 1968, or periodic prison riots), business crises, and organizational crises facing life-or-death situations in a time of rapid environmental change. Crises consist of a 'short chain of events that destroy or drastically weaken' a condition of equilibrium and the effectiveness of a system or regime within a period of days, weeks, or hours rather than years. Surprises characterize the dynamics of crisis situations. Some crises are processes of events leading to a level of criticality or degree of intensity generally out of control. Crises often have past origins, and diagnosing their original sources can help to understand and manage a particular crisis or lead it to alternative state of condition.

Critical incident. Any situation faced by emergency workers that causes them to experience unusually strong emotional reactions which have the potential to interfere with their ability to function either at the scene or later.

Critical Infrastructure Government Coordinating Councils. The Critical Infrastructure Government Coordinating Councils will serve as government coordination mechanisms and will be comprised of representatives from DHS, sector-specific agencies, appropriate supporting Federal departments and agencies, and state and local government representatives, as appropriate. These councils will work with and support their counterpart Critical Infrastructure Sector Coordinating Council to plan, implement, and execute sector-wide security, planning, and information sharing.

Critical infrastructure information. The term 'critical infrastructure information' means information not customarily in the public domain and related to the security of critical infrastructure or protected systems— 1) actual, potential, or threatened interference with, attack on, compromise of, or incapacitation of critical infrastructure or protected systems by either physical or computer-based attack or other similar conduct (including the misuse of or unauthorized access to all types of communications and data transmission systems) that violates Federal, State, or local law, harms interstate commerce of the United States, or threatens public health or safety; 2) the ability of any critical infrastructure or protected system to resist such interference, compromise, or incapacitation, including any planned or past assessment, projection, or estimate of the vulnerability of critical infrastructure or a protected system, including security testing, risk evaluation thereto, risk management planning, or risk audit; or 3) any planned or past operational problem or solution regarding critical infrastructure or protected systems, including repair, recovery, reconstruction, insurance, or continuity, to the extent it is related to such interference, compromise, or incapacitation.

Critical Infrastructure Partnership Advisory Council. CIPAC is a partnership between government and private sector CI/KF [critical infrastructure and key resources] owners and operators that facilitates effective coordination of Federal CI/KR protection programs. DHS published a Federal Register Notice on March 24, 2006, announcing the establishment of CIPAC as a Federal Advisory Committee Act (FACA) exempt body pursuant to section 871 of the Homeland Security Act.

Critical Infrastructure Protection Program. The term 'critical infrastructure protection program' means any component or bureau of a covered Federal agency that has been designated by the President or any agency head to receive critical infrastructure information.

Critical Infrastructure Sector Coordinating Councils. The Critical Infrastructure Sector Coordinating Councils will act as private sector coordination mechanisms and will be comprised of private sector infrastructure owners and operators, and supporting associations, as appropriate. These

councils will bring together sector-specific infrastructure protection activities and issues and will provide a primary point of entry for government to partner with the sector.

Critical Infrastructure. Critical infrastructure includes systems, facilities, and assets so vital that if destroyed or incapacitated would disrupt the security, economy, health, safety, or welfare of the public. Critical infrastructure may cross political boundaries and may be built (such as structures, energy, water, transportation, and communications systems); natural (such as surface or groundwater resources); or virtual (such as cyber, electronic data, and information systems). Criticality is often in the eyes of the beholder and is dependent upon a given situation. The large and diverse number of critical assets within a region, constrained state and local resources, and our need to gain better understanding of infrastructure interdependencies require the development of criteria for and a risk-based approach to identifying critical assets.

Critical Infrastructure and Key Resources Sectors: 1.Agriculture and Food Banking and Finance Chemical. 2. Commercial Facilities. 3. Commercial Nuclear Reactors, Materials and Waste. 4. Communications. 5. Dams. 6. Defense Industrial Base. 7. Drinking Water and Water Treatment Systems. 8. Emergency Services. 9. Energy. 10. Government Facilities. 11. Information Technology. 12. National Monuments and Icons Postal and Shipping Public Health and Healthcare. 13. Transportation Systems

Critical Infrastructure/Key Resources (CI/KR). Critical infrastructure includes those assets, systems, networks and functions—physical or virtual—so vital to the United States that their incapacitation or destruction would have a debilitating impact on security, national economic security, public health or safety or any combination of those matters. Key resources are publicly or privately controlled resources essential to minimal operation of the economy and the government.

Critical Infrastructures. Systems and assets, whether physical or virtual, so vital to the United States that the incapacity or destruction of such systems and assets would have a debilitating impact on security, national economic security, national public health or safety, or any combination of those matters.

Critical mass. The smallest mass of fissile material that will support a self-sustaining **chain reaction** under specified conditions.

Critical Nuclear Weapon Design Information. Department of Defense marking for Top Secret Restricted Data **or** Secret Restricted Data revealing the theory of operation or design of the components of a thermonuclear or implosion-type fission bomb, warhead, demolition munitions, or test device. Specifically excluded is information concerning arming, fusing, and firing systems; limited life components; and totally contained quantities of fissionable, fusionable, and high-explosive materials by type. Among these excluded items are the components that military personnel, including contractor personnel, set, maintain, operate, test, or replace.

Critical pathways. An outline of process that defines, in step, the best practice known at the time.

Critical Systems. Systems are so vital that their incapacitation or destruction would have serious impact upon a medical center's ability to continue to provide patient care or other essential services. (VHA Emergency Management Guidebook 2005)

Critical threshold. The level of a good or services below which the crude mortality rate will increase.

Criticality accident. The release of energy as a result of accidentally producing a self-sustaining or divergent fission chain reaction (also called nuclear criticality accident).

Cross-certification. The process for the exchange of clearance information and need-to-know verification when DOD and DOE personnel are engaged in the exchange of classified nuclear weapon information that includes Restricted Data.

Cross-contamination. The transfer of bacteria from raw foods or unclean surfaces to ready-to-eat, cooked food.

Crown fire. A fire burning in the higher branches and foliage of a tree.

CRS. Community Rating System, National Flood Insurance Program.

CRS. Congressional Research Service.

Crude Mortality Rate. The number of deaths of a given population measured as deaths/10,000/day.

Cryogenic liquid. An extremely low- temperature liquefied gas (below minus 150 °C).

CSEPP. Chemical Stockpile Emergency Preparedness Program. **CSG.** Counterterrorism Security Group.

CSIA IWG. Cyber Security and Information Assurance Interagency Working Group.

CSIRT. Computer Security Incident Response Teams.

Cultural Competence. A set of values, behaviors, attitudes, and practices that enables an organization or individual to work effectively across cultures; the ability to honor and respect the beliefs, language, interpersonal styles, and behaviors of individuals and families receiving services as well as of staff who are providing such services.

Culture of Preparedness. The second element of our continuing transformation for homeland security perhaps will be the most profound and enduring—the creation of a Culture of Preparedness. A new preparedness culture must emphasize that the entire Nation—Federal, State, and local governments; the private sector; communities; and individual citizens—shares common goals and responsibilities for homeland security. In other words, our homeland security is built upon a foundation of partnerships. And these partnerships must include shared understanding of at least four concepts: 1) the certainty of future catastrophes; 2) the importance of initiative; 3) the roles of citizens and other homeland security stakeholders in preparedness; and 4) the roles of each level of government and the private sector in creating a prepared Nation.

In order for citizens to play an optimum role in responding to a mass casualty event, it is important to develop a culture of preparedness. Spreading basic knowledge such as who to inform when an incident occurs can speed up responses and result in lives being saved. Similarly, increasing basic search and rescue and first aid skills can avoid the onset of complications for those injured in a mass casualty incident. In addition to knowledge, attitudes need to be changed. The passive expectation that responding to emergencies is someone else's responsibility (typically someone in authority) can be changed to an active willingness to get involved in the activities necessary to a planned response. While efforts to inculcate such a culture can be sponsored (i.e. funded and conceived) at national level, programming is likely to be most effective if delivered by local government authorities and based in a planning process. Such activities may include: 1) preparedness training to teach communities how to survive without outside help for a given period (48 or 72 hours); 2) basic search and rescue and first aid training for community members and for emergency services staff (publications such as Capacity Building for Search & Rescue in Local Communities (Jeannet 1999) and International harmonization of First Aid: First recommendations on life-saving techniques (IFRC 2004) provide useful advice on this); 3) presentations at public gatherings such as clubs, religious centres (e.g. those connected with churches, mosques and temples), and community

service organizations; 4) advertising or public information through the press and electronic media, or using posters, leaflets and public displays in markets and shopping areas.

The education system has an important role to play in preparedness. Schools can incorporate some elements of the community's emergency preparedness plans in curricula for children and teen-agers, in order to increase the awareness of what to do during a mass casualty incident

Curie (Ci). The unit of radioactivity equal to 3.7 x 10 10 disintegrations per second or 3.7 x 10 10 becquerel.

CUSEC. Central United States Earthquake Consortium.

Cyber security. The prevention of damage to, unauthorized use of, or exploitation of, and, if needed, the restoration of electronic information and communications systems and the information contained therein to ensure confidentiality, integrity, and availability. Includes protection and restoration, when needed, of information networks and wireline, wireless, satellite, public safety answering points, and 911 communications systems and control systems.

Cyber terrorism. Terrorism that is directed at automated systems directly or that uses automated systems to disrupt other critical infrastructure systems that they support or control.

Cyber. Usually used in connection with references to automated systems — both in terms of hardware and software.

Cyclone severity categories. A series of categories with descriptions that provide information concerning effects due to winds typical of cyclones. See annex c for more information.

Cyclone warning. A message released by a **tropical cyclone** warning centre (tcwc) when the existence of a **cyclone** or a developing disturbance with potential to develop into a cyclone exists and is expected to cause at least **gale** force winds in coastal areas within 24 hours.

Cyclone watch. A message released by a tropical cyclone warning centre (tcwc) when a cyclone or a disturbance with potential to develop into a cyclone exists and is likely to cause coastal gales within 48 hours but not within 24 hours.

Cyclone. A large-scale, closed circulation system in the atmosphere with low barometric pressure and strong winds that rotate counterclockwise in the northern hemisphere and clockwise in the southern hemisphere. The system is referred to as a 'cyclone' in the Indian ocean and south pacific, **'hurricane'** in the western Atlantic and eastern pacific and 'typhoon' in the western pacific.

D

DAE. Disaster Assistance Employee (FEMA).

Dam. An artificial barrier, together with appurtenant works, constructed for storage, control or diversion of water, other liquids, silt, debris or other liquid-borne material.

Dam failure. The uncontrolled release of the contents of a dam through collapse of the dam or some part of it, or the inability of a dam to perform functions such as water supply, prevention of excessive seepage or containment of hazardous substances.

Damage. The negative result from the impact of an event.

Damage Assessment. The process used to appraise or determine the number of injuries and deaths, damage to public and private property, and the status of key facilities and services such as hospitals and other health care facilities, fire and police stations, communications networks, water and sanitation systems, utilities, and transportation networks resulting from a man-made or natural disaster.

Damage Classification. Evaluation and recording of damage to structures, facilities, or objects according to three (or more) categories: 1. Severe Damage — which precludes further use of the structure, facility, or abject for its intended purpose. 2. Moderate Damage — or the degree of damage to principal members, which precludes effective use of the structure, facility, or object for its intended purpose, unless major repairs are made short of complete reconstruction. 3. Light Damage — such as broken windows, slight damage to roofing and siding, interior partitions blown down, and cracked walls; the damage is not severe enough to preclude use of the installation for the purpose for which it was intended.

Damage Ratio (DR). The fraction of the MAR impacted by the actual accident-generated conditions under evaluation.

Dambreak affected zone. That zone of flooding where the changes in depth and velocity of flooding due to dambreak are such that there is potential for incremental loss of life. The dambreak affected zone is limited to those areas where dambreak causes a rise in level of floodwaters greater than 300 millimetres.

Dambreak analysis. An analysis which provides an estimation of downstream flooding effects resulting from dam failure. The analysis includes a dam breach analysis and the routing of the dambreak hydrograph through the downstream channel.

Dangerous contact animal. An animal showing no clinical signs of disease but which, by reason of its possible exposure to disease, will be slaughtered as a pre-emptive disease control measure.

Dangerous goods. Substances which are either specifically listed in the ADG code or meet the classification criteria of the ADG code.

Data. Known facts or things used as a basis for inference or reckoning. Data are not synonymous with numerical expressions.

Database. A structured set of data.

DCIP. Defense Critical Infrastructure Program.

DCO. Defense Coordinating Officer.

DCPA. Defense Civil Preparedness Agency.

Debriefing. The process of sharing the good and bad points of the response to an incident as a means to improving any future planning and responses.

Decay Heat. The heat generated by the radioactive decay of fission products.

Decision support system. Interactive computer-based model that enables risk analysts and/or decision makers to see how variation of the key factors and parameters affecting decisions influence the optimal solution according to pre-set decision rules.

Decision-makers. Persons who have the ability, resources, and authority to make decisions or judgments and to act on them.

Declaration of disaster. Official issuance of a state of emergency upon the occurrence of a large-scale calamity, in order to activate measures aimed at the reduction of the disaster's impact.

Declaration. The formal action by the President to make a State eligible for major disaster or emergency assistance under the Robert T. Stafford Relief and Emergency Assistance Act, Public Law 93-288, as amended.

Declassification. 1. The authorized change in the status of classified information to unclassified information. 2. The determination that classified information no longer requires, in the interest of national security, any degree of protection against unauthorized disclosure, together with removal or cancellation of the classification designation, as follows: (1) Information is a determination by appropriate authority in accordance with approved classification policy that information is no longer classified; or (2) Documents or Material is a determination by appropriate authority in accordance with approved classification guidance that a classified document or material no longer contains classified information. A determination by appropriate authority that information no longer requires classification protection or that a previously classified document or material is no longer classified.

Declassifier. One authorized to downgrade or declassify documents or material in specified areas.

Decommissioning. The process of closing and securing a facility or storage facility with radioactive or hazardous material so as to provide adequate protection from radiation and hazardous material exposure and to isolate radioactive contamination and hazardous material from the human environment.

Decompression chamber. A chamber in which the pressure can be varied, in which persons who have been subjected to abnormal pressure remain while returning gradually to atmospheric pressure. syn. 'hyperbaric chamber'.

Decontamination. The act of removing a chemical, biological, or radiological contaminant from, or neutralizing its potential effect on a person, object or environment by washing, chemical action, mechanical cleaning, or other techniques.

Deep Dose Equivalent (DDE). The dose equivalent derived from external radiation at a tissue depth of 1 cm in tissue.

Defective item, material, or service. Any item, material, or service that does not meet the commercial standard or procurement requirements as defined in catalogues, proposals, procurement specifications, design specifications, testing requirements, contracts, or the like. It includes those items or services found, during acceptance testing, preoperational testing, operations, inspections, or audit, not to meet the quality or reliability requirements appropriate to the use or specificity of the

item or service procured. It also includes misrepresentation of the specifications or trademarks associated with the parts/service marking, packaging, or certification/identification stamps. It does not include parts or services that fail or are otherwise found to be inadequate because of random failures or errors within the accepted reliability level.

Defense Against Weapons of Mass Destruction Act. The Defense Against Weapons of Mass Destruction (WMD) Act, 50 U.S.C. 2301et seq, is intended to enhance the capability of the Federal government to prevent and respond to terrorist incidents involving WMD. Congress has directed that DOD provide certain expert advice to Federal, State, and local agencies with regard to WMD, to include domestic terrorism rapid response teams, training in emergency response to the use or threat of use of WMD and a program of testing and improving the response of civil agencies to biological and chemical emergencies.

Defense Coordinating Officer (DCO). DOD has appointed 10 DCOs and assigned one to each FEMA region. If requested and approved, the DCO serves as DOD's single point of contact at the JFO. With few exceptions, requests for Defense Support of Civil Authorities originating at the JFO are coordinated with and processed through the DCO. The DCO may have a Defense Coordinating Element consisting of a staff and military liaison officers to facilitate coordination and support to activated ESFs. Specific responsibilities of the DCO (subject to modification based on the situation) include processing requirements for military support, forwarding mission assignments to the appropriate military organizations through DOD-designated channels and assigning military liaisons, as appropriate, to activated ESFs.

Defense Coordinating Officer (DCO). Supported and provided by the Department of Defense (DOD) to serve in the field as the point of contact to the Federal Coordinating Officer (FCO) and the ESFs regarding requests for military assistance. The DCO and staff coordinate support and provide liaison to the ESFs.

Defense Critical Infrastructure Program (DCIP)..the mission of the DCIP is to identify, prioritize, and coordinate protection of critical assets that affect the warfighting capability of the U.S. armed forces and, ultimately, our national defense and economic security; to establish adaptive plans and procedures to mitigate risk and restore capability in the event of an asset's loss or degradation; to support Defense critical infrastructure crisis and consequence management; and to protect critical infrastructure information.

Defense Emergency Response Fund. Established by Public Law 101-165 (1989). That law provides that, The Fund shall be available for providing reimbursement to currently applicable appropriations of the Department of Defense for supplies and services provided in anticipation of requests from other Federal departments and agencies and from State and local governments for assistance on a reimbursable basis to respond to natural or manmade disasters. The Fund may be used upon a determination by the Secretary of Defense that immediate action is necessary before a formal request for assistance on a reimbursable basis is received. The Fund is applicable to military support to civil authorities (MSCA) under DoD Directive 3025.1 and to foreign disaster assistance under DoD Directive 5100.46.

Defense Production Act of 1950 (DPA). The Defense Production Act of 1950 (DPA) as amended by P L. 102-558, 106 Stat. 4201, 50 U.S.C. App. 2062, is the primary authority to ensure the timely availability of resources for national defense and civil emergency preparedness and response. Among other things, the DPA authorizes the President to demand that companies accept and give priority to government contracts which he deems necessary or appropriate to promote the

national defense. The DPA defines national defense to include activities authorized by the emergency preparedness sections of the Stafford Act. Consequently, DPA authorities are available for activities and measures undertaken in preparation for, during, or following a natural disaster or accidental or man-caused event. The Department of Commerce has redelegated DPA authority under Executive Order 12919, National Defense Industrial Resource Preparedness, June 7, 1994, as amended, to the Secretary of Homeland Security to place, and upon application, to authorize State and local governments to place, priority rated contracts in support of Federal, State, and local emergency preparedness activities.

Defense Support of Civil Authorities (DSCA) — Immediate Response. Imminently serious conditions resulting from any civil emergency may require immediate action to save lives, prevent human suffering or mitigate property damage. When such conditions exist, and time does not permit approval from higher headquarters, local military commanders and responsible officials from DOD components and agencies are authorized to take necessary action to respond to requests from civil authorities. This response must be consistent with the Posse Comitatus Act 18 U.S.C. § 1385), which generally prohibits Federal military personnel (and units of the National Guard under Federal authority) from acting in a law enforcement capacity (e.g., search, seizures, arrests) within the United States, except where expressly authorized by the Constitution or Congress.

Defense Support of Civil Authorities (DSCA). Defense support of civil authorities, often referred to as civil support, is DoD support, including Federal military forces, the Department's career civilian and contractor personnel, and DoD agency and component assets, for domestic emergencies and for designated law enforcement and other activities. The Department of Defense provides defense support of civil authorities when directed to do so by the President or Secretary of Defense

Defense Technical Information Center (DTIC). The central facility of the DOD for secondary distribution of technical documents generated by research, development, test, and evaluation efforts sponsored by the Department of Defense.

Defense-in-Depth. The nuclear power plant design basis used to ensure maximum protection of the environment from an inadvertent release of fission products.

Deficit. The condition that results when the available supply is less than the rate of consumption.

Definitive medical care. Medical treatment that includes all equipment and procedures necessary to restore the health or provide palliation, if health can not be restored, to the individual patient.

Deflagration. The chemical oxidation reaction (burning) of hydrocarbon material in which the reaction front advances into the unreacted material at less than sonic velocity. A certain pressure rise will occur.

Deforestation. To clear of forest or trees; Conversion of forest to non-forest.

Defusing. An informal opportunity for emergency workers to spontaneously interact with their fellow workers after response to an emergency to assist in removing the causes of tension from that event.

Degree. A unit of direction from a given point — there are 360 degrees in a circle.

Delegation of Authority. Identification, by position, of the authorities for making policy determinations and decisions at headquarters, field levels, and all other organizational locations.

Generally, pre-determined delegations of authority will take effect when normal channels of direction are disrupted and terminate when these channels have resumed.

Demands, Agent Generated. The term presented by Dynes et al to describe the issues created by the disaster itself such as property damage, death, etc.

Demands, hazard generated. Needs generated by the hazard impact itself and perceived as a responsibility of the incident response system. For example, the need to provide care of patients from an evacuated nursing home would constitute a hazard-generated demand for a jurisdiction. This term is an adaptation of agent generated demand (using the emergency management term hazard instead of agent). See demands, agent generated.

Demands, response generated. The needs created by the attempt to organize responders. (Adapted from Dynes et al, 1981) For example, the need to disseminate information across the multiple response organizations is a response generated demand that requires methodology that differs from day-to-day operations.

De-minimis risk. That risk which is sufficiently low that the community regards it as insignificant and is not concerned with it.

Demobilization. The ICS/IMS phase that begins the transition of Management, Operations, and Support functions and elements from the incident activities back to normal operations or to their baseline standby state as their operational objectives are attained.

Department of Homeland Security (June 2002). The Homeland Security Act of 2002, Pub. L. No. 107-296, 116 Stat. 2135 (2002) (codified predominantly at 6 U.S.C. §§ 101-557), as amended with respect to the organization and mission of the Federal Emergency Management Agency in the Department of Homeland Security Appropriations Act of 2007, Pub. L. No. 109295, 120 Stat. 1355 (2006), established a Department of Homeland Security as an executive department of the United States. The Homeland Security Act consolidated component agencies into the Department. The Secretary of Homeland Security is the head of the Department and has direction, authority, and control over it. All functions of all officers, employees, and organizational units of the Department are vested in the Secretary.

Department of Homeland Security, Guiding Principles. The philosophy that informs and shapes decision making and provides normative criteria that governs the actions of policy makers and employees in performing their work:

1. Protect Civil Rights and Civil Liberties. We will defend America while protecting the freedoms that define America. Our strategies and actions will be consistent with the individual rights and liberties enshrined by our Constitution and the Rule of Law. While we seek to improve the way we collect and share information about terrorists, we will nevertheless be vigilant in respecting the confidentiality and protecting the privacy of our citizens. We are committed to securing our nation while protecting civil rights and civil liberties.

2. Integrate Our Actions. We will blend 22 previously disparate agencies, each with its employees, mission and culture, into a single, unified Department whose mission is to secure the homeland. The Department of Homeland Security will be a cohesive, capable and service-oriented organization whose cross-cutting functions will be optimized so that we may protect our nation against threats and effectively respond to disasters.

3. Build Coalitions and Partnerships. Building new bridges to one another are as important as building new barriers against terrorism. We will collaborate and coordinate across traditional boundaries, both horizontally (between agencies) and vertically (among different levels of

government). We will engage partners and stakeholders from federal, state, local, tribal and international governments, as well as the private sector and academia. We will work together to identify needs, provide service, share information and promote best practices. We will foster inter-connected systems, rooted in the precepts of federalism that reinforce rather than duplicate individual efforts. Homeland security is a national effort, not solely a federal one.

4. Develop Human Capital. Our most valuable asset is not new equipment or technology, but rather our dedicated and patriotic employees. Their contributions will be recognized and valued by this Department. We will hire, train and place the very best people in jobs to which they are best suited. We are committed to personal and professional growth and will create new opportunities to train and to learn. We will create a model human resources management system that supports equally the mission of the Department and the people charged with achieving it.

5. Innovate. We will introduce and apply new concepts and creative approaches that will help us meet the challenges of the present and anticipate the needs of the future. We will support innovation and agility within the public and private sector, both by providing resources and removing red tape so that new solutions reach the Department and the marketplace as soon as possible. We will harness our nation's best minds in science, medicine and technology to develop applications for homeland security. Above all, we will look for ways to constantly improve—we will recognize complacency as an enemy.

6. Be Accountable. We will seek measurable progress as we identify vulnerabilities, detect evolving threats to the American homeland and prioritize our homeland security resources. We will assess our work, evaluate the results and incorporate lessons learned to enhance our performance. We will reward excellence and fix what we find to be broken. We will communicate our progress to the American people, operating as transparently as possible and routinely measuring the success of our progress.

Department of Homeland Security, Mission. We will lead the unified national effort to secure America. We will prevent and deter terrorist attacks and protect against and respond to threats and hazards to the nation. We will ensure safe and secure borders, welcome lawful immigrants and visitors, and promote the free-flow of commerce.

The primary missions of the Department are to prevent terrorist attacks within the United States; reduce the vulnerability of the United States to terrorism; and minimize the damage, and assist in the recovery, from terrorist attacks that do occur within the United States; carry out all functions of entities transferred to the Department, including by acting as a focal point regarding natural and manmade crises and emergency planning; ensure that the functions of the agencies and subdivisions within the Department that are not related directly to securing the homeland are not diminished or neglected except by specific explicit Act of Congress; ensure that the overall economic security of the United States is not diminished by efforts, activities, and programs aimed at securing the homeland; ensure that the civil rights and civil liberties of persons are not diminished by efforts, activities, and programs aimed at securing the homeland; and monitor connections between illegal drug trafficking and terrorism, coordinate efforts to sever such connections, and otherwise contribute to the efforts to interdict illegal drug trafficking.

Department of Homeland Security, Primary Responsibilities. As described in this Act, the Department's primary responsibilities shall include: information analysis and infrastructure protection;

Department of Homeland Security, Strategic Goals: 1. **Awareness** — Identify and understand threats, assess vulnerabilities, determine potential impacts and disseminate timely information to our homeland security partners and the American public. 2. **Prevention** — Detect, deter and mitigate threats to our homeland. 3. **Protection** — Safeguard our people and their freedoms, critical infrastructure, property and the economy of our Nation from acts of terrorism, natural disasters, or other emergencies. 4. **Response** — Lead, manage and coordinate the national response to acts of terrorism, natural disasters, or other emergencies. 5. **Recovery** — Lead national, state, local and private sector efforts to restore services and rebuild communities after acts of terrorism, natural disasters, or other emergencies. 6. **Service** — Serve the public effectively by facilitating lawful trade, travel and immigration. 7. **Organizational Excellence** — Value our most important resource, our people. Create a culture that promotes a common identity, innovation, mutual respect, accountability and teamwork to achieve efficiencies, effectiveness, and operational synergies.

Department of Homeland Security, Strategic Plan. In January 2003, the Department of Homeland Security became the Nation's 15th and newest Cabinet department, consolidating 22 previously disparate agencies under one unified organization. One year ago, no single federal department had homeland security as its primary objective. Now it is our mission. We are integrating our resources to meet a common goal. Our most important job is to protect the American people and our way of life from terrorism. We have a single, clear line of authority to get the job done. While we can never eliminate the potential for attack, particularly in a society that's as open, as diverse, and as large as ours, we will significantly reduce the Nation's vulnerability to terrorism and terrorist attack over time. Through partnerships with state, local and tribal governments and the private sector, we are working to ensure the highest level of protection and preparedness for the country and the citizens we serve. This plan outlines our approach to implement the National Strategy to secure the United States from terrorist threats and attacks, and prepare our country by building up capacity to respond if either occurs. It provides the frame of reference in which we will set priorities and focus our operations. We, in the Department of Homeland Security, are working to protect our fellow citizens and our very way of life by securing our borders, our airports, our waterways and our critical infrastructure. We are increasing our nation's ability to respond to emergencies. We are protecting the rights of American citizens and enhancing public services. We understand our mission. The task before us is difficult, but not impossible. We undertake the challenges before us with the understanding that Americans do not live in fear. We live in freedom, and we will never let that freedom go.

Department of Homeland Security, Vision. Preserving our freedoms, protecting America. we secure our homeland.

Department of Homeland Security. Legislation to create the largest reorganization of the federal government in 50 years was signed into law on November 25, 2002. Three months later, on March 1, 2003, the majority of the 22 agencies and 180,000 employees were officially merged to form the U.S. Department of Homeland Security.

Department Operations Center (DOC). A type of multiagency coordination entity. DOCs normally focus on internal agency incident management and response and are linked to and, in most cases, are physically represented in a higher level EOC. ICPs should also be linked to DOCs and EOCs to ensure effective and efficient incident management.

Deposition. Physical settling or placing of radioactive material onto a surface. Fallout may be deposited on surfaces. Material ingested or inhaled by an individual may be deposited in the lungs or other organs.

Depression. Region of the atmosphere in which the pressures are lower than those of the surrounding region at the same level.

Deputy. A fully qualified individual who, in the absence of a superior, can be delegated the authority to manage a functional operation or perform a specific task. In some cases, a deputy can act as relief for a superior and, therefore, must be fully qualified in the position. Deputies can be assigned to the Incident Commander, General Staff, and Branch Directors.

Dermal Toxicity. Adverse effects resulting from skin exposure to a substance.

Descriptive studies. Attempts to answer questions such as, What happened?, or What is it? Descriptive studies do not need to evaluate an intervention, they may just describe in detail what happened, how it happened, and who was involved.

Desertification. The process by which a semi-arid (dry land) ecosystem loses its capacity for seasonal revival or repair and progresses towards becoming a desert. This process causes environmental degradation well beyond its boundaries. It is a mixed event related to natural (lack of adequate rainfall, seasonal variations in evaporation, texture and structure of the soil, topography, types of vegetation, water, and wind erosion) and human-made actions (herd growth, technological interference, slash-burn agriculture). Desertification is a slow-onset type of event.,

Design Basis Accidents (DBAs). Accidents that are postulated for the purpose of establishing functional requirements for safety significant structures, systems, components, and equipment.

Design Basis Threat. A statement that describes threats that are postulated for the purpose of establishing requirements for safeguards and security programs, systems, components, equipment, information, or material.

Design Basis. The set of requirements that bound the design of systems, structures, and components within the facility. These design requirements include consideration of safety, plant availability, efficiency, reliability, and maintainability. Some aspects of the design basis are important to safety, although others are not.

Design earthquake. Earthquake parameters selected for designing an earthquake-resistant structure according to code requirements.

Design flood. The **flood,** either observed or synthetic, which is chosen as a basis for the design of a hydraulic structure.

Design storm. 1. Rainstorm, either observed or synthetic, which is chosen as the basis for the design of a hydraulic structure. 2. Rainfall amount and distribution adopted for a given drainage area, used in determining the **design flood.**

Design water level. The maximum water elevation including the flood surcharge, that a **dam** is designed to withstand.

Designated area. The geographical area designated under a Presidential major disaster declaration that is eligible to receive disaster assistance in accordance with the provisions of Public Law (P.L.) 93-288, as amended.

Development. The responses to the disaster of sufficient magnitude to render the functional status of the component above the pre-event state. Development occurs when the pre-event status of a basic component of society is raised to levels greater than in the pre-event conditions.

Development strategy. A set of principles or plan of action designed to promote the growth and output while emphasizing sustainable development objectives. More recently, development has been increasingly defined in terms of human development, with special emphasis on poverty eradication and protection of the environment.

Devolution of authority. The passing of an unexercised right, devolution of authority is an essential planning requirement for departments and agencies manifested as a formal list of personnel who are pre-delegated the authority and responsibility to assume leadership of organizational elements within a department or agency with the approval of the department or agency head.

DFO. Disaster Field Office.

DHS. U.S. Department of Homeland Security.

Direct attack. A method of fire attack where wet or dry firefighting techniques are used. It involves suppression action right on the fire edge which then becomes the fireline.

Direct pressure. Method for controlling bleeding.

Directing staff. Personnel appointed to assist the exercise director in the control and coordination of an exercise. They are usually allocated specific functions to oversight, and may include such appointments as umpires, function coordinators, observers, damage control, safety officers, etc.

Direction and control. Direction and control is a critical emergency management function. During the applicable phases (pre-, trans-, and post-) of the emergency response effort, it allows the jurisdiction to: Analyze the emergency situation and decide how to respond quickly, appropriately, and effectively; Direct and coordinate the efforts of the jurisdiction's various response forces; Coordinate with the response efforts of other jurisdictions; Use available resources efficiently and effectively.

Director of Operations Coordination (DHS). The DHS Director of Operations Coordination is the Secretary's principal advisor for the overall departmental level of integration of incident management operations. Run by the Director, the DHS National Operations Center is intended to provide a one-stop information source for incident information sharing with the White House and other Federal departments and agencies at the headquarters level.

Dirty Bomb. A type of radiological dispersal device (RDD) that combines a conventional explosive with radioactive material.

Disaster. Disasters are fundamentally social phenomena; they involve the intersection of the physical processes of a hazard agent with the local characteristics of everyday life in a place and larger social and economic forces that structure that realm. Disasters are easily characterized as unfortunate things that happen from time to time to people and their cities. What is missing in this view is any understanding of the ways that political and economic forces create conditions that result in an earthquake having disastrous impacts for some people and communities. The disruptions of a disaster can unmask social inequalities and the injustices that accompany them.

Too often disasters become the basis for rebuilding social inequalities and perhaps deepening them, thus setting the stage for the next disaster. Disasters, from a vulnerability perspective, are understood as bound up in the specific histories and socio-cultural practices of the affected people taken in the context of their political and economic systems. The value of a vulnerability approach [to the study of hazards and disasters] lies in its openness to cultural specificity, social variability, diversity, contingency, and local agency. A vulnerability approach [to hazards and disasters] directs attention back to people and the common everyday aspects of their lives that make them more or less likely to be caught up in a disaster. It is the local struggles and strategies that can provide lessons for dealing with disaster across a range of societal contexts. Too often disaster research proceeds with the 'view from above'.

Disasters and other environmental problems are too often treated, not as symptoms of more basic political and economic processes, but rather as accidents whose effects can be remedied by sufficient application of technical skill and knowledge. Many people now accept that human activity itself has created the conditions for disaster events. This is partly because of growing awareness that through negligence or inappropriate response, the workings of social systems have made a disaster out of a situation which otherwise might not have been so serious. There has also been a growth in understanding that it is hazards that are natural, but that for a hazard to become a disaster it has to affect vulnerable people.

Disaster (*emergency management application*). A hazard impact causing adverse physical, social, psychological, economic or political effects that challenges the ability to rapidly & effectively respond. Despite a stepped up capacity and capability (call-back procedures, mutual aid, etc.) and change from routine management methods to an incident command/management process, the **outcome** is lower than expected compared to a smaller scale or lower magnitude impact (See emergency for important contrast between the two terms).

Disaster (*healthcare organization application*). Any **internal** or **external** emergency incident generated by a force, or an event occurring on or off campus, that endangers the well-being and safety of medical center patients, visitors, staff, property or records.

Disaster (*social science application*). Accidental or uncontrollable events, actual or threatened, that are concentrated in time and space, in which a society undergoes severe danger and incurs such losses to its members and physical appurtenances that the social structure is disrupted and the fulfillment of all or some of the essential functions of the society is prevented.

Disaster area. A geographical part of the state or territory in which a state of emergency or disaster.

Disaster Assistance Employee (DAE, FEMA). Disaster Assistance Employee (DAE), also known as a Stafford Act employee or Reservist, is a nonpermanent, excepted service employee appointed under the authority of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, P.L. 93-288, as amended. DAEs perform disaster response and recovery activities, usually at temporary work sites located in disaster damaged areas. Initial appointments are for periods of up to one year and may be renewed in increments of one year.

DAEs are a critical staff resource to FEMA. They perform key program, technical, and administrative functions during disasters. Without this work, FEMA's ability to assist State and local governments in recovering from the effects of disasters would be significantly less effective. DAEs must be free to travel at a minimum of two to six weeks at a time, and sometimes longer, usually with as little as a day or two of notice. They need to be able to produce high quality work with minimal supervision, under pressure and in a hectic work environment. Their travel to and from a disaster scene is paid for, along with day-to-day expenses for lodgings and an allotment for meals and expenses. DAEs receive a salary which is based on the kinds of work they perform.

Disaster Critical Control Point (DCCP). The time at which the supplies balance all of the needs in terms of the function or sub-function being evaluated. Identification of this time depends on the correct, ongoing re-assessment of needs and available supplies.

Disaster Declaration. Under the Stafford Act a disaster declaration is made upon a state Governor's request, FEMA processing, and Presidential Declaration when an event is seen to overwhelm State and local governmental response capabilities. The forms of public assistance typically flow either from a disaster declaration or an emergency declaration. A major disaster could

result from a hurricane, earthquake, flood, tornado or major fire which the President determines warrants supplemental Federal aid. The event must be clearly more than State or local governments can handle alone. If declared, funding comes from the President's Disaster Relief Fund, which is managed by FEMA, and disaster aid programs of other participating Federal departments and agencies.

Disaster ecological. Events that are caused principally by human beings and that initially affect, in a major way, the earth, its atmosphere, and its flora and fauna.

Disaster epidemiology. The medical discipline that studies the influence of such factors as life style, biological constitution and other personal or social determinants on the incidence and distribution of disease as it concerns disasters.

Disaster Field Office (DFO). The office established in or near the designated area to support federal and state response and recovery operations. The DFO houses the FCO and the Emergency Response Team (ERT), and where possible, the State Coordinating Officer (SCO) and support staff.

Disaster management. Disaster management is the process of forming common objectives and common values in order to encourage participants to plan for and deal with potential and actual disasters. A process that assists communities to respond, both pre- and post-disaster, in such a way as to save lives, to preserve property; and to maintain the ecological, economic, and political stability of the impacted region.

Disaster medicine. The study and collaborative application of various health disciplines to the prevention, preparedness, response and recovery from the health problems arising from disaster. This must be achieved in cooperation with agencies and disciplines involved in

Disaster Mitigation Act (DMA) of 2002 (Public Law106-390, October 30, 2000): The Disaster Mitigation Act (DMA) of 2000 amended the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988. The DMA authorizes the creation of a pre-disaster mitigation program to make grants to State, local and tribal governments. It also includes a provision that defines mitigation planning requirements for State, local and tribal governments. This new section (Section 322) establishes a new requirement for local and tribal mitigation plans; authorizes up to 7 percent of the HMGP funds available to a State to be used for development of State, local and tribal mitigation plans; and provides for States to receive an increased percentage of HMGP funds from 15 percent to 20 percent if, at the time of the disaster declaration, the State has in effect a FEMA approved State Mitigation Plan that meets the criteria established in regulations. Disaster Mitigation Act of 2002,

Congressional Findings: natural disasters, including earthquakes, tsunamis, tornadoes, hurricanes, flooding, and wildfires, pose great danger to human life and to property throughout the United States; greater emphasis needs to be placed on— identifying and assessing the risks to States and local governments (including Indian tribes) from natural disasters; implementing adequate measures to reduce losses from natural disasters; and ensuring that the critical services and facilities of communities will continue to function after a natural disaster; expenditures for postdisaster assistance are increasing without commensurate reductions in the likelihood of future losses from natural disasters; in the expenditure of Federal funds under the Robert T. Stafford Disaster Relief and Emergency Assistance Act, high priority should be given to mitigation of hazards at the local level; and with a unified effort of economic incentives, awareness and education, technical assistance, and demonstrated Federal support.

Disaster Mitigation Act of 2000 Purpose. The purpose of this title is to establish a national disaster hazard mitigation program— (1) to reduce the loss of life and property, human suffering, economic disruption, and disaster assistance costs resulting from natural disasters; and (2) to provide a source of predisaster hazard mitigation funding that will assist States and local governments (including Indian tribes) in implementing effective hazard mitigation measures that are designed to ensure the continued functionality of critical services and facilities after a natural disaster.

Disaster Mortuary Operational Response Team (DMORT). A Federal Level Response team designed to provide mortuary assistance in the case of a mass fatality incident or cemetery related incident. We work under the local jurisdictional authorities such as Coroner/Medical Examiners, Law Enforcement and Emergency Managers.

Disaster Preparedness Improvement Grant Program (DPIG). Authorized under Section 201 of the Stafford Act. Annual matching awards are provided to States to improve or update their disaster assistance plans and capabilities.

Disaster preparedness. The aggregate of all measures and policies taken by humans before the event for reduction of the damage that otherwise would have resulted from the event, and coping with the damage sustained.

Disaster prevention. The aggregate of approaches and measures taken to ensure that the hazard does not cause a disaster, either by preventing the event or by mitigating activities, or by activities/structure that is able to absorb the event.

Disaster Recovery Center (DRC). Places established in the area of a Presidentially declared major disaster, as soon as practicable, to provide victims the opportunity to apply in person for assistance and/or obtain information relating to that assistance. DRCs are staffed by local, State, and Federal agency representatives, as well as staff from volunteer organizations (e.g., the ARC).

Disaster reduction. Disaster reduction is the sum of all the actions, which can be undertaken to reduce the vulnerability of a society to natural hazards. The solutions include proper land-use planning, aided by vulnerability mapping, to locate people in safe areas, the adoption of proper building codes in support of disaster resilient engineering, based on local hazard risk assessments, as well as ensuring the control and enforcement of such plans and codes based on economic or other incentives. Sound information and political commitment are the basis of successful disaster reduction measures.

This is an ongoing process which is not limited to a singular disaster event. It motivates societies at risk to become engaged in conscious disaster management, beyond traditional response to the impact of natural phenomena. Disaster reduction is multi-sectoral and interdisciplinary in nature and involves a wide variety of interrelated activities at the local, national, regional and international level.

Disaster reduction. The conceptual framework of elements considered with the possibilities to minimize vulnerabilities and disaster risks throughout a society, to avoid (prevention) or to limit (mitigation and preparedness) the adverse impacts of hazards, within the broad context of sustainable development. The disaster risk reduction framework is composed of the following fields of action, as described in ISDR's publication 2002 Living with Risk: a global review of disaster reduction initiatives: risk awareness and assessment including hazard analysis and vulnerability/capacity analysis; knowledge development including education, training, research and information; public commitment and institutional frameworks, including organisational, policy, legislation and community action; application of measures including environmental management, land-use and

urban planning, protection of critical facilities, application of science and technology, partnership and networking, and financial instruments; early warning systems including forecasting, dissemination of warnings, preparedness measures and reaction capacities.

Disaster Relief Act of 1950 (Pub. L. No. 81-875, 64 Stat. 1109). Congress for the first time authorized a coordinated federal response to major disasters. Formally passed as the Federal Disaster Relief Act of 1950). Public Law 81-875 was significant for a number of reasons. Funding was authorized for a disaster relief program rather than a single-incident response. The responsibility for determining when Federal disaster relief is required was transferred from Congress to the President. The basic philosophy of Federal disaster relief was developed establishing that Federal assistance is supplemental to State and local resources. The basis for later legislation on cost-sharing between Federal and State or local governments was put into place. Provisions were made for emergency repairs to or temporary replacement of essential public facilities. Aid was provided only to State and local governments.

Disaster Relief Act of 1969 (Public Law 91-79). The Disaster Relief Act of 1969, became law on October 1, expands the Federal disaster assistance program. Permanent provisions of the Act include assistance (matching funds) to States in planning for State and 1oca1 aid to individuals suffering disaster losses and appointment of a Federal coordination officer for each major disaster.

Disaster Relief Act of 1974 (Public Law 93-288): A Federal statute designed to supplement the efforts of the affected States and local governments in expediting the rendering of assistance, emergency services, and the reconstruction and rehabilitation of devastated areas (PL 93-288), as amended. In April 1974, there was a series of devastating tornadoes that hit six Midwestern States. This confirmed the need to add individual and family assistance to the disaster relief program. As a result, the Disaster Relief Act of1974 (Public Law 93-288) was established. Under this law: 1. The Individuals and Households Grant Program is available. 2. Federal and State disaster relief operations are conducted on a partnership basis, and a State Coordinating Officer (SCO) works jointly with an FCO. 3. Federal assistance supports local, Tribal, and State activities and resources. 4. Assistance is contingent upon a Presidential Declaration.

Disaster Relief Act of 1988 (Stafford Act). In November 1988, the Robert T. Stafford Disaster Relief and Emergency Assistance Act was passed. This act provided a framework for continued disaster relief and provided the authority for FEMA's role in managing Federal disaster assistance. It also legislated a minimum 75- percent Federal/25-percent State and local cost sharing for the PA Program. The Stafford Act refocused assistance for non-natural disasters, unless caused by fire, flood, or explosion, to a more limited scope. It also confirmed the importance of individual assistance and added an emphasis on mitigation of future losses. Key features of the act are: 1. State, Tribal, and local governments have the primary responsibility to respond to a disaster. 2. Federal assistance is designed to supplement the efforts and available resources of State, Tribal, and local governments, and voluntary relief organizations in alleviating the damage, loss, hardship, or suffering resulting from a disaster. 3. FEMA may task any Federal agency, with or without reimbursement, to provide assistance to State, Tribal, and local disaster efforts in a declared disaster. Disaster assistance programs included in the Stafford Act are: 1. Individual Assistance (IA), in the form of individual and household grants and temporary housing. 2. PA, including grants for emergency work, repair and restoration, and debris removal. 3. Mitigation grants, to reduce long-term risk to life and property from natural or technological disasters.

Disaster Relief Act, 1980. The Public Assistance (PA) Program, which provided disaster assistance to State and local governments, was in the form of a 100-percent Federal grant. The response to the eruption of Mount St. Helens in May 1980 was the first administrative implementation of a 75-percent Federal and 25-percent State and local cost sharing of disaster expenses. This response was the first step toward a cost-sharing, full-partnership concept of managing disaster response and recovery.

Disaster Relief Act, 1993. Congress amended the Stafford Act in October 1993 to expand the scope of mitigation to include acquisition of properties in floodplains.

Disaster Relief Act, 1994. An October 1994 amendment incorporated most of the former Civil Defense Act of 1950, 50 U.S.C. App., into the Stafford Act. This amendment allows FEMA to implement an all-hazards approach to preparedness.

Disaster Relief Act, 2000. The Disaster Mitigation Act of 2000 further modified the Stafford Act to establish a national program for pre-disaster mitigation, streamline administration of disaster relief, and control Federal costs of disaster assistance.

Disaster Resilience. Disaster resilience refers to the capability to prevent or protect against significant multihazard threats and incidents, including terrorist attacks, and to expeditiously recover and reconstitute critical services with minimum damage to public safety and health, the economy, and national security.

Disaster resistant community. Becoming disaster resistant requires a community-wide effort over a long period of time. Participation and commitment are required of all sectors of the community: employers, businesses, community associations, services, and local government. Project Impact provide guidance on how to accomplish this cooperative effort. Under Project Impact guidelines, a community goes through a number of steps in four phases, including:

Phase 1: Build the Partnership: Form a partnership team of local officials, representatives of industry and business, infrastructure, transportation, utilities, housing, volunteer organizations, health care, government, work force, education—all community elements having a stake in reducing losses. Designate a project impact coordinator to provide staff assistance for the partnership team and to assist with community education and outreach. Establish subgroups to tackle identified issues. Develop or reproduce Project Impact materials to explain objectives and how to get there.

Phase 2: Identify Hazards and Community Vulnerabilities. Determine which areas of your community can be affected by disasters, how likely it is that a disaster may occur, and how intense the disaster might be. Identify the facilities that are at risk and to what degree they might be affected, as well as how their damage might affect the vulnerability of other structures. Do a risk assessment to define the potential consequences of a disaster based on a combination of your hazard and vulnerability studies. ***Phase 3:*** Prioritize and Take Hazard Risk-Reduction Actions. Plan for open space acquisition of high hazard potential areas. Develop policies, incentives and legislation to encourage property owners to invest in projects that will reduce losses in disasters. Adopt policies that require consideration and mitigation of identified hazards in subdividing or consolidating parcels, changing land uses, or redevelopment. Support community efforts to improve or replace vulnerable utilities and transportation systems.

Phase 4: Communicate Successes. Develop and distribute promotional mitigation materials, organize a speakers bureau, and ask the news media to become partners or sponsors in communicating the value of reducing hazards and the progress toward making your community disaster resistant.

Disaster Resistant University FEMA Initiative. Five U.S. universities have been chosen to participate in the pilot phase of a unique undertaking by the Federal Emergency Management Agency (FEMA) to help the nation's colleges and universities limit future property and economic damage from natural disasters. The five universities will each receive about $100,000 from FEMA for the project and each university will match equally the resources provided by FEMA. The five pilot Disaster Resistant Universities are Tulane University, University of Alaska/ Fairbanks, University of Miami, University of North Carolina/Wilmington and the University of Washington at Seattle. These five universities have already shown their commitment to making their campuses more disaster resistant, said FEMA Director James Lee Witt. When an institution takes action like these universities are doing, their activities will improve the ability of their surrounding community and regions to recover from a major disaster. FEMA's Disaster Resistant Universities initiative uses the same strategic approach as FEMA's

Project Impact: Building Disaster Resistant Communities. Through Project Impact communities are encouraged to come together to assess their vulnerabilities to natural hazards and implement strategies to limit damage before disasters occur. Project Impact bases its work and planning on three simple principles: Risks must be identified and preventive actions decided at the local level; private-public partnerships are essential; and long-term efforts and investments in prevention measures are necessary. The first part of the project consisted of a University of California at Berkeley study of the economic consequences of a disaster on a university and its surrounding community and state. The study substantiated the premise that a disaster in a community's predominant business — the university — will have severe economic consequences locally and even statewide. As part of the study, UC Berkeley also developed a plan to limit future disaster losses and guidelines for other universities to use in the pilot phase of the initiative. It is clear that disasters do much more than destroy buildings, FEMA Director James Lee Witt said. They impact a locality in many different ways for a long time. The federal government alone invests nearly $15 billion per year in university-based research, he added. Witt said that he expects the Disaster Resistant University initiative will be an important component of FEMA's efforts to change the way America deals with disasters.

Disaster response. A sum of decisions and actions taken during and after disaster, including immediate relief, rehabilitation, and reconstruction.

Disaster risk. The chance of a hazard event occurring and resulting in a disaster.

Disaster risk management. The systematic process of using administrative decisions, organization, operational skills and capacities to implement policies, strategies and coping capacities of the society and communities to lessen the impacts of natural hazards and related environmental and technological disasters. This comprises all forms of activities, including structural and non-structural measures to avoid (prevention) or to limit (mitigation and preparedness) adverse effects of hazards.

Disaster risk reduction. The conceptual framework of elements considered with the possibilities to minimize vulnerabilities and disaster risks throughout a society, to avoid (prevention) or to limit (mitigation and preparedness) the adverse impacts of hazards, within the broad context of sustainable development.

The disaster risk reduction framework is composed of the following fields of action, as described in ISDR's publication 2002 Living with Risk: a global review of disaster reduction initiatives: 1) risk awareness and assessment including hazard analysis and vulnerability/capacity

analysis; 2) knowledge development including education, training, research and information; 3) public commitment and institutional frameworks, including organisational, policy, legislation and community action; 4) application of measures including environmental management, land-use and urban planning, protection of critical facilities, application of science and technology, partnership and networking, and financial instruments; 5) early warning systems including forecasting, dissemination of warnings, preparedness measures and reaction capacities.

Disaster, major. Any natural catastrophe (including any hurricane, tornado, storm, high water, wind- driven water, tidal wave, tsunami, earthquake, volcanic eruption, landslide, mudslide, snowstorm, or drought) or, regardless of cause, any fire, flood, or explosion, in any part of the United States, which, in the determination of the President, causes damage of sufficient severity and magnitude to warrant major disaster assistance under the Stafford Act to supplement the efforts and available resources of States, local governments, and disaster relief organizations in alleviating the damage, loss, hardship, or suffering caused thereby. (Robert T. Stafford Act 102; 44 CFR 206.2 and 206.36)

Disaster, natural. A natural disaster is a serious disruption to a community or region caused by the impact of a naturally occurring rapid onset event that threatens or causes death, injury or damage to property or the environment and which requires significant and coordinated multi-agency and community response. Such serious disruption can be caused by any one, or a combination, of the following natural hazards: bushfire; earthquake; flood; storm; cyclone; storm surge; landslide; tsunami; meteorite strike; or tornado.

Disaster, technological. The term ‘technological disaster’ renders such events too impersonal in origin. They believe that such ‘accidents’ are due mainly to the excessive priority given to industrial profits and advocate the term ‘man-made disaster’ to indicate corporate responsibility.

Disaster victim identification team. A police team responsible for identification of deceased disaster victims.

Dispatch. The ordered movement of a resource or resources to an assigned operational mission or an administrative move from one location to another.

Dispersal equipment. Equipment designed to combat oil spills by the application of dispersant.

Dispersant. A chemical formulation containing non-ionic surface active agents that lower the interfacial tension between oil and water and enable the oil film to break up more easily under natural wave action or mechanical agitation. Dispersants may be water-based, solvent- (hydrocarbon) based, or concentrates (high surfactant content).

Displaced person. Person, who, for different reasons or circumstances, has been compelled to leave their home. They may or may not reside in their country of origin, but are not legally regarded as a **refugee.**

Disqualification. The loss of formal qualification for radiological control technicians (RCTs) or the process of designating radiological workers (RWs) as needing additional training prior to task assignment because of one or more of the following: insufficient or unsatisfactory performance of proficiency requirements, lapse of periodic requalification (for RCTs) or retraining (for radiological workers) requirements, or serious job-performance deficiencies resulting in unsafe radiological conditions.

Distress phase. A situation wherein there is a reasonable certainty that a vessel or aircraft or person is threatened by grave and imminent danger and requires immediate assistance.

Distress signal. A pyrotechnic device intended for signalling, warning, or rescue.

Disused dam. A dam where the storage is no longer used.

Division. A portion of the **fire perimeter** comprising of two or more sectors. The number of sectors grouped in a division should be such as to ensure effective direction and control of operations. Divisions are generally identified by a local geographic name.

Division. The partition of an incident into geographical areas of operation. Divisions are established when the number of resources exceeds the manageable span of control of the Operations Chief. A division is located within the ICS organization between the branch and resources in the Operations Section.

DMA. Disaster Mitigation Act of 2002.

DMAT. Disaster Medical Assistance Team.

DMORT. Disaster Mortuary Operational Response Team.

Doctrine. Doctrine influences the way in which policy and plans are developed, forces are organized and trained, and equipment is procured. It promotes unity of purpose, guides professional judgment and enables [first responders] to fulfill their responsibilities.

DoD Immediate Response..the majority of DOD support is coordinated using the concept of DSCA. However, imminently serious conditions resulting from any civil emergency may require immediate action to save lives, prevent human suffering or mitigate property damage. When such conditions exist, and time does not permit approval from higher headquarters, local military commanders and responsible officials from DOD components and agencies are authorized to take necessary action to respond to requests from civil authorities. This response must be consistent with the Posse Comitatus Act, which generally prohibits Federal military personnel (and units of the National Guard when they are acting under Federal authority) from acting in a law enforcement capacity (e.g., search, seizures, arrests) within the United States, except where expressly authorized by the Constitution or Congress.

DOE Complex-wide Lessons Learned Program. The collection of DOE and contractor organizational lessons learned programs sharing information to improve performance.

DOE Facility Representative. For each major facility or group of lesser facilities, an individual, or designee, assigned responsibility by the Head of the Field Element/Operations Organization for monitoring the performance of the facility and its operations. This individual should be the primary point of contact with the contractor and will be responsible to the appropriate Secretarial Officer and Head of the Field Element/Operations Organization for implementing occurrence reporting requirements.

DOE Field Element. DOE Operations/Field Offices, Power Marketing Administrations, and where applicable, DOE Area Offices subordinate to Operations/Field Offices.

Domain Awareness. Obtaining effective knowledge of activities, events, and persons in the dimensions of air, land, sea, and cyber-space.

Domain. A major grouping of activities related to the life cycle of a domestic incident. The four domains are prevention, preparedness, response, and recovery.

Domestic Emergency. Any natural disaster or other emergency that does not seriously endanger national security, but which is of such a catastrophic nature that it cannot be managed effectively without substantial Federal presence, or which arises within spheres of activity in which there is an established Federal role.

Domestic Emergency Support Team (DEST). Relative to terrorism incident operations, an organization formed by the Federal Bureau of Investigation (FBI) to provide expert advice and assistance to the FBI On-Scene Commander (OSC) related to the capabilities of the DEST agencies and to coordinate follow-on response assets. When deployed, the DEST merges into the existing Joint Operations Center (JOC) structure.

Domestic Readiness Group (DRG). The DRG is an interagency body convened on a regular basis to develop and coordinate preparedness, response, and incident management policy. This staff-level group evaluates various policy issues of interagency import regarding domestic preparedness and incident management and makes recommendations to Cabinet and agency deputies and principals for decision. As appropriate, the chair of the HSC [Homeland Security Council] and Cabinet principals will present such policy issues to the President for decision. The DRG has no role regarding operational management during an actual incident.

DOR. Disaster Operations and Recovery Section, Emergency Management Institute, FEMA.

Dose. A general term denoting the quantity of radiation or energy absorbed. Dose may refer to absorbed dose, the amount of energy deposited per unit mass, or to the equivalent dose (the absorbed dose adjusted for the relative biological effect of the type of radiation being measured).

Dose rate. The radiation dose delivered per unit time.

Dosimeter. A portable device that measures total radiation dose received.

Downgrading. A determination by appropriate authority that: (1) information may be handled at a level lower than the original classification level, or (2) documents or material may be handled at a level and/or category lower than the original classification level and/or category. In either case, the revised classification level shall not be lower than Confidential.

DPMU. Disaster Portable Morgue Unit.

DRC. Disaster Recovery Center.

Drill. A coordinated, supervised activity usually used to test a single specific operation or function in a single agency. Drills are commonly used to provide training on new equipment, develop or test new policies or procedures, or practice and maintain current skills. Typical attributes include the following: A narrow focus, measured against established standards; Instant feedback; Performance in isolation; Realistic environment.

Drought. 1. Prolonged absence or marked deficiency of precipitation. 2. Period of abnormally dry weather sufficiently prolonged for the lack of precipitation to cause a serious hydrological imbalance.

Drought index. A numerical value, such as the byram-keetch drought index, reflecting the dryness of soils, deep forest litter, logs and living vegetation. syn. ‘soil dryness index’.

Droughts. Period of deficiency of moisture in the soil such that there is inadequate water required for plants, animals, and human beings

DRR. Disaster Risk Reduction.

Dry firefighting. The suppression of a fire without the use of water. This is normally achieved by removing the fuel by the use of hand tools or machinery.

DSCA. Defense Support of Civil Authorities.

Duff. The mat of undecomposed or partly decomposed vegetation matter on the forest floor, the original vegetative structures still being recognisable.

DUNS. Data Universal Numbering System.

Duplex. A pair of frequencies where the transmitted signal is on a different frequency to the received signal.

Duration. The length of time over which something continues (for disasters: brief = seconds to hours; short = hours to days; intermediate = days to weeks; prolonged = months to years).

Dust (sand) storm. Dust (sand) energetically lifted to great heights by strong and turbulent winds.

Dust. Small solid particles that settle out under their own weight but that may remain suspended for some time.

E

Early warning. The provision of timely and effective information, through identified institutions, that allows individuals exposed to a hazard to take action to avoid or reduce their risk and prepare for effective response. Early warning systems include a chain of concerns, namely: understanding and mapping the hazard; monitoring and forecasting impending events; processing and disseminating understandable warnings to political authorities and the population, and undertaking appropriate and timely actions in response to the warnings''.

Earth flow. A mass movement characterised by down slope translation of loose material.

Earthquake. 1. A sudden break within the upper layers of the earth, sometimes breaking the surface, resulting in the vibration of the ground. 2. The vibrations of the earth caused by the passage of seismic waves radiating from some source of elastic energy.

Earthquake intensity. A measure of ground shaking obtained from the damage done to structures built by humans, changes in the earth's surface and felt reports. Special form or card listing questions designed about the modified mercalli scale of intensity to which simple answers indicate the intensity of an earthquake. The answers to these questionnaires gathered from an area around a felt earthquake can be integrated with field observations and other reports in drawing isoseismal maps.

Earthquake magnitude. A quantity that is characteristic of the total energy released by an **earthquake,** in contrast to 'intensity' which subjectively describes earthquake effects at a particular place. Richter in 1935 devised the logarithmic magnitude scale in current use to define local magnitude (ML) in terms of the motion that would be measured by a standard type of seismograph located 100 kilometres from the epicentre of an earthquake. Several other magnitude scales are also in use, for example body-wave magnitude (mb) and surface-wave magnitude (MS) which use body waves and surface waves respectively. The scale is open- ended but the largest known earthquake magnitudes are about MS 8.5.

Earthquake occurrence (recurrence) interval. The average interval of time between the occurrence of earthquakes in a particular region.

Earthquake risk. The relative risk is the comparative earthquake hazard from one site to another. The probabilistic risk is the odds of earthquake occurrence within a given time interval and region.

Earthquake swarm. A series of minor earth tremors (none of which may be identified as the **main shock)** that occurs within a limited area and time.

EAS. Emergency Alert System.

ECG. Enduring Constitutional Government.

Ecologically sustainable development. Using, conserving and enhancing natural resources so that ecological processes, on which life depends, are maintained, and the total quality of life, now and in the future, can be increased.

Economic Injury Disaster Loan (EIDL, SBA). Small businesses and small agricultural cooperatives that have suffered substantial economic injury resulting from a physical disaster or an agricultural production disaster designated by the Secretary of Agriculture may be eligible for the SBA's Economic Injury Disaster Loan Program. Substantial economic injury is the inability of a business to meet its obligations as they mature and to pay its ordinary and necessary operating expenses. An EIDL can help you meet necessary financial obligations that your business could have met had the disaster not occurred. It provides relief from economic injury caused directly by the disaster and permits you to maintain a reasonable working capital position during the period affected by the disaster. The SBA provides EIDL assistance only to those businesses we determine are unable to obtain credit elsewhere. The SBA can provide up to $1.5 million in disaster assistance to a business. This loan cap includes both economic injury and physical damage assistance. Your loan amount will be based on your actual economic injury and financial needs. The interest rate on EIDLs cannot exceed 4 percent per year. The term of these loans cannot exceed 30 years. Your term will be determined by your ability to repay the loan.

Economic risk analysis. That sub-set of **risk analysis** which is concerned with factors that can be expressed in dollar values.

Economy. The wealth and resources of a community, especially in terms of pro duction and consumption of goods and services; the main techniques for providing the resources essential for maintaining the basic functions and infra structure of the affected society. It includes how these resources are used by the society and the sources of these resources, e.g., agriculture, crops, industry, and the products produced, jobs, foraging, trade and transport (import/exports), value of the currency, per capita income, etc. It is a Basic Societal Function.

Ecosystem. The interacting system of a biological community, both plant and animal, and its non-living surroundings.

Edge burning. A term used to describe perimeter burning of an area in mid- conditions prior to large scale prescribed burning. This practice is used to strengthen buffers and to reduce mopping-up operations.

Education. Education is instruction, structured to achieve specific competency-based objectives, that imparts primarily knowledge. This may be general knowledge or it may be job specific but extend to higher order knowledge (for example, understanding the big picture, or working under stress) not specifically included in one's job description but of great value during emergency management activities. Educational material should be competency — based and specify a level of proficiency that relates to the competencies (awareness, operations, or expert).

Effective dose equivalent (EDE) (H_e). The summation of the products of the dose equivalent received by specified tissues of the body (H**t**) and the appropriate weighting factor (W**t**) — that is ($H_E = W_T H_T$). It includes the dose from radiation sources internal and/or external to the body. The effective dose equivalent is expressed in units of rem.

Effective dose. A measure of dose which takes into account both the type of radiation involved and the radiological sensitivities of the organs and tissues irradiated.

Effective precipitation. The part of precipitation that reaches stream channels as runoff.

Effective warning time. The time available after receiving advice of an impending flood and before the floodwaters disable damage-reduction activities. The effective warning time is typically used to move farm equipment, raise furniture and evacuate people.

Effective. Achieving the established organization-wide and/or unit-level strategic and tactical objectives (related to adequate).

Effects. The results of an action.

Efficient. Achieving objectives with a minimum of resources compared to past or standard methods. Resources include time, effort, personnel, equipment, supplies, facilities, and expense.

EIDL. Economic Injury Disaster Loan (Small Business Administration).

El Nino. An anomalous warming of ocean water resulting from the oscillation of a current in the South Pacific, usually accompanied by heavy rain fall in the coastal region of Peru and Chile, and reduction of rainfall in equatorial Africa and Australia.

Elements at risk. The population, buildings and civil engineering works economic activities, public services and infrastructure, etc. Exposed to hazards.

Elevated Condition (Yellow). An Elevated Condition is declared when there is a significant risk of terrorist attacks. In addition to the Protective Measures taken in the previous Threat Conditions, Federal departments and agencies should consider the following general measures in addition to the Protective Measures that they will develop and implement: increasing surveillance of critical locations; coordinating emergency plans as appropriate with nearby jurisdictions; assessing whether the precise characteristics of the threat require the further refinement of preplanned Protective Measures; and implementing, as appropriate, contingency and emergency response plans.

Elevations in the threat alert level. The term ‘elevations in the threat alert level’ means any designation (including those that are less than national in scope) that raises the homeland security threat level to either the highest second highest threat level under the Homeland Security Advisory System.

EM. Emergency Management.

EMA. Emergency Management Agency.

EMAC Advisory Group (EAG). The EAG, comprised of representatives from national organizations whose membership are EMAC stakeholders, facilitates the effective integration of multi-discipline emergency response and recovery assets for nation-wide mutual aid through EMAC. Many of these resources are local teams which need the ability to be brought on as temporary state employees.

EMAP. Emergency Management Accreditation Program.

Embankment flood. The flood which, when routed through the reservoir, gives a stillwater level at the **top of dam.**

Emergencies Involving Chemical or Biological Weapons. Pursuant to 10 U.S.C. 382, in response to an emergency involving biological or chemical WMD that is beyond the capabilities of civilian authorities to handle, the Attorney General may request DOD assistance directly. Assistance to be provided includes monitoring, containing, disabling, and disposing of the weapon, as well as direct law enforcement assistance that would otherwise violate the Posse Comitatus Act. Among other factors, such assistance must be considered necessary for the immediate protection of human life.

Emergencies Involving Nuclear Materials. 18 U.S.C. 831(e) authorizes the Attorney General to request DOD law enforcement assistance — including the authority to arrest and conduct searches — notwithstanding the prohibitions of the Posse Comitatus Act — when both the Attorney General and Secretary of Defense agree that an emergency situation exists and the Secretary of Defense determines that the requested assistance will not impede military readiness. An emergency situations

involving nuclear material is defined as a circumstance that poses a serious threat to the United States in which (1) enforcement of the law would be seriously impaired if the assistance were not provided and (2) civilian law enforcement personnel are not capable of enforcing the law. In addition, the statute authorizes DOD personnel to engage in such other activity as is incident to the enforcement of this section, or to the protection of persons or property from conduct that violates this section.

Emergency (*emergency management application*). A Hazard impact causing adverse physical, social, psychological, economic or political effects that challenges the ability to rapidly & effectively respond. It requires a stepped up capacity and capability (call-back procedures, mutual aid, etc.) to meet the expected outcome, and commonly requires change from routine management methods to an incident command/management process in order to achieve the expected outcome (See disaster for important contrast between the two terms).

Emergency (*types*). Types of Emergencies: Emergencies take many forms. They can involve any combination of consequences stemming from: 1. Technological and man-made hazards: nuclear waste disposal spills; radiological, toxic substance, or hazardous materials accidents; utilities failures; pollution; epidemics; crashes; explosions; urban fires. 2. Natural disasters: earthquakes, floods, hurricanes, tornadoes, tsunami, sea surges, freezes, blizzards of snow and ice, extreme cold, forest fires, drought, and range infestation. 3. Internal disturbances: civil disorders such as riots, demonstrations run amok, large-scale prison breaks, strikes leading to violence, and acts of terrorism. 4. Energy and material shortages: from strikes, price wars, labor problems, and resource scarcity. 5. Attack: the ultimate emergency—nuclear, conventional, chemical, or biological warfare.

Emergency action Level (EAL). Specific, predetermined, observable criteria used to detect, recognize, and determine the emergency class of Operational Emergencies. They are based on consequence estimates and evaluations performed using information from the Hazards Assessment.

Emergency action plan. A plan of action to be taken to reduce the potential for property damage and loss of life in an area affected by a dam failure or large flood.

Emergency affected persons. People, other than emergency management personnel, who experience losses or injury or are affected by an emergency. Usually understood to exclude the deceased. syn. ‘disaster affected person’.

Emergency alert system. A national communications network and public warning system started in 1994 that replaced the Emergency Broadcast System jointly administered by the Federal Communications Commission, FEMA, and the National Weather Service. The System requires broadcasters, cable television systems, wireless cable systems, satellite digital audio radio service (SDARS) providers and, effective in May 2007, direct broadcast satellite (DBS) service providers to provide the communications capability to the President to address the American public during a national emergency. The system also may be used by state and local authorities to deliver important emergency information such as AMBER alerts and weather information targeted to a specific area.

Emergency Assessment Resource Manual (EARM). The EARM represents a sitewide TIA tool consisting of multiple sections, one for each facility that requires a Hazards Assessment.

Emergency Assistance Declaration Procedure, Stafford Act (Title V, Sec. 501, 42 U.S.C. 5191). (a) Request and declaration — All requests for a declaration by the President that an emergency exists shall be made by the Governor of the affected State. Such a request shall be based on a finding that the situation is of such severity and magnitude that effective response is beyond the capabilities of the State and the affected local governments and that Federal assistance is necessary. As a part of such request, and as a prerequisite to emergency assistance under this Act, the Governor

shall take appropriate action under State law and direct execution of the State's emergency plan. The Governor shall furnish information describing the State and local efforts and resources which have been or will be used to alleviate the emergency, and will define the type and extent of Federal aid required. Based upon such Governor's request, the President may declare that an emergency exists. (b) Certain emergencies involving Federal primary responsibility — The President may exercise any authority vested in him by section 502 or section 503 with respect to an emergency when he determines that an emergency exists for which the primary responsibility for response rests with the United States because the emergency involves a subject area for which, under the Constitution or laws of the United States, the United States exercises exclusive or preeminent responsibility and authority. In determining whether or not such an emergency exists, the President shall consult the Governor of any affected State, if practicable. The President's determination may be made without regard to subsection (a).

Emergency Assistance Planning and Preparedness. The preparation for deployment of Departmental resources, emergency response assets, and personnel, and/or use of facilities to support federal interagency plans, Presidential direction, and state, local, or tribal agreements of mutual aid. Emergency Assistance may be implemented coincident with an Energy Emergency response.

Emergency Assistance Program. All activities whereby Departmental resources, emergency response assets, personnel, and/or facilities are deployed in support of federal interagency plans, international agreements, Presidential direction, and state, local, or tribal agreements of mutual aid. The Emergency Assistance Program may be implemented coincident with implementation of the Energy Emergency Program (Chapter VI).

Emergency Assistance Response. Response to events requiring DOE Emergency Assistance shall be directed to appropriate DOE Headquarters elements. DOE responsibilities for Emergency Assistance are delineated within interagency federal response and recovery plans, Executive Orders, and/or international agreements. DOE Headquarters shall monitor such events for changing requirements, brief the White House and Congressional offices, and develop options for continuing Departmental operations and missions.

Emergency Assistance. Assistance which may be made available under an emergency declaration. In general, Federal support to State and local efforts to save lives, protect property and public health and safety, and lessen or avert the threat of a catastrophe. Federal emergency assistance may take the form of coordinating all disaster relief assistance (including voluntary assistance) provided by Federal agencies, private organizations, and State and local governments.

Or, the Federal government may provide technical and advisory assistance to affected State and local governments for: the performance of essential community services; issuance of warnings of risks or hazards; public health and safety information, including dissemination of such information; provision of health and safety measures; management, control, and reduction of immediate threats to public health and safety; debris removal; temporary housing; and distribution of medicine, food, and other consumable supplies. (Stafford Act)

Emergency class. Used to differentiate an operational emergency involving hazardous materials by the degree of severity, depending on the actual or potential consequence of the emergency situation; the classes are: Alert, Site Area Emergency, and General Emergency.

Emergency colour code. A code used in health care facilities for a specific emergency, as follows: fire/smoke — red; cardiac arrest/medical emergency — blue; bomb threat — purple; internal emergency (failure or threat to essential services or hazardous substances incident, illegal occupancy)

— yellow; personal threat (armed or unarmed persons threatening injury to others or themselves) — black; external emergency — brown; evacuation — orange. For ‘all clear’, the relevant colour code should be stated followed by ‘all clear’.

Emergency equipment. Equipment and supplies that are used to support an emergency response.

Emergency facilities and equipment. The facilities, equipment, and supplies that should be established and maintained for adequate emergency response support.

Emergency facilities. Facilities that are used support an emergency response.

Emergency health kit. Basic drugs and medical equipment calculated for the emergency needs of a population of 10,000 persons over three months. One prepackaged kit contains 10 identical smaller kits, each for 1,000 persons.previously known as ‘who emergency health kit’.

Emergency Management (and/or Business Continuity Advisory Committees). Members of the advisory committee should participate with the clear understanding that the objective is to minimize turnover of committee members to maintain an effective committee. Within the private sector, representatives can include, but are not limited to, information technology and communications, plant operations, transportation, maintenance, engineering, personnel, public relations, environment, legal, finance, risk management, health and safety, security, stakeholders, and fire fighting/rescue.

Within the public sector, representatives can include police, fire, emergency medical services, engineering, public works, environmental protection, public health, finance, education, emergency management, legal, transportation authorities, homeland security, stakeholders, and the military (e.g., the National Guard). When determining the representation on the committee, consideration should be given to public sector representation on a private sector committee and vice versa. This will help to establish a coordinated and cooperative approach to the program.

Emergency Management Advisory Committee (EMAC). The EMAC provides support to the Director of Emergency Management in identifying and resolving Department-wide emergency management issues.

Emergency Management and Response Information Sharing and Analysis Center (EMR-ISC). About EMR-ISAC: The U.S. Fire Administration established the Emergency Management and Response-Information Sharing and Analysis Center (EMR-ISAC) to collect, analyze and disseminate Critical Infrastructure Protection (CIP) information in support of federal government initiatives, and encourage the leaders, owners and operators of the ESS throughout the nation to practice CIP [Critical Infrastructure Protection].

Emergency Management Assistance Compact (EMAC). Administered by the National Emergency Management Association, EMAC is a congressionally ratified organization that provides form and structure to the interstate mutual aid and assistance process. Through EMAC, a State can request and receive assistance from other member States.

Emergency Management Assistance Compact (EMAC). The EMAC was congressionally ratified in 1996 to provide a fast and flexible response system through which States send requested personnel and equipment to help disaster relief efforts in other States. All 50 States, the District of Columbia, Puerto Rico, and the U.S. Virgin Islands have enacted legislation to become members of the EMAC. **(DHS,** National Preparedness Guidelines, Sep. 2007, p. 12)

Emergency Management Assistance Compact (EMAC). A congressionally ratified organization that provides form and structure to interstate mutual aid. Through EMAC, a disaster

impacted state can request and receive assistance from other member states quickly and efficiently, resolving two key issues upfront: liability and reimbursement. (EMAC web site)

Emergency Management Committee (EMC). A committee established by an organization that has the responsibility for EMP oversight within the organization. As such, the committee would normally have the responsibility to ensure the overall preparation, implementation, evaluation and currency of the EMP. (Adapted from the VHA Emergency Management Guidebook 2005)

Emergency Management Exercises. Evaluated demonstrations of the integrated capabilities of emergency response resources (personnel, procedures, facilities, and equipment) conducted for the purpose of validating elements of an emergency management program. Exercises should be realistic simulations of emergencies to include command, control, and communication functions and event-scene activities and may vary significantly in size and complexity to achieve their respective purposes.

Emergency Management Guide (EMG). Non-mandatory guidance developed to assist all DOE facilities/sites, activities, and operations, and all DOE organizational levels (facility/site, Field/Operations Office, and Headquarters offices) during the implementation of the DOE comprehensive EMS requirements. EMGs provide acceptable approaches to emergency planning, preparedness, response, recovery and readiness assurance activities at DOE facilities and sites, including DOE transportation activities, Operations/Field Offices, and DOE Headquarters offices.

Emergency Management Institute (EMI). FEMA's national training center in Emmitsburg, Maryland.

Emergency Management Mission. Emergency management protects communities by coordinating and integrating all activities necessary to build, sustain, and improve the capability to mitigate against, prepare for, respond to, and recover from threatened or actual natural disasters, acts of terrorism, or other man-made disasters.

Emergency Management Operations. A term that can be used to denote the activities that occur during the response phase of an emergency event, based at the Emergency Operations Center and managed and directed by an Emergency Management Team. Emergency Management Operations include management of the EOC and activities administered by the Emergency Support Functions. Emergency Management Operations are intended to support the incident management team and the incident response, address countywide incident-related issues that are outside the scope of the incident management team, support the coordination with other jurisdictions and levels of government, and assist with keeping political authorities adequately informed.

Emergency Management Performance Grants..to sustain and enhance emergency management capabilities in support of the Goal [National Preparedness Goal], the Emergency Management Performance Grants (EMPG) program is designed to assist States and Urban Areas achieve the target levels of capability to sustain and enhance the effectiveness of their emergency management program. A comprehensive state emergency management system must be inclusive of local programs and input. Local emergency management organizations should remain informed and have the opportunity to provide input to State planning processes.

Although DHS expects States to include support for their local jurisdictions in the EMPG programs, each State is responsible for determining the appropriate amount of funding to be passed through to support the development or enhancement of local emergency management capabilities. As a condition for receipt of funds, States must also comply with FY06 NIMS implementation Requirements. States are not required to receive accreditation under the EMAP Standard, but are

required to use the EMAP Standard, the NEMB-CAP process, the NRP, and NIMS as a baseline around which to design their EMPG work plans. EMPG has a 50 % Federal and 50 % State cost-share cash or in-kind match requirement. Unless otherwise authorized by law, Federal funds can not be matched with other Federal funds. EMPG allowable costs are divided into planning, organization, equipment, training, and exercises categories. In addition, management and administration (M&A) costs are allowable. While the EMPG program is not intended to support construction activities, DHS recognizes that an updated, functioning emergency operations center (EOC), accessible to and usable by individuals with disabilities, is a core component of an effective emergency management system. Therefore, limited construction and renovation activities for EOCs are allowable under EMPG, consistent with past EMPG practices. The State must match 50 % of any money used for construction and must comply with the Davis-Bacon Act.

Emergency Management Phases. Emergency Management Phases: Emergency-related activities are clustered into four phases that are related by time and function to all types of disasters. The phases are also related to each other, and each involves different types of skills.

Emergency Management Program Coordinator. The program coordinator should ensure the preparation, implementation, evaluation, and revision of the program. It is not the intent of this standard to restrict the users to program coordinator titles. It is recognized that different entities use various forms and names for their program coordinator that performs the functions identified in the standard. An example of a title for the public sector is emergency manager, and an example of a title for the private sector is business continuity manager. A written position description should be provided.

Emergency Management Program. A program that implements the organization's mission, vision, management framework, and strategic goals and objectives related to emergencies and disasters. It uses a comprehensive approach to emergency management as a conceptual framework, combining mitigation, preparedness, response, and recovery into a fully integrated set of activities. The program applies to all departments and organizational units within the organization that have roles in responding to a potential emergency.

Emergency Management Team (EMT). The Emergency Response Organization (ERO) component formed to manage response actions during emergencies involving DOE facilities or requiring DOE assistance. At each response tier (facility, Field, and HQ), the EMT provides for overall management, direction, and control of the emergency response and normally operates from a command center or Emergency Operations Center (EOC).

Emergency management vision. Emergency management seeks to promote safer, less vulnerable communities with the capacity to cope with hazards and disasters.

Emergency management. The entire process of planning and intervention for rescue and relief to reduce impact of emergencies as well as the response and recovery measures, to mitigate the significant social, economic and environmental consequences to communities and ultimately to the country, usually through an emergency operation center, EOC. The functions include the following: 1. Firefighting services. 2. Police services. 3. Medical and health services. 4. Rescue. 5. Engineering. 6. Warning services. 7. Communications. 8. Radiological, chemical, and other special weapons defense. 9. Evacuation of persons from stricken areas. 10. Emergency welfare services. 11. Emergency transportation. 12. Plant protection. 13. Temporary restoration of public utility services. The emergency management and business continuity community comprises many different entities including the government at distinct levels (e.g., federal, state/provincial, territorial, tribal,

indigenous, and local levels); business and industry; nongovernmental organizations; and individual citizens. Each of these entities has its own focus, unique missions and responsibilities, varied resources and capabilities, and operating principles and procedures. Each entity can have its own definition of disaster.

Emergency Management/Response Personnel. Emergency management/response personnel include Federal, State, territorial, tribal, substate regional, and local governments, private sector organizations, critical infrastructure owners and operators, nongovernmental organizations, and all other organizations and individuals who assume an emergency management role.

Emergency Manager. The local emergency manager has the day-to-day responsibility of overseeing emergency management programs and activities. He or she works with chief elected and appointed officials to ensure that there are unified objectives with regard to the community's emergency response plans and activities. This role entails coordinating all aspects of a jurisdiction's mitigation, preparedness, response and recovery capabilities. The emergency manager coordinates all components of the emergency management program for the community, to include assessing the availability and readiness of local resources most likely required during an incident and identifying any shortfalls.

Other duties of the local emergency manager might include the following: 1. Coordinate the planning process and work cooperatively with other community agencies and private sector enterprises. 2. Oversee damage assessments during an incident. 3. Advise and inform local officials about emergency management activities during an incident. 4. Develop and execute public awareness and education programs. 5. Involve private sector businesses and relief organizations in planning, training and exercises.

Emergency Managers Weather Information Network (EMWIN). As an integral part of its mission, the NWS recognizes the need to provide the emergency management community with access to a set of NWS warnings, watches, forecasts, and other products at no recurring cost. Toward that end, the Emergency Managers Weather Information Network (EMWIN) system was developed. In partnership with the Federal Emergency Management Agency (FEMA) and other public and private organizations, EMWIN is now evolving into a fully operational and supported NWS service. EMWIN is a suite of data access methods which make available a live stream of weather and other critical emergency information. Each method has unique advantages. EMWIN's present methods in use or under development for disseminating the basic datastream include: Radio; Internet; Satellite.

Emergency measures. A collective term encompassing the assessment, corrective, and protective actions taken during the course of an emergency condition.

Emergency medicine. The study of emergency medical conditions and their management.

Emergency Operating Records Protection Program. A program established to ensure that vital records, regardless of media, essential to the continued functioning or reconstitution of an organization during and after an emergency, are available, per 36 CFR 1236.

Emergency Operating Records. Vital records, regardless of media, that are essential to the continued functioning or reconstitution of an organization during and after an emergency.

Emergency Operations Center (EOC). Local EOCs are the physical location where multi-agency coordination occurs. EOCs help form a common operating picture of the incident, relieve on-scene command of the burden of external coordination and secure additional resources.

The core functions of an EOC include coordination, communications, resource dispatch and tracking and information collection, analysis and dissemination. EOCs may be permanent

organizations and facilities that are staffed 24 hours a day, 7 days a week, or they may be established to meet short-term needs. Standing EOCs — or those activated to support larger, more complex incidents — are typically established in a central or permanently established facility. Such permanent facilities in larger communities are typically directed by a full-time emergency manager. EOCs may be organized by discipline (fire, law enforcement, medical services, etc.), by jurisdiction (city, county, region, etc.), by Emergency Support Function (communications, public works, engineering, transportation, resource support, etc.) or, more likely, by some combination thereof.

Emergency Operations Center (EOC). Emergency operations centers (EOCs) represent the physical location at which the coordination of information and resources to support incident management activities normally takes place.

Emergency Operations Plan (EOP). A document that: describes how people and property will be protected in disaster and disaster threat situations; details who is responsible for carrying out specific actions; identifies the personnel, equipment, facilities, supplies, and other resources available for use in the disaster; and outlines how all actions will be coordinated.

Emergency Operations Plan (EOP). An all-hazards document that specifies actions to be taken in the event of an emergency or disaster event; identifies authorities, relationships, and the actions to be taken by whom, what, when, and where, based on predetermined assumptions, objectives, and existing capabilities.

Emergency plan implementing procedures. Emergency Plan Implementing Procedures describe how emergency plans are implemented.

Emergency plan. The emergency plan documents the emergency management program and describe the provisions for response to an Operational Emergency. It contains a brief, clear, and concise description of the overall emergency organization, designation of responsibilities, and procedures, including notifications, involved in coping with any or all aspects of a potential credible operational emergency.

Emergency Planning & Community Right to Know Act (42 U.S.C. 11001 et seq., 1986): Also known as Title III of SARA, EPCRA was enacted by Congress as the national legislation on community safety. This law was designated to help local communities protect public health, safety, and the environment from chemical hazards. To implement EPCRA, Congress required each state to appoint a State Emergency Response Commission (SERC). The SERC's were required to divide their states into Emergency Planning Districts and to name a Local Emergency Planning Committee (LEPC) for each district. Broad representation by fire fighters, health officials, government and media representatives, community groups, industrial facilities, and emergency managers ensures that all necessary elements of the planning process are represented.

Emergency Planning Zone (EPZ). The EPZ is the geographic area surrounding the site/facility for which special planning and preparedness actions are taken or need to be taken to reduce or minimize the impact to onsite personnel and public health and safety in the event of an Operational Emergency involving hazardous materials.

Emergency planning. The identification of hazards and threats, hazard mitigation, development and preparation of emergency plans and procedures, and identification of personnel and resources needed for an effective response.

Emergency power systems. The auxiliary power systems that provide power to safety and security related equipment during periods of partial or total power failure of associated primary power system.

Emergency preparedness. The term ‘emergency preparedness’ means all those activities and measures designed or undertaken to prepare for or minimize the effects of a hazard upon the civilian population, to deal with the immediate emergency conditions which would be created by the hazard, and to effectuate emergency repairs to, or the emergency restoration of, vital utilities and facilities destroyed or damaged by the hazard. Such term includes the following:

1. Measures to be undertaken in preparation for anticipated hazards (including the establishment of appropriate organizations, operational plans, and supporting agreements, the recruitment and training of personnel, the conduct of research, the procurement and stockpiling of necessary materials and supplies, the provision of suitable warning systems, the construction or preparation of shelters, shelter areas, and control centers, and, when appropriate, the nonmilitary evacuation of the civilian population).

2. Measures to be undertaken during a hazard (including the enforcement of passive defense regulations prescribed by duly established military or civil authorities, the evacuation of personnel to shelter areas, the control of traffic and panic, and the control and use of lighting and civil communications).

3. Measures to be undertaken following a hazard (including activities for fire fighting, rescue, emergency medical, health and sanitation services, monitoring for specific dangers of special weapons, unexploded bomb reconnaissance, essential debris clearance, emergency welfare measures, and immediately essential emergency repair or restoration of damaged vital facilities).

The purpose of this title is to provide a system of emergency preparedness for the protection of life and property in the United States from hazards and to vest responsibility for emergency preparedness jointly in the Federal Government and the States and their political subdivisions. The Congress recognizes that the organizational structure established jointly by the Federal Government and the States and their political subdivisions for emergency preparedness purposes can be effectively utilized to provide relief and assistance to people in areas of the United States struck by a hazard. The Federal Government shall provide necessary direction, coordination, and guidance, and shall provide necessary assistance, as authorized in this title so that a comprehensive emergency preparedness system exists for all hazards.

Emergency Program Coordinator (EPC). The individual who has been specifically charged with the development and coordination of EMP within the VAMC. The EPC is a member of, and works closely with, the Emergency Management Committee to ensure that an effective EMP and process is in effect for the institution.

Emergency Program Manager (EPM). The individual primarily responsible for developing, implementing and maintaining a healthcare organization’s emergency management program. See emergency manager.

Emergency Public Information (EPI). The EPI function gives the public accurate, timely, and useful information and instructions throughout the emergency period. The EPI organization initially focuses on the dissemination of information and instructions to the people at risk in the community. However, the EPI organization also must deal with the wider public’s interest and desire to help or seek information. People may call to find out about loved ones. They may call to offer help, or simply send donations. They may even urge Federal action. Good, timely information can help prevent overloading a jurisdiction’s communications network, its transportation infrastructure, and its staff.

Emergency Public Information Plan. A plan covering a specific facility or multiple facilities located on a contiguous site, which provides: (1) Identification of personnel, resources, facilities, and coordination procedures necessary to provide emergency public information. (2) Training and exercises for Joint Information Center personnel. (3) A methodology for informing workers and the public of DOE emergency plans and protective actions, before and during emergencies. (4) Coordination of public information efforts with state, local, and tribal governments, and federal emergency response plans, as appropriate.

Emergency Public Information. Information which is disseminated primarily in anticipation of an emergency or at the actual time of an emergency and in addition to providing information as such, frequently directs actions, instructs, and transmits direct orders.

Emergency Readiness Assurance Plan (ERAP). The facility's five-year plan to ensure that site emergency plans, implementing procedures, and resources are adequate and sufficiently maintained, exercised, and evaluated.

Emergency Responder. As used in this plan [FEMA Strategic Plan, 2002] an individual who performs an operational role in responding to an incident.

Emergency Response Organization (ERO). The organizational structure of the Comprehensive Emergency Management System including the establishment and maintenance of the DOE Headquarters Emergency Management Team (EMT), Field Element emergency response staff, and facility/site ERO during normal operations, the functions of the on-shift emergency organization, and the staffing of a full facility/site response organization following declaration of an emergency; clearly specified authorities and responsibilities; and the configuration and staffing in terms of initial response and staff augmentation during the emergency.

AH personnel who may be needed to perform duties, beyond those specified by 29 CFR 1910.120 for the first responder awareness level, during a response to any of the broad range of emergencies defined in the Hazards Survey or assessment are members of the ERO.

Emergency response plan. A plan which sets out the roles and responsibilities of agencies in emergency response and the coordination arrangements which are to be utilized.

Emergency Response Planning Guidelines (ERPGs). Values, developed under the auspices of the American Industrial Hygiene Association, intended to provide estimates of concentration ranges where one reasonably might anticipate observing adverse effects as described in the definitions of ERPG-1, ERPG-2 and ERPG-3 as a consequence of exposure to a specific non-radioactive hazardous substance.

ERPG-1 is the maximum airborne concentration below which it is believed that nearly all individuals could be exposed for up to 1 hour without experiencing other than mild transient adverse health effects or perceiving a clearly defined, objectionable odor.

ERPG-2 is the maximum airborne concentration below which it is believed that nearly all individuals could be exposed for up to 1 hour without experiencing or developing irreversible or other serious health effects or symptoms which could impair an individual's ability to take protective action.

ERPG-3 is the maximum airborne concentration below which it is believed that nearly all individuals could be exposed for up to 1 hour without experiencing or developing life- threatening health effects. Regulations, such as 29 CFR 1910.38, require employee emergency action plans, including procedures to account for all employees after emergency evacuation has been completed.

Emergency Response Provider. Includes Federal, State, local, and tribal emergency public safety, law enforcement, emergency response, emergency medical (including hospital emergency facilities), and related personnel, agencies, and authorities. See Section 2 (6), Homeland Security Act of 2002, Pub. L. 107-296, 116 Stat. 2135 (2002). Also known as Emergency Responder.

Emergency Response Teams (ERT). The ERT is the principal interagency group that supports the PFO and/or the FCO in coordinating the overall Federal incident operation. The ERT can be augmented by an advanced element known as the ERT-A and/or a national headquarters-level team, known as the ERT-N, deployed for large-scale high visibility events. The ERT provides staffing for the JFO and ensures Federal resources are available to meet incident management and State requirements identified by the State Coordinating Officer. The size and composition of the ERT is scalable and can range from a small organization focusing on recovery operations to all ESF primary and support agencies undertaking the full range of prevention, preparedness, response and recovery activities.

Emergency Response Teams (ERT-A). The ERT-A responds during the early stages of an incident. It is headed by a team leader from FEMA and is composed of program and support staff and representatives from selected ESF primary agencies. A part of the ERT-A deploys to the State EOC or to other locations to work directly with the State to obtaining information on the impact of the event and to identify specific State requests for Federal incident management assistance. Other elements of the ERT-A (including Mobile Emergency Response Support (MERS) personnel and equipment) deploy directly to or near the affected area to establish field communications, locate and establish field facilities, and set up operations. The ERT-A identifies or validates the suitability of candidate sites for the location of mobilization center(s) and the JFO.

Emergency Response Teams (ERT-N). An ERT-N is a headquarters-level national team that deploys to large-scale, high visibility incidents. An ERT-N may pre-deploy based on threat conditions. The Secretary of Homeland Security determines the need for ERT-N deployment, coordinating the plans with the affected region and other Federal agencies. The ERT-N includes staff from FEMA Headquarters and regional offices as well as other Federal agencies. (Three ERT-N teams are structured with one team on call every third month. A fourth standing team is on-call year-round exclusively to respond to incidents in the National Capital Region (NCR)).

Emergency Response. The application of resources to mitigate consequences to workers, the public, the environment, and the national security, and the initiation of recovery from an emergency.

Emergency Risk Management. Emergency risk management is a ‘systematic process that produces a range of measures that contribute to the well-being of communities and the environment’. It includes: context definition; risk identification; risk analysis; risk evaluation; risk treatment; monitoring and reviewing; and, communicating and consulting.

Emergency Safety Procedures (ESP) for building occupants. An annex to the EOP that describes the initial evacuation, shelter in place, and other reactive measures during the life- safety stages of an emergency that directly affects the facility. Also referred to as a **Facility Emergency Plan (FEP),** and by GSA as the **Occupant Emergency Plan (or Program).**

Emergency service. An agency responsible for the protection and preservation of life and property from harm resulting from incidents and emergencies. Syn. ‘emergency services authority’ and ‘emergency service organisation’.

Emergency Services Sector (ESS). The emergency services sector (ESS) is our first line of defense: local police, fire and rescue, emergency medical services, public health departments, and public works departments.

Emergency Services. The preparation for and the carrying out of functions, other than those for which military forces are primarily responsible, to prevent, minimize and repair injury and damage resulting from disasters, together with all other activities necessary or incidental to the preparation for and carrying out of the foregoing functions. These functions include, by way of illustration and not limitation, fire fighting services, police services, medical and health services, rescue, engineering, warning services, communications, radiological, chemical and other special weapons defense, evacuation of persons from stricken areas, emergency welfare services, emergency transportation, emergency resource management, existing or properly assigned functions of plant protections, temporary restoration of public utility services, emergency sheltering, and other functions related to civilian protection. These functions also include the administration of approved regional, state and federal disaster recovery and assistance programs. (Arlington County, Virginia, EOP and CEMP)

Emergency shelter. Group shelter provided for affected persons in a community hall or similar. It is part of emergency relief, and is different from temporary accommodation/'

Emergency supply. The provision of resources in emergencies to response agencies, by other than their internal resource acquisition systems. Organisation to provide all reasonable welfare aid and services to people in need due to an emergency or disaster. Such measures include coordination, control and provision of services to be instituted before, during and after the impact of an emergency or disaster.

Emergency Support Function #7 — Resource Support Annex. Purpose **—** Emergency Support Function (ESF) #7 — Resource Support assists the Department of Homeland Security (DHS), supporting Federal agencies and State, tribal, and local governments requiring resource support prior to, during, and/or after incidents requiring a coordinated Federal response.

Scope -Resource support to Federal, State, tribal, and local governments consists of emergency relief supplies, facility space, office equipment, office supplies, telecommunications (in accordance with the Office of Science and Technology Policy (OSTP) National Plan for Telecommunications Support in Non-Wartime Emergencies), contracting services, transportation services (in coordination with ESF #1 — Transportation), and personnel required to support immediate response activities. ESF #7 provides support for requirements not specifically identified in other ESFs, including excess and surplus property. Resource support may continue until the disposition of excess and surplus property, if any, is completed.

Emergency Support Function (ESF) #1 — Transportation. Purpose: provides support to the Department of Homeland Security (DHS) by assisting Federal, State, tribal, and local governmental entities, voluntary organizations, nongovernmental organizations, and the private sector in the management of transportation systems and infrastructure during domestic threats or in response to incidents. ESF #1 also participates in prevention, preparedness, and recovery activities. ESF #1 carries out the Department of Transportation (DOT)'s statutory responsibilities, including regulation of transportation, management of the Nation's airspace, and ensuring the safety and security of the national transportation system.

Emergency Support Function (ESF) #10 — Oil and Hazardous Materials Response. ESF #10 provides for a coordinated response to actual or potential oil and hazardous materials incidents

by placing the hazard-specific response mechanisms of the NCP within the broader National Response Framework coordination structure. ESF #10 includes the appropriate response and recovery actions to prepare for, prevent, minimize, or mitigate a threat to public health, welfare, or the environment caused by actual or potential oil and hazardous materials incidents. Hazardous materials addressed under the NCP include chemical, biological, and radiological substances, whether accidentally or intentionally released. These include certain chemical, biological, and radiological substances considered weapons of mass destruction (WMD).

Emergency Support Function (ESF) #11 — Agriculture and Natural Resources..supports State, tribal, and local authorities and other Federal agency efforts to address: (1) provision of nutrition assistance; (2) control and eradication of an outbreak of a highly contagious or economically devastating animal/zoonotic disease, highly infective exotic plant pest, or economically devastating plant pest infestation; (3) assurance of the safety and security of the commercial food supply (under Department of Agriculture (USDA) jurisdictions and authorities); (4) protection of natural and cultural resources and historic properties (NCH) resources when activated by the Secretary for incidents requiring a coordinated Federal response; and (5) the safety and well-being of household pets.

Emergency Support Function (ESF) #12 — Energy. ESF12 is intended to facilitate the restoration of damaged energy systems and components when activated by the Secretary for incidents requiring a coordinated Federal response. Under Department of Energy (DOE) leadership, ESF #12 is an integral part of the larger DOE responsibility of maintaining continuous and reliable energy supplies for the United States through preventive measures and restoration and recovery actions. ESF #12 collects, evaluates, and shares information on energy system damage and estimations on the impact of energy system outages within affected areas.

Additionally, ESF #12 provides information concerning the energy restoration process such as projected schedules, percent completion of restoration, geographic information on the restoration, and other information as appropriate. ESF #12 facilitates the restoration of energy systems through legal authorities and waivers. ESF #12 also provides technical expertise to the utilities, conducts field assessments, and assists government and private-sector stakeholders to overcome challenges in restoring the energy system.

Emergency Support Function (ESF) #13 — Public Safety and Security. ESF 13 integrates Federal public safety and security capabilities and resources to support the full range of incident management activities associated with potential or actual incidents requiring a coordinated Federal response. ESF #13 provides a mechanism for coordinating and providing Federal-to- Federal support; Federal support to State, tribal, and local authorities; and/or support to other ESFs, consisting of noninvestigative law enforcement, public safety, and security capabilities and resources during potential or actual incidents requiring a coordinated Federal response.

ESF #13 capabilities support incident management requirements including but not limited to, force and critical infrastructure protection, security planning and technical assistance, technology support, and general law enforcement assistance in both pre-incident and pos-incident situations. ESF #13 is activated in situations requiring extensive public safety and security and where State and local government resources are overwhelmed or are inadequate, or in pre-incident or postincident situations that require protective solutions or capabilities unique to the Federal Government.

Emergency Support Function (ESF) #2 — Communications. Purpose: supports the restoration of public communications infrastructure, facilitates the recovery of systems and

applications from cyber attacks, and coordinates Federal communications support to response efforts during incidents requiring a coordinated Federal response (hereafter referred to as Incidents).

This ESF implements the provisions of the Office of Science and Technology Policy (OSTP) National Plan for Telecommunications Support in Non-Wartime Emergencies (NPTS). ESF #2 also provides communications support to State, tribal and local first responders when their systems have been impacted, and provides communications and information technology support to the Joint Field Office (JFO) and JFO field teams. With the rapid convergence of communications, Internet, and information technology (IT), the National Communications System (NCS) and the National Cyber Security Division (NCSD) work closely to coordinate the ESF #2 response. This convergence requires increased synchronization of effort and capabilities between the communications and information technology sectors.

Emergency Support Function (ESF) #3 — Public Works and Engineering. Scope: ESF #3 is structured to provide public works and engineering-related support for the changing requirements of domestic incident management to include preparedness, response, and recovery actions. Activities within the scope of this function include conducting preincident and postincident assessments of public works and infrastructure; executing emergency contract support for life-saving and life-sustaining services; providing technical assistance to include engineering expertise, construction management, and contracting and real estate services; providing emergency repair of damaged infrastructure and critical facilities; and implementing and managing the DHS/Federal Emergency Management Agency (FEMA) Public Assistance

Emergency Support Function (ESF) #4 — Firefighting. Purpose: Emergency Support Function (ESF) #4 — Firefighting provides Federal support for the detection and suppression of wildland, rural, and urban fires resulting from, or occurring coincidentally with, an incident requiring a coordinated Federal response for assistance. Scope: ESF #4 manages and coordinates firefighting activities, including the detection and suppression of fires on Federal lands, and provides personnel, equipment, and supplies in support of State, tribal, and local agencies involved in rural and urban firefighting operations.

Emergency Support Function (ESF) #5 — Emergency Management. Purpose: ESF #5 — Emergency Management is responsible for supporting overall activities of the Federal Government for domestic incident management. ESF #5 provides the core management and administrative functions in support of National Response Coordination Center (NRCC), Regional Response Coordination Center (RRCC), and Joint Field Office (JFO) operations. Scope: ESF #5 serves as the coordination ESF for all Federal departments and agencies across the spectrum of domestic incident management from hazard mitigation and preparedness to response and recovery. ESF #5 will identify resources for alert, activation, and subsequent deployment for quick and effective response.

Emergency Support Function (ESF) #6 — Mass Care, Emergency Assistance, Housing, and Human Services Annex. Purpose: Emergency Support Function (ESF) #6 — Mass Care, Emergency Assistance, Housing, and Human Services supports and augments State, regional, tribal, local, and nongovernmental organization (NGO) mass care, emergency assistance, housing, and human services missions. The purpose of this ESF is to ensure that the needs of disaster-impacted populations are addressed by coordinating Federal assistance to impacted areas.

Scope: when directed by the President, ESF #6 services and programs are implemented to assist individuals and households impacted by potential or actual disaster incidents. The Department of Homeland Security/Federal Emergency Management Agency (DHS/FEMA) coordinates and leads

Federal resources as required to support State, tribal, and local governments and NGOs in the performance of mass care, emergency assistance, housing, and human services missions.

Emergency Support Function (ESF) #8 — Public Health and Medical Services. Provides the mechanism for coordinated Federal assistance to supplement State, tribal, and local resources in response to a public health and medical disaster, potential or actual incidents requiring a coordinated Federal response, and/or during a developing potential health and medical emergency. Public Health and Medical Services includes behavioral health needs consisting of both mental health and substance abuse considerations for incident victims and response workers and, as appropriate, at-risk population groups defined in the Base Plan as individuals in need of additional medical response assistance, and veterinary and/or animal health issues.

Emergency Support Function (ESF) #9 — Search and Rescue (SAR). '.rapidly deploys components of the Federal SAR Response System to provide specialized lifesaving assistance to State, tribal, and local authorities when activated for incidents or potential incidents requiring a coordinated Federal response. The Federal SAR Response System is composed of the primary agencies that provide specialized SAR operations during incidents or potential incidents requiring a coordinated Federal response. SAR services include the performance of distress monitoring, communications, location of distressed personnel, coordination, and execution of rescue operations including extrication or evacuation along with the provisioning of medical assistance and civilian services through the use of public and private resources to assist persons and property in potential or actual distress.

Emergency Support Function (ESF). A functional area of response activity established to facilitate the delivery of federal assistance required during the immediate response phase of a disaster to save lives, protect property and public health, and to maintain public safety. ESFs represent those types of federal assistance which the state will most likely need because of the overwhelming impact of a catastrophic or significant disaster on its own resources and response capabilities, or because of the specialized or unique nature of the assistance required. ESF missions are designed to supplement state and local response efforts.

Emergency Support Function Teams (ESFTs). FEMA coordinates incident response support from across the Federal Government by calling up, as needed, one or more of the 15 ESF teams. The ESF teams are coordinated by FEMA through its NRCC. During a response, ESFs are a critical mechanism to coordinate functional capabilities and resources provided by Federal departments and agencies, along with certain private sector and nonprofit organizations.

They represent an effective way to bundle and funnel resources and capabilities to local, State and other responders. These functions are coordinated by a single agency but may rely on several agencies that provide resources for each functional area. The mission of the ESF is to provide the greatest possible access to capabilities of the Federal Government regardless of which agency has those capabilities. The ESFs serve as the primary operational-level mechanism to provide assistance in functional areas such as transportation, communications, public works and engineering, firefighting, mass care, housing, human services, public health and medical services, search and rescue, agriculture and energy.

The Framework identifies primary ESF agencies on the basis of authorities and resources. Support agencies are assigned based on the availability of resources in a given functional area. ESFs provide the greatest possible access to Federal department and agency resources regardless of which organization has those resources. The ESFs are: ESF #1: Transportation (Coordinator: Department of

Transportation). ESF #2: Communications (Coordinator: DHS, National Communications Systems). ESF #3: Public Works and Engineering (Coordinator: DOD, Army Corps of Engineers). ESF #4: Firefighting (Coordinator: USDA, U.S. Forest Service). ESF #5: Emergency Management (Coordinator: DHS: FEMA). ESF #6: Mass Care, Emergency Assistance, Housing/Human Services (DHS, FEMA). ESF #7: Resource Support (Coordinator: General Services Administration). ESF #8: Public Health and Medical Services (Coordinator: HHS). ESF #9: Search & Rescue (Coordinator: DHS, FEMA). ESF #10: Oil and Hazardous Materials Response (Coordinator: EPA). ESF #11: Agriculture and Natural Resources (Coordinator: USDA). ESF #12: Energy (Coordinator: Department of Energy). ESF #13: Public Safety and Security (Coordinator: Department of Justice). ESF #14: Long Term Community Recovery (Coordinator: DHS, FEMA). ESF #15: External Affairs (Coordinator: DHS).

Emergency Support Functions Coordinator. The ESF coordinator is the entity with management oversight for that particular ESF. The coordinator has ongoing responsibilities throughout the preparedness, response, and recovery phases of incident management.

Emergency Support Functions Primary Agency(ies). An ESF primary agency is a Federal agency with significant authorities, resources, or capabilities for a particular function within an ESF. Some ESFs have more than one primary function and, therefore, more than one primary agency. ESFs with multiple primary agencies designate one of those primary agencies to serve as the ESF coordinator for the purposes of pre-incident planning and coordination.

Emergency Support Functions Support Agencies. Support agencies are those entities with specific capabilities or resources that support the primary agency(ies) in executing the mission of the ESF.

Emergency Support Services. The departments of local government that have the capability to respond to emergencies 24 hours a day. They typically include law enforcement, fire, rescue, and public works. They may also be referred to as emergency response personnel or emergency operating forces.

Emergency Support Team (EST). An interagency group operating from the Federal Emergency Management Agency (FEMA) headquarters. The EST oversees the national-level response support effort and coordinates activities with the ESF primary and support agencies in supporting federal response requirements in the field.

Emergency Support Team (Sec. 303, 42 U.S.C. 5144). The President shall form emergency support teams of Federal personnel to be deployed in an area affected by a major disaster or emergency. Such emergency support teams shall assist the Federal coordinating officer in carrying out his responsibilities pursuant to this Act. Upon request of the President, the head of any Federal agency is directed to detail to temporary duty with the emergency support teams on either a reimbursable or nonreimbursable basis, as is determined necessary by the President, such personnel within the administrative jurisdiction of the head of the Federal agency as the President may need or believe to be useful for carrying out the functions of the emergency support teams, each such detail to be without loss of seniority, pay, or other employee status.

Emergency worker. A term used to encompass all personnel involved in an incident addressing either hazard generated demands or response generated demands. This term includes first and second responders, incident management personnel, support personnel including organizational personnel, emergency operations center managers and staff, and others significantly involved in incident activities.

Emergency. Any occasion or instance for which, in the determination of the President, Federal assistance is needed to supplement State and local efforts to save lives and to protect property and public health and safety, or to lessen or avert the threat of a catastrophe in any part of the United States. The Governor of a State, or the Acting Governor in his/her absence, may request that the President declare an emergency when an incident occurs or threatens to occur in a State which would not qualify under the definition of a major disaster. Assistance authorized by an emergency declaration is limited to immediate and short-term assistance, and may not exceed $5 million, except when authorized by the FEMA Associate Director for Response and Recovery under certain conditions.

As defined at Title V of P.L. 93-288, Section 102(1), an emergency is any occasion or instance for which, in the determination of the President, federal assistance is needed to supplement state and local efforts and capabilities to save lives and to protect property and public health and safety. Title V includes authority for the President to direct federal agencies to provide emergency assistance to save lives and protect property and public health and safety for emergencies other than natural disasters. Under Title V, the President may direct the provision of emergency assistance either at the request of a Governor (Section 501(a)) or upon determination by the President that an emergency exists for which the primary responsibility for response rests with the United States (501(b)). This definition deals with actions that are taken under the federal Response Plan.

EMI. Emergency Management Institute, National Emergency Training Center, FEMA/DHS, Emmitsburg, MD.

EMPG. Emergency Management Performance Grants.

EMR-ISC. Emergency Management and Response Information Sharing and Analysis Center.
EMWIN. Emergency Managers Weather Information Network.

Endemic disease. The usual presence or prevalence of a disease in a given geographical area. Hyperendemic expresses a persistence in excess of expected endemicity. Pandemic is the presence of a disease, at the same time, in important proportions throughout the world.

Endogenous risks. Those risks arising from the natural world; as distinct from risk arising from man's technology.

Endpoint. The criterion or criteria used to judge the results of an intervention or action. Primary endpoints are the explicit variables that define the relationship being hypothesized. Secondary endpoints are measures that may result from the research or be defined by the research that are not related directly to the question(s) being studied.

Enduring Constitutional Government. 'Enduring Constitutional Government,' or 'ECG,' means a cooperative effort among the executive, legislative, and judicial branches of the Federal Government, coordinated by the President, as a matter of comity with respect to the legislative and judicial branches and with proper respect for the constitutional separation of powers among the branches, to preserve the constitutional framework under which the Nation is governed and the capability of all three branches of government to execute constitutional responsibilities and provide for orderly succession, appropriate transition of leadership, and interoperability and support of the National Essential Functions during a catastrophic emergency.

Energy. Any property with the capability to transform or change a function or parts of the environment or the society.

Energy emergency. Any significant deviation from a planned or expected course of events that could endanger or adversely affect people, property, or the environment (but excluding the internal

operations of the Power Marketing Administrations). Energy emergencies encompass, but are not limited to, supply crises caused by international political causes (e.g., embargo), defense mobilization, natural disasters, energy system sabotage, major accidents, and labor strikes or lock outs.

Engineered failure. In a system under extreme stress, the identification and selection of priority activities that should be preserved, while allowing less critical services to degrade. This management strategy is designed to avoid catastrophic or random failure of emergency response systems when system capacity or capability is exceeded. The guiding principle is the preservation of the functions most important to achieving organizational goals. It may also be referred to as engineered system failure or managed degradation of incident response.

Energy yield. The total effective energy released in a nuclear explosion.

Enteric diseases. A general term for a variety of infectious intestinal diseases due to a number of known causes (amoebae, intestinal parasites, worms, bacilli, vibrio cholerae), or unknown causes transmitted through various mechanisms (food, water, direct contact). Can be of sudden diarrhoeal onset, chronic, or in carrier state, all with danger of transmission. Disaster conditions facilitate and aggravate the disease with risk epidemics, especially among children.

Entity. A governmental agency or jurisdiction, private or public company, partnership, nonprofit organization, or other organization that has emergency management and continuity of operations responsibilities.

Environment. 1. The complex of physical, chemical and biological agents and social factors which may impact on a person or a community. 2. conditions or influences comprising social, physical and built elements, which surround and interact with a community.

Environmental damage. Adverse effects to the environment.

Environmental hazard. A condition capable of posing an unreasonable risk to air, water, or soil quality and to plants or wildlife.

Environmental health. The science that aims at creating the environmental conditions most conducive to health.

Environmental interference. Modification of the environment by human actions.

Environmental risk. Risks to natural ecosystems or to the beauty or amenity of the natural world.

EOC. Emergency Operations Center.

EOP. Emergency Operations Planning

EOP. Executive Office of the President.

EPA. Environmental Protection Agency.

EPI. Emergency Public Information.

Epicenter. The point on the Earth's surface above the point at depth in the Earth's crust where an earthquake begins.

Epicentre. The point on the earth's surface directly above the focus (or hypocentre) of an earthquake.

Epidemic. The occurrence of more cases of a disease than would be expected in a community or region during a given time period. A sudden severe outbreak of a disease such as SARS. From the Greek epi-, upon + demos, people or population = epidemos = 'upon the population'. 1. An unusual increase in the number of cases of an infectious disease which already exists in an endemic state in the region or population concerned. 2. The appearance of a more or less important number of

cases of an infectious disease introduced in a region or population that is usually free from that disease.

Epidemiologic Surveillance. The term 'epidemiologic surveillance' means the process of actively gathering and analyzing data related to human health and disease in a population in order to obtain early warning of human health events, rapid characterization of human disease events, and overall situational awareness of disease activity in the human population.

Epidemiological Investigation, Rapid. An investigation that follows anomaly detection or an alert from a surveillance system, with the goal of rapidly determining the validity of the alert, and the parameters of the outbreak as the index case is being confirmed.

Epidemiology. The medical discipline that studies the influence of such factors as the life style, biological constitution and other personal or social determinants on the incidence and distribution of disease.

Epidemiology (*public health application*). The study of the distribution and determinants of disease & other adverse health factors in human populations by time, place and person.

Epizootic. A disease temporarily prevalent amongst animals.

Equivalent dose. A measure of dose in organs and tissues which takes into account the type of radiation involved.

ERC. Emergency Response Center.

ERT. Emergency Response Team.

Erosion. Loosing or dissolving and removal of rock or soil as a result of water, ice or wind action.

Error. The deviation which can exist between the actual performance characteristic of a component, equipment or system, and the true or required value of such performance.

Escort. An individual with the prerequisite training necessary for unescorted access to the area(s) where the escort activities will be performed who is authorized to accompany and ensure the safety of individuals who lack such training.

ESF. Emergency Support Function.

ESS. Emergency Services Sector.

Essential Functions. The critical activities that are performed by organizations, especially after a disruption of normal activities. There are three categories of essential functions: National Essential Functions (NEFs), Primary Mission Essential Functions (PMEFs), and Mission Essential Functions (MEFs).

Essential Services Provider (within the context of the Stafford Act):.'essential services provider' means an entity that provides: telecommunications service; electrical power; natural gas; water and sewer services; or any other essential service, as determined by the President; and is a municipal entity; a nonprofit entity; or a private, for-profit entity; and is contributing to efforts to respond to an emergency or major disaster.

ETC. Emergency Transportation Center.

Etiological agent. A viable microorganism or its toxin, which causes or may cause human disease; limited to the agents identified in Title 42 CFR Part 72.

ETIS. Emergency Traffic Information System.

ETO. Emergency Transportation Operations.

Evacuation. Organized, phased, and supervised withdrawal, dispersal, or removal of civilians from dangerous or potentially dangerous areas, and their reception and care in safe areas.

Evacuation (*mandatory or directed***).** This is a warning to persons within the designated area that an imminent threat to life and property exists and individuals MUST evacuate in accordance with the instructions of local officials.

Evacuation (*notice versus no-notice***).** These evacuations are also in the context of either a notice evacuation where sufficient planning time exists to warn citizens and to effectively implement a plan, or a no-notice evacuation where circumstances require immediate implementation of contingency plans.

Evacuation (*spontaneous***).** Residents or citizens in the threatened areas observe an emergency event or receive unofficial word of an actual or perceived threat and without receiving instructions to do so, elect to evacuate the area. Their movement, means, and direction of travel is unorganized and unsupervised.

Evacuation (*voluntary***).** This is a warning to persons within a designated area that a threat to life and property exists or is likely to exists in the immediate future. Individuals issued this type of waning or order are NOT required to evacuate, however it would be to their advantage to do so.

Evacuation centre. Centre that provides affected people with basic human needs including accommodation, food and water. In addition, to enhance the recovery process, other welfare/recovery services should also be provided.

Evacuation point. A predetermined place where patients, visitors and staff are taken or are assembled in the event of an evacuation. syn. ‘evacuation assembly area’.

Evaluate. To determine or fix a value to; to determine the significance or worth of, usually by careful appraisal or study.

Evaluation. The process of validation or identification of weaknesses and/or findings in emergency management programs. Evaluations are performed by the Director of Emergency Management.

Evaluation (*emergency management application*). A systematic assessment process that leads to judgments and decisions about plans, programs or policies (adapted from Schalock, 2001) Informal evaluation is also recognized as an ongoing and important activity of an emergency management program. It can be formalized by objective documentation of the assessment activity and its findings.

Evaluation critique. This critique session generally occurs the day following the exercise and includes participation by all controllers and evaluators. This critique should provide the forum for discussion and correlation of individual observations, the formulation of exercise findings, determination of objectives demonstrated, and determination of overall exercise performance. Recommendations for corrective and improvement actions should be addressed.

Evaluation research. The investigation to affix a value to what is being studied.

Evaluation, formative. A process of evaluation designed to further shape the direction, strategy and tactics of the entity being evaluated, and provide feedback that will result in positive system change rather than focus upon shortcomings as failure: evaluations are intended — by the evaluator — as a basis for improvement.

Evaluation, summative. A process of evaluation designed to provide a composite judgment of all evaluated aspects of the entity, hence the term summative. The primary purpose for this type of evaluation is to provide a definitive statement, essentially a grade that stands as the judgment on the evaluated entity.

Evaluator. Personnel assigned to make objective observations, using supplied exercise evaluation guidance that will provide a uniform basis for system evaluation from the exercise experience

Evaluators. Individuals who document and evaluate responder performance and the adequacy of facilities and equipment against established emergency plans and exercise evaluation criteria.

Event. A planned, non-emergency activity. ICS can be used as the management system for a wide range of events, e.g. NSSES, Opsail, parades, concerts, or sporting activities. The event IAP usually includes contingency plans for possible incidents that might occur during the event.

Event (*catastrophic*). For purposes of this plan [NRP 2004], a catastrophic event is any natural or manmade incident, including terrorism, which leaves extraordinary levels of mass casualties, damage and disruption severely affecting the population, infrastructure, environment, and economy. A catastrophic event results in sustained national impacts over a prolonged period of time; exceeds resources normally available in the local, State, Federal, and private sectors; and significantly interrupt governmental operations and emergency services to such an extent that national security could be threatened. In contrast to a Major Disaster or Emergency as defined in the Stafford Act, a catastrophic event is characterized as an incident of low or unknown probability but extremely high consequences.

Event categorization. The process of determining the category into which an event falls, i.e., Emergency, Unusual Occurrence, and Off-Normal Event.

Event classification. The process of determining the severity of an Operational Emergency involving hazardous materials. Operational Emergency classes, in order of decreasing severity are: General Emergency, Site Area Emergency, and Alert.

Event tree analysis. A technique which describes the possible range and sequence of the outcomes which may arise from an initiating event.

Event tree. A diagrammatic means of expressing the logic of sequences of events. In **risk analysis** event trees can be used for such purposes as identifying failure modes.

Event, extreme. A term used commonly in the field of risk management to collectively describe emergencies and disasters: low probability-high consequence events.

Events Requiring Classification. An Operational Emergency involving the **loss of control over hazardous materials** (i.e., involving an actual or potential airborne release to the environment, that is, outside a structure or enclosure on a DOE facility or site). The emergency response to such an event can benefit from a classification scheme that is based on the severity of potential consequences at specific distances from the source of the release.

Events That Do Not Require Classification. Operational Emergency events or conditions, which do not involve the loss of control over hazardous materials.

Events That Do Not Require Further Classification. Events that occur that represent a significant degradation in the level of safety at a site/facility and that require time-urgent response efforts from outside the site/facility. These events do not require further classification (i.e., as Alert, Site Area Emergency, or General Emergency).

Exceedance probability. The probability that an event of a given magnitude, or any greater magnitude, will occur. Exceedance probability relates to a given time period, commonly one year.

Exceptional. Refers to unusual numbers or types of victims, impacted medical care systems, or other very adverse conditions.

Exclusion Zone (EZ). The contaminated area of a site.

Executive Order 11988. Floodplain Management. Executive Order 11988 requires federal agencies to avoid to the extent possible the long and short-term adverse impacts associated with the occupancy and modification of flood plains and to avoid direct and indirect support of floodplain development wherever there is a practicable alternative.

In accomplishing this objective, each agency shall provide leadership and shall take action to reduce the risk of flood loss, to minimize the impact of floods on human safety, health, and welfare, and to restore and preserve the natural and beneficial values served by flood plains in carrying out its responsibilities for the following actions: 1) acquiring, managing, and disposing of federal lands and facilities; 2) providing federally-undertaken, financed, or assisted construction and improvements; 3) conducting federal activities and programs affecting land use, including but not limited to water and related land resources planning, regulation, and licensing activities; 4) determine if a proposed action is in the base floodplain (that area which has a one percent or greater chance of flooding in any given year);. 5) conduct early public review, including public notice; 6) identify and evaluate practicable alternatives to locating in the base floodplain, including alterative sites outside of the floodplain; 7) identify impacts of the proposed action; 8) if impacts cannot be avoided, develop measures to minimize the impacts and restore and preserve the floodplain, as appropriate; 9) reevaluate alternatives; 10) present the findings and a public explanation; 11) implement the action.

Executive. The Executive is the administrator, chief executive officer, or designee of the agency or political subdivision that has responsibility for the incident. The title may also be applied to executives from the private and non-governmental sectors (see chief executive officer). Executive and agency administrator are commonly considered to be synonymous terms.

Executive Team. Team that provides strategic direction to the Department and evaluates the emergency's impact on Departmental operations, missions, and functions.

Exercise artifact. Artificialities that occur during exercises of all types that affect tasks, processes, outputs and outcomes in either positive or negative fashion. They should be recognized and addressed by exercise controllers during the exercise or by exercise evaluators and after-action review managers during the exercise analysis.

Exercise boundaries. The boundaries of the area involved in the exercise. Specific exercise boundaries are discussed and depicted on maps in the exercise package.

Exercise control. The group with the responsibility for monitoring the progress of an **exercise** to ensure objectives are achieved in line with the exercise plan, controlling role players, liaison with external or joint agencies providing support or facilities for the exercise, and all safety measures. In short exercise control is responsible for the total conduct of the exercise and the staff must be separate from the personnel being exercised.

Exercise director. The exercise director is the person with the overall responsibility to approve, initiate and terminate the exercise. In large scale exercises, s/he may be supported by a deputy and/or assistant exercise directors.

Executive Team. Team that provides strategic direction to the Department and evaluates the emergency's impact on Departmental operations, missions, and functions.

Exercise evaluation criteria. A set of criteria that can be used to evaluate a DOE emergency management program exercise. This list of criteria, organized by functional area and program element, can be used to develop an exercise and facility/site-specific set.

Exercise evaluation. A mechanism for evaluating the ability of an organization to respond to a simulated emergency. It includes selected document review, player briefing, evaluation of controller

training, observations of exercise performance, exercise critique sessions, and identification of potential findings.

Exercise Library Evaluation Guide. An online reference library of exercise evaluation information including links to evaluator training programs, exercise evaluation documents such as the Homeland Security Exercise and Evaluation Program (HSEEP) After-Action Report/Improvement Plan (AAR/IP) Template, and other resources. An online Exercise Evaluation Guide (EEG) repository, where exercise planners, evaluators, and participants can access and download the latest versions of the HSEEP EEGs. An EEG Builder tool, allowing Lead Exercise Evaluators to create custom Homeland Security Exercise and Evaluation Program (HSEEP)-compliant EEGs tailored to their specific exercise needs.

Exercise Objective Matrix. A tool to facilitate administration of the exercise program. The matrix should identify all programmatic exercise objectives and correlate with facility/site- specific hazards and the specific objectives to be demonstrated in individual exercises. The matrix should support/document validation of Emergency Management Program elements over a multi-year period.

Exercise Observers. Outsiders invited to observe all or selected portions of the exercise. Observers do not participate in exercise play or in exercise control functions.

Exercise planning team. This is the group that is. responsible for designing, developing, conducting and evaluating all aspects of an exercise. The planning team determines exercise design objectives, tailors the scenario to jurisdictional needs, and develops documents used in exercise evaluation, control, and simulation. The Exercise Planning Team performs its responsibilities under the leadership of the Exercise Director.

Exercise setup. Exercise setup includes setting up simulations, preparing scenes and visual areas (e.g., smoke generators, simulated spills, actor moulage, etc.), performing controller communications checks, conducting responder initial conditions briefings, synchronizing clocks, initializing computer simulation data, and other scenario-specific activities. Exercise setup should be carefully planned to ensure that all logistics necessary to conduct the exercise are checked before the exercise begins.

Exercise Types: 1. Drill: A coordinated, supervised activity usually used to test a single specific operation or function in a single agency. Drills are commonly used to provide training on new equipment, develop or test new policies or procedures, or practice and maintain current skills. Typical attributes include the following: A narrow focus, measured against established standards; Instant feedback; Performance in isolation; Realistic environment.

2. Full Scale Exercise (FSE): A multi-agency, multi-jurisdictional, multi-organizational activity that tests many facets of preparedness. They focus on implementing and analyzing the plans, policies, procedures, and cooperative agreements developed in discussion-based exercises and honed in previous, smaller, operations-based exercises. In FSEs, the reality of operations in multiple functional areas presents complex and realistic problems that require critical thinking, rapid problem solving, and effective responses by trained personnel. During FSEs, events are projected through a scripted exercise scenario with built-in flexibility to allow updates to drive activity. FSEs are conducted in a real-time, stressful environment that closely mirrors real events.

3. Functional Exercise (FE): An activity designed to test and evaluate individual capabilities, multiple functions, activities within a function, or interdependent groups of functions. Events are projected through an exercise scenario with event updates that drive activity at the management level. An FE simulates the reality of operations in a functional area by presenting complex and realistic problems that require rapid and effective responses by trained personnel in a highly stressful environment.

4. Tabletop Exercise (TTX): An activity that involves key personnel discussing simulated scenarios in an informal setting. This type of exercise can be used to assess plans, policies, and procedures or to assess the systems needed to guide the prevention of, response to, and recovery from a defined incident. TTXs typically are aimed at facilitating understanding of concepts, identifying strengths and shortfalls, and achieving changes in attitude. Participants are encouraged to discuss issues in depth and develop decisions through slow-paced problem solving, rather than the rapid, spontaneous decision making that occurs under actual or simulated emergency conditions.

Exercise, full-scale. A scenario-based extension of a functional exercise to include all or most of the functions and complex activities of the EOP. It is typically conducted under high levels of stress and very real-time constraints of an actual incident. Interaction across all functions by the players decreases the artificial (oral) injects by controllers, and make the overall scenario much more realistic. Because of this, the full-scale exercise is a more comprehensive evaluation/validation of the EOP, its policies and procedures, in the context of emergency conditions.

Exercise, functional. The scenario-based execution of specific tasks and/or more complex activity within a functional area of the EOP. This is typically conducted under increased levels of stress and genuine constraints that provide increased realism, and so is less reliant upon orally presented simulation. Collaboration and cooperation and interactive decision-making are more focused within the exercised function and accomplished in real-time. Interaction with other functions and outside personnel are simulated, commonly through the play of exercise controllers.

Exercise, tabletop. A scenario-based discussion that permits evaluation of the EOP and/or Recovery Plan, or elements thereof, through oral interaction and application of plan guidance. This is accomplished using minimal or no physical activity, hence the descriptor table-top. It is used to have individuals and teams describe their roles and responsibilities through a presented scenario, and to evaluate the performance of these roles and responsibilities in a relatively low stress environment. Through the use of simulation techniques, emphasis is placed on collaboration and cooperation, decision-making and team building in the context of a specified scenario. This format allows a significant amount of comment and coaching from the facilitator/s.

Exercise. A scripted, scenario-based activity designed to evaluate the system's capabilities and capacity to achieve overall and individual functional objectives, and to demonstrate the competencies for relevant response and recovery positions. The purpose of exercise evaluation is to determine a

valid indication of future system performance under similar conditions, and to identify potential system improvements.

Existing flood hazard. The hazard a community is exposed to as a result of its location on the floodplain

Exogenous risks. Those risks arising from the activities of man and from his technology.

Exotic animal disease. Disease affecting animals (which may include man) and which does not presently occur in some country.

Expected loss. The expected number of lives lost, persons injured, damage to property and disruption of essential services and economic activity due to the impact of a particular natural or man-made hazard. It includes physical, social, functional and economic effects.

Experience. Adequate participation in prior response, signified by satisfactory performance evaluations from previous deployments in the position or function being considered. (FEMA IST training manual)

Experimental studies. Studies that use inferential statistics to compare the outcome of a given intervention with that of a control group that does not receive the intervention.

Expert judgment. Information and data given by qualified individuals in response to technical questions. Expert judgment is generally used when test/observational data are difficult or expensive to obtain and when other sources of information are sparse, poorly understood, open to differing interpretations, or requiring synthesis. expert judgment is an integral part of most problem solving and analysis (Los Alamos National Laboratories). In performance-based evaluation, expert judgment is essentially the determination made by a qualified individual comparing performance measures, often approximated, to the individual's understanding of an optimal yet realistic metric.

Expert. An individual who meets some defined level of knowledge, skills and abilities (i.e., competencies) that usually have been demonstrated by the expert's past experiences.

Explicit. Expressly stated, leaving nothing merely implied; stated in detail. In research, explicit criteria are firm and based on scientific evidence (evidence-based without interpretation).

Explosion. Sudden release of large amounts of energy in a destructive manner; a result of powders, mists, or gasses undergoing instantaneous ignition, or liquids or solids undergoing sudden decomposition, or a pressurised vessel undergoing over-pressure rupture with such force as to generate tremendous heat, cause severe structural damage, occasionally generating a shock wave, and propelling shrapnel.

Explosion. The rapid release of a large amount of energy within a limited space.

Explosive Limits. Some items have a minimum and maximum concentration in air which can be detonated by spark, shock, fire. The lowest concentration is known as the lower explosive limit (LEL). The highest concentration is known as the upper explosive limit (UEL).

Explosive. A substance, whether or not contained in a device specially prepared, which is manufactured with a view to producing a practical effect by explosion or a pyrotechnic effect, or any other substance which, by reason of the nature of its explosive properties is to be treated as such.'

Exposure (and vulnerability). In Order to contract infectious disease, you need to be exposed to the microbe that causes the disease. However, some people are exposed and never become ill, while others may die from the same exposure. If we call the person who is exposed a 'host', the host may have certain vulnerabilities or strengths that alter the outcome of the exposure. The host may have inherited genetic traits that limit his or her vulnerability to a certain class of microbes, or may have previous experience with the specific microbe, and thus have an immune-response system that is poised and ready to fight off the microbial invader.

Exposure standard. An airborne concentration of a particular substance in a person's breathing zone.

Exposure time. The time period of interest for seismic risk calculations, seismic hazard calculations, or design of structures. For structures, the exposure time is often chosen to be equal to the design lifetime of the structure.

Exposure. A measurement of the total amount of radiation to which an individual is exposed related to the ionization produced in air by x-ray or gamma radiation. Similar to dose.

External Departmental Organizations. An organizational entity beyond that of the immediate facility/site conducting the exercise, including the cognizant Operations Office and the Headquarters Office of Emergency Management.

External emergency. An event which arises externally to the health care facility and may necessitate a response beyond the normal operational level of the facility.

External evaluation. Evaluation by a DOE organization outside the immediate facility organization. Departmental elements with oversight responsibilities (both Field Elements and Headquarters elements) should coordinate external evaluations so that they are conducted at least every three years.

External validity. The ability to apply the findings of the research in other areas or applications.

Extra-tropical depression. A mid-latitude, low-pressure cell with inwardly and upwardly spiralling winds. Unlike tropical cyclones, the cell can develop over land as well as water, usually in relation to the polar front and with a core of cold air.

Extreme event. A collective term referring to emergencies and disasters. See emergency and disaster.

Extreme events. An extreme event in the context of the natural world is an act of nature, such as a lightning stroke or a flood [that] may be a productive resource and a hazard at the same time. Lightning may kill an animal but also start a fire essential to the preservation of a forest ecosystem. A flood may destroy a farmstead while fertilizing the fields.

Extreme flood. A rare and usually very severe flood, greater in magnitude than the 1 % annual exceedance probability event and possibly approaching the magnitude of a probable maximum flood.

Extreme scenarios. Those scenarios used in vulnerability assessments and/or radiological and toxicological sabotage assessments, should provide the analyst with an upper bound on the severity of potential consequences.

Extremely hazardous substance (EHS). EPA applies the term extremely hazardous substance to chemicals that must be reported to the appropriate authorities if released above the threshold reporting quantity. Each substance has a threshold reporting quantity.

Eye (of the storm). The relatively clear and calm area inside the circular wall of convective clouds, the geometric centre of which is the centre of the tropical cyclone.

F

Facility. 1. (*field management*) The buildings, utilities, structures, and other land improvements associated with an operation or service and dedicated to a common function. 2. (*environment, safety and health*) Any equipment, structure, system, process, or activity that fulfills a specific purpose. Examples include accelerators; storage areas; explosive operations; fusion research devices; nuclear reactors; production or processing plants; coal conversion plants; magneto-hydrodynamics experiments; windmills; radioactive waste disposal systems; and burial grounds; environmental restoration activities; testing laboratories; research laboratories; transportation activities; and accommodations for analytical examinations of irradiated and unirradiated components. 3. (*nonproliferation and national security*) An educational institution, manufacturing plant, laboratory, office building, or complex of buildings located on the same site that is operated and protected as one unit by DOE or its contractor(s). 4. (*waste management*) All contiguous land, structures, other appurtenances, and improvements on the land used for treating, storing, or disposing of waste or spent nuclear fuel.

Facility Emergency Plan (FEP). A support annex to the EOP that describes the initial evacuation, shelter in place, and other reactive measures during the life-safety stages of an emergency that directly affects the facility. Also referred to by VHA as Emergency Safety Procedures for Building Occupant, and by GSA as the Occupant Emergency Plan.

Facility manager. That individual, or designee, usually but not always a contractor, with direct line responsibility for operation of a facility or group of related facilities, including authority to direct physical changes to the facility.

Factor of safety. 1. The figure by which the minimum breaking force of new rope is divided to determine its safe working load. 2. In structural and other engineering systems, the ratio of system resistance to the peak design loads.

Failure. A condition of a component, equipment or system, in which the design intention is not met.

Failure mode. The manner in which a component, equipment or system fails as expressed by the consequences of failure. For example the fail-safe mode.

Failure rate. The frequency with which a component, equipment or system fails. syn. ‘failure frequency’.

Fallout. The descent of airborne particles of dust, soot, or, more particularly, of radioactive materials resulting from a nuclear explosion.

Famine. A catastrophic food shortage affecting large numbers of people due to climatic, environmental and socio-economic reasons.

Fatality management. Complete documentation and recovery of human remains and items of evidence (except in cases where the health risks posed to personnel outweigh the benefits of recovery of remains). Remains receive surface decontamination (if indicated) and, unless catastrophic circumstances dictate otherwise, are examined, identified, and released to the next- of-kin’s funeral

home with a complete certified death certificate. Reports of missing persons and ante mortem data are efficiently collected.

Victims' family members receive updated information prior to the media release. All hazardous material regulations are reviewed and any restrictions on the transportation and disposition of remains are made clear by those with the authority and responsibility to establish the standards. Law enforcement agencies are given all information needed to investigate and prosecute the case successfully. Families are provided incident-specific support services.

Fault tree analysis (FTA). A systems engineering method for representing the logical combinations of various system states and possible causes which can contribute to a specified event (called the 'top event').

Fault tree. The logic diagram used in fault tree analysis, that traces an undesirable event back to its cause/s.

Fault. A fracture or crack along which two blocks of rock slide past one another. This movement may occur rapidly, in the form of an earthquake, or slowly, in the form of creep.

Fault. A fracture or zone of fractures in rock along which the two sides have been displaced relative to each other parallel to the fracture. The total fault offset may range from one millimetre for very small earthquakes to ten metres for the earth's largest shocks.

FCO. Federal Coordinating Officer.

FEB. Federal Executive Board.

Federal Assistance. Federal disaster assistance is often thought of as synonymous with Presidential declarations and the Stafford Act. The fact is that Federal assistance can be provided to State, tribal and local jurisdictions, and to other Federal departments and agencies, in a number of different ways through various mechanisms and authorities.

The majority of Federal assistance does not require coordination by the Department of Homeland Security (DHS) and can be provided without a Presidential major disaster or emergency declaration. Federal assistance for incidents that do not require DHS coordination may be led by other Federal departments and agencies consistent with their authorities. The Secretary of Homeland Security may monitor such incidents and may activate Framework mechanisms to support departments and agencies without assuming overall leadership for the Federal response to the incident.

Federal Continuity Directive (FCD). A document developed and promulgated by DHS, in coordination with the CAG and in consultation with the Continuity PCC, which directs executive branch departments and agencies to carry out identified continuity planning requirements and assessment criteria.

Federal Coordinating Center (FCC). The VAMC or military hospital that has oversight of the National Disaster Medical System (NDMS) within a specific metropolitan area. This includes responsibility for execution of Memoranda of Understanding with local private sector hospitals participating in the system, development of patient reception and management plans, and the reporting of available NDMS bed capacity within the area to [the medical regulating center].

Federal Coordinating Officer (FCO). For Stafford Act events, upon the recommendation of the FEMA Administrator and the Secretary of Homeland Security, the President appoints an FCO. The FCO is a senior FEMA official trained, certified and well experienced in emergency management, and specifically appointed to coordinate Federal support in the response to and recovery from emergencies and major disasters. The FCO executes Stafford Act authorities,

including commitment of FEMA resources and the mission assignment of other Federal departments or agencies. If a major disaster or emergency declaration covers a geographic area that spans all or parts of more than one State, the President may decide to appoint a single FCO for the entire incident, with other individuals as needed serving as Deputy FCOs. In all cases, the FCO represents the FEMA Administrator in the field to discharge all FEMA responsibilities for the response and recovery efforts underway. For Stafford Act events — and if the Secretary has not appointed a PFO — the FCO is the primary Federal representative with whom State and local officials interface to determine the most urgent needs and set objectives for an effective response in collaboration with the Unified Coordination Group.

In such events, the FCO is the focal point of coordination within the Unified Coordination Group, ensuring overall integration of Federal emergency management, resource allocation and seamless integration of Federal activities in support of, and in coordination with, State, tribal and local requirements. When a PFO is not assigned to a Stafford Act response, the FCO serves locally as a primary, although not exclusive, point of contact for Federal interfaces with the media and the private sector. Some FCO-certified FEMA executives are given additional, specialized training regarding unusually complex incidents. For example, one may be further trained for catastrophic earthquake response, whereas another might cultivate unique skills for response related to weapons of mass destruction or pandemic influenza.

Federal Coordinating Officer (FCO). The FCO manages Federal resource support activities related to Stafford Act disasters and emergencies. The FCO supports the PFO, when one is appointed, and assists the Unified Command. The FCO is responsible for directing and coordinating the timely delivery of Federal disaster assistance resources and programs to the affected State, and local governments, individual victims, and the private sector. The FCO works closely with the PFO, Senior Federal Law Enforcement Official (SFLEO), and other Senior Federal Officials (SFOs) representing other Federal agencies engaged in the incident management effort. In non-terrorist situations where a PFO has not been assigned, the FCO leads the Federal components of the Joint Field Office (JFO) and works in partnership with the State Coordinating Officer (SCO).

Federal Coordinating Officer (FCO). The senior federal official appointed in accordance with the provisions of P.L. 93-288, as amended, to coordinate the overall response and recovery activities. The FCO represents the President as provided by Section 303 of P.L. 93-288, as amended, for the purpose of coordinating the administration of federal relief activities in the designated area. Additionally, the FCO is delegated responsibilities and performs those for the FEMA Director as outlined in Executive Order 12148 and those responsibilities delegated to the FEMA Regional Director in Title 44 Code of Federal Regulations, Part 205.

Federal Coordinating Officer (FCO). Under the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended, the FCO is appointed by the President. He/she is responsible for an initial appraisal of the impact area, establishing field offices, and coordinating relief and support with state and local coordinating officers.

Federal Disaster Area. An area of a state (oftentimes defined by counties) that is declared eligible for federal disaster relief under the Stafford Act. These declarations are made by the President usually as a result of a request made by the governor of the affected state.

Federal Emergency Management Agency (FEMA). An independent agency of the federal government with a mission to reduce life and property and protect our Nation’s infrastructure through an emergency management program of mitigation, preparedness, response, and recovery.

Federal Executive Associations (FEAs). A forum, modeled after but independent of the Federal Executive Boards, for communication and collaboration among Federal agencies outside of Washington, DC, utilized to help coordinate the field activities of Federal departments and agencies primarily in localized sections of the Nation.

Federal Incident Response Support Team (FIRST). A forward component of the ERT-A [Emergency Response Team] that provides on-scene support to the local Incident Command or Area Command structure.

Federal Law Enforcement Assistance. State and local governments may request Federal law enforcement assistance under the Emergency Federal Law Enforcement Assistance Act without a Presidential major disaster or emergency declaration. In addition, Federal agencies may request public safety and security or general law enforcement support from another Federal agency during a large-scale incident. The ESF #13 Annex [NRF] provides further guidance on the integration of public safety and security resources to support the full range of incident management functions. **(DHS,** Overview: ESF and Support Annexes Coordinating Federal Assistance In Support of the National Framework (Draft), September 10, 2007, p. 6)

Federal On-Scene Coordinator (FOSC). The Federal official pre-designated by the EPA or the USCG to coordinate responses under subpart D of the NCP (40 CFR 300) or the government official designated to coordinate and direct removal actions under subpart E of the NCP. A FOSC can also be designated as the Incident Commander.

Federal Planning Structure. The Federal planning structure consists of multiple elements: the National Preparedness Guidelines; the 15 National Planning Scenarios and core capabilities; the National Incident Management System; the National Response Framework; the National Infrastructure Protection Plan and the 17 sector-specific plans; a DHS strategic plan and overall Federal concept of operations for each of the National Planning Scenarios; a National Exercise Schedule that incorporates Federal, State and local activity; and an incident management Playbook that allows the Secretary of Homeland Security, as the principal Federal official for domestic incident management, to ensure effective management of the high-consequence threat scenarios.

Federal Preparedness Coordinators (FPCs). As the Nation's Preeminent Emergency Management Agency, we will promote the integration and synchronization of preparedness across jurisdictions and all levels of governments by establishing a network of Federal Preparedness Coordinators. Strengthening preparedness requires a dedicated, locally-based DHS senior executive to support the networks of Federal, State, local, tribal, and private-sector partners to plan, train and exercise in preparation for coordinated contingency missions, as well as to share information on a routine basis.

Therefore, FPCs will play a vital role in building regional preparedness across jurisdictions through focused planning, information sharing and partnership building. They will strengthen preparedness within their assigned Regions to prevent and respond to threatened or actual domestic terrorist attacks, major disasters, and other emergencies by establishing a Regional domestic all-hazards preparedness goal, integrating mechanisms for improved delivery of Federal preparedness assistance to State and local governments and outlining actions to strengthen preparedness capabilities. Their efforts will lead the integration of DHS' Regional preparedness efforts, including measurable readiness priorities and targets goals that appropriately balance the potential threat and magnitude of terrorist attacks, major disasters, and other emergencies with the resources required to prevent, respond to, and recover from them.

Federal Radiological Emergency Response Plan (FRERP). The plan used by Federal agencies to respond to a radiological emergency, with or without a Stafford Act declaration. Without a Stafford Act declaration, Federal agencies respond to radiological emergencies using the FRERP, each agency in accordance with existing statutory authorities and funding resources. The Lead Federal Agency has responsibility for coordination of the overall Federal response to the emergency. FEMA is responsible for coordinating non-radiological support using the structure of the Federal Response Plan. When a major disaster or emergency is declared under the Stafford Act and an associated radiological emergency exists, the functions and responsibilities of the FRERP remain the same.

The Lead Federal Agency coordinates the management of the radiological response with the Federal Coordinating Officer. Although the direction of the radiological response remains the same with the Lead Federal Agency, the FCO has the overall responsibility for coordination of Federal assistance in support of State and local governments using the Federal Response Plan.

Federal Radiological Monitoring and Assessment Center (FRMAC). The FRMAC gathers radiological information such as plume and deposition predictions, air and ground concentrations, exposure rates and dose projections, assurance of data quality, and current meteorological conditions and weather forecasts. FRMAC provides the results of the data collection, sample analysis, evaluations, assessments, and interpretations to the key decision makers in the affected areas of the emergency.

Monitoring continues until all of the surrounding areas where radioactivity was released are fully evaluated. The FRMAC is one of the emergency response resources, or assets, administered by the National Nuclear Security Administration (NNSA) Nevada Site Office. The Federal government maintains an extensive response capability for radiological monitoring and assessment. In the unlikely event of a major radiological incident, the full resources of the U.S. government will be coordinated to support state, local and Tribal governments. The efforts of 17 Federal agencies are coordinated under the Federal Radiological Emergency Response Plan (FRERP) to integrate the Federal response to a radiological emergency.

Federal Resource Coordinator (FRC). In non-Stafford Act situations, when a Federal department or agency acting under its own authority has requested the assistance of the Secretary of Homeland Security to obtain support from other Federal departments and agencies, DHS may designate an FRC. In these situations, the FRC coordinates support through interagency agreements and memorandums of understanding. Relying on the same skill set, DHS may select the FRC from the FCO cadre or other personnel with equivalent knowledge, skills and abilities. The FRC is responsible for coordinating timely delivery of resources to the requesting agency.

Federal Resource Coordinator (FRC). The Federal official appointed to manage Federal resource support activities related to non-Stafford Act incidents. The FRC is responsible for coordinating support from other Federal departments and agencies using interagency agreements and MOU's.

Federal Response Plan (FRP). 1) The plan designed to address the consequences of any disaster or emergency situation in which there is a need for Federal assistance under the authorities of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. 5121 et seq. 2) The FRP is the Federal government's plan of action for assisting affected States and local jurisdictions in the event of a major disaster or emergency. As the implementing document for the Stafford Act, the FRP organizes the Federal response by grouping potential response requirements into 12 functional

categories, called Emergency Support Functions. The FRP was completed in April 1992, and 29 Federal departments and agencies are signatories to the plan.

Federal Response Plan (FRP). A document published by the Federal Emergency Management Agency to fulfill requirements established in Public Law 93-288, as amended. The FRP provides a framework for coordinated federal response in support of state and local governments.

Federal Response Plan (FRP). A national level plan developed by the Federal Emergency Management Agency (FEMA) in coordination with 26 federal departments and agencies plus the American Red Cross. This plan was developed in 1992 and updated in 1999 to implement the Stafford Act in the provision of federal disaster to states and local communities in a Presidential-declared disaster. It was superseded by the National Response Plan in March 2004. (adapted from the VHA Emergency Management Guidebook 2005)

EMA Administrator. The Federal Emergency Management Agency (FEMA) Administrator is the principal advisor to the President, the Homeland Security Council (HSC) and the Secretary for all matters relating to emergency management in the United States. The Administrator partners with State, tribal and local governments and emergency responders, with Federal agencies, with the private sector and with nongovernmental sectors to utilize all the nation's resources to respond to natural disasters, acts of terrorism and other manmade disasters, including catastrophic incidents.

FEMA Emergency Management Higher Education (EM HiEd) Project. A goal of FEMA is to encourage and support the dissemination of hazard, disaster, and emergency management-related information in colleges and universities across the U.S. We believe that in the future more and more emergency managers in government as well as in business and industry will come to the job with college education that includes a degree in emergency management. We also believe that in order to build disaster resistant and resilient communities a broad range of college students and professionals need courses that introduce them to hazards, risk, vulnerability, disasters, and what to do about them. In support of this effort, the Emergency Management Institute in Emmitsburg, Maryland, developed the EM HiEd Project in 1994 with the aim of promoting college-based emergency management education for future emergency managers and other interested personnel.

FEMA Emergency Management Institute Mission. To support FEMA and the Department of Homeland Security's goals by improving the skills of U.S. officials at all levels of government to prevent, prepare for, respond to, recover from, and mitigate the potential effects of all types of disasters and emergencies. (FEMA, Emergency Management Institute Performance Measures October 3, 2007, slide 6)

FEMA Goal. It is FEMA's goal to reduce the loss of life and property and protect the United States from all hazards by leading and supporting the country in a risk-based, comprehensive emergency management system of protection, response, recovery, mitigation, and now, more than ever, preparedness.

FEMA Goals: 1. Reduce loss of life and property. 2. Minimize suffering and disruption caused by disasters. 3. Prepare the Nation to address the consequences of terrorism. 4. Serve as the Nation's portal for emergency management information and expertise. 5. Create a motivating and challenging work environment for employees. 6. Make FEMA a world-class enterprise. 7. Strengthen core capabilities, competencies and capacities. Fostering a national emergency management system and implementing a cohesive national preparedness system must begin by strengthening the foundational building blocks of a weakened but venerable agency. The Nation needs a strong FEMA; but that cannot be achieved without purposeful new investments. 8. Build strong Regions. The Region is the

essential field echelon of FEMA that engages most directly with State partners and disaster victims to deliver frontline services. It is the Region that can build and nurture State and local capabilities across the spectrum of preparedness, response, recovery and mitigation. And it is the Region that will lead the Federal response to incidents across the spectrum of all-hazards events. A strong FEMA will rely on strong Regions to regain the trust and confidence of Governors, mayors, leaders in the private sector and the citizens of our homeland. 9. Strengthen our partnership with States. Response to disasters and emergencies is primarily a State and local effort. To build and support an effective National system of emergency management, FEMA must have effective partnerships with State and local governments. 10. Professionalize the national emergency management system. The Nation's ability to marshal an effective response to disasters requires the right people with the right skills. We will work with our partners to build a nationwide system of trained and certified experts skilled in all hazards emergency management — starting right here in FEMA.

FEMA Mission (1997). To provide leadership and support to reduce the loss of life and property and protect our nation's institutions from all types of hazards through a comprehensive, risk-based, all-hazards emergency management program of mitigation, preparedness, response and recovery. **(FEMA,** FEMA's Mission, October 1997).

FEMA Mission (2000). Recovery from natural disasters (FEMA's primary mission).

FEMA Mission (2001). The Federal Emergency Management Agency (FEMA) is an independent agency, its mission to reduce loss of life and property and protect our nation's critical infrastructure from all types of hazards through a comprehensive, risk-based, emergency management program of mitigation, preparedness, response and recovery.

FEMA Mission (2002). Lead America to prepare for, prevent, respond to, and recover from disasters.

FEMA Mission (2003). The primary mission of the Federal Emergency Management Agency is to reduce the loss of life and property and protect the Nation from all hazards, including natural disasters, acts of terrorism, and other man-made disasters, by leading and supporting the Nation in a risk-based, comprehensive emergency management system of preparedness, protection, response, recovery, and mitigation.

FEMA Mission (2004). FEMA's mission continues to be the reduction of the loss of life and of damage to property and to protect our residents from all hazards, natural and man-made. We accomplish this mission by providing the Nation with comprehensive, risk-based emergency management programs, including mitigation, preparedness, response, and recovery. Our integration into the new Department of Homeland Security has increased our opportunities to perform this mission. We continue to work closely with many other Federal Departments and agencies, and with States, Tribal Nations, local governments, volunteer organizations, and private industry.

FEMA Mission (2004). FEMA's Mission Statement: Lead America to prepare for, prevent, respond to, and recover from disasters.

FEMA Mission (2005). Our panels today separate witnesses from a federal agency, FEMA, from those of its parent organization, DHS. The separation is deliberate. It reflects in part the differing perspectives on Katrina that we have heard consistently from officials of the two entities. It also reflects tension between the two that pre-dates the storm, tension over resources, roles, and responsibilities within the Department. This tension is clear in Mr. Brown's [FEMA Director Michael Brown] response when Committee investigators asked him why FEMA was not prepared for Katrina. Mr. Brown responded, Its mission had been marginalized; its response capability had been

diminished. There's the whole clash of cultures between DHS' mission to prevent terrorism and FEMA's mission to respond to and to prepare for responding to disasters of whatever nature.

FEMA Mission (2006)..the mission of the Agency to reduce the loss of life and property and protect the Nation from all hazards by leading and supporting the Nation in a risk-based, comprehensive emergency management system of (A) mitigation, by taking sustained actions to reduce or eliminate long-term risks to people and property from hazards and their effects; (B) preparedness, by planning, training, and building the emergency management profession to prepare effectively for, mitigate against, respond to, and recover from any hazard; (C) response, by conducting emergency operations to save lives and property through positioning emergency equipment, personnel, and supplies, through evacuating potential victims, through providing food, water, shelter, and medical care to those in need, and through restoring critical public services; and (D) recovery, by rebuilding communities so individuals, businesses, and governments can function on their own, return to normal life, and protect against future hazards.

FEMA Mission (2007, October). The mission of the Federal Emergency Management Agency (FEMA) is to provide leadership to prepare, protect, respond, recover, and mitigate the effects of emergencies and major disasters, both natural and man-made. Emergencies include acts of terrorism, hurricanes and severe storms.

FEMA National Advisory Council Membership. Thirty individuals have been selected for appointment to the National Advisory Council (NAC) from a geographic and substantive cross-section of officials, emergency managers and emergency response providers from Tribal, State and local governments, the private sector and nongovernmental organizations. These members will represent influential, high-level senior leaders of their organizations, stakeholder groups and the private sector or members of the public.

FEMA National Advisory Council Mission. The mission of the National Advisory Council is to ensure effective and ongoing coordination of national Preparedness, protection, response, recovery and mitigation for natural disasters, acts of terrorism and other man-made disasters by: 1) incorporation input from tribal, state and local governments, and the public and private sectors; 2) providing an avenue for feedback, suggestions and constructive criticisms from the diverse government, private sector and nonprofit partners involved in any disaster activities; and providing a venue for input during the development and revision of the National Preparedness Goal; national preparedness system, National Incident Management System,, National Response Plan (NRP) and other related plans and strategies.

FEMA National Advisory Council Mission..Mission—'to ensure effective and ongoing coordination of national preparedness, protection, response, recovery, and mitigation for natural disasters, acts of terrorism, and other man-made disasters.' Specifically, the Council will focus attention on the development and revision of the national preparedness goal, the national preparedness system, the National Incident Management System, the National Response Plan, and other related plans and strategies. The development of the National Advisory Council was set into motion by the Post- Katrina Emergency Management Reform Act of 2006. The Federal Register notice posted on February 7, 2007, establishes the Council and requests applications for membership.

FEMA National Advisory Council. The National Advisory Council (NAC) shall advise the Administrator of the Federal Emergency Management Agency (FEMA) on all aspects of emergency management. The National Advisory Council shall incorporate State, local and tribal government and private sector input in the development and revision of the national preparedness goal, the national

preparedness system, the National Incident Management System, the National Response Plan and other related plans and strategies.

FEMA National Preparedness Directorate. The Deputy Administrator for National Preparedness will head a new directorate within FEMA, consolidating FEMA strategic preparedness assets. It will include both existing FEMA programs and certain legacy Preparedness Directorate programs. It will incorporate functions related to preparedness doctrine, policy and contingency planning. It will further contain the Department's exercise coordination and evaluation program, emergency management training, along with the Chemical Stockpile Emergency Preparedness Program and the Radiological Emergency Preparedness program. The Deputy Administrator for National Preparedness will oversee two major functional responsibilities: (1) Readiness, Prevention and Planning; and (2) the National Integration Center.

FEMA Operations Center (FOC). A continuously operating entity of the Department of Homeland Security responsible for monitoring emergency operations and promulgating notification of changes to the COGCON status.

FEMA Readiness, Prevention and Planning Division..within the FEMA National Preparedness Directorate, the Readiness, Prevention and Planning division will be the central division within FEMA responsible for preparedness policy and planning functions. This expanded division will likely include FEMA's catastrophic planning activities and the following offices: (1) Exercise & Evaluation; (2) Contingency Preparedness; (3) Preparedness Doctrine & Policy; (4) Citizen Corps; and (5) the Chemical Stockpile Emergency Preparedness Program and the Radiological Emergency Preparedness program. The Readiness, Prevention and Planning division will be responsible, among other functions, for coordinating HSPD-8 (National Preparedness) implementation, the National Assessment and Reporting System, Nationwide Plan Review, the Federal Preparedness Coordinator program, and coordinating with the approximately 2,100 Citizen Corps Councils in all of the States and territories and the numerous governmental and non-governmental Citizen Corps partners.

FEMA Re-Engineering. Speaking on the side of the federal government, one of the first things we have to do is to re-engineer FEMA so that this agency can maximize its role supporting response and recovery efforts and providing the necessary assistance to state and local communities when those communities call on FEMA for support. Well, what does that re-engineering mean? It means developing a more effective distribution and delivery system for supplies, more efficient business processing and disaster registration systems, and enhanced communication capabilities. The reality is that FEMA is a 20th century organization and we are now in the 21st century. And there are processes and tools that we do see working around us in the private sector and in other areas of the government that we must adapt and apply to FEMA.

The fact of the matter is, we want to have FEMA's distribution and logistics system — the ability to move people and goods in support of emergency responders — emulate the best of private sector models so that we can get vital supplies and assistance to communities in a reasonable amount of time and replenish our stocks in a timely manner. But I also have to say something else. This is, after all, a shared responsibility, and that means state and local government also has to do some significant preparedness planning to make sure, particularly in those immediate hours and first few days in the aftermath of a catastrophe, particularly an unexpected catastrophe, there are available on the state and local scene those supplies that are necessary to deal with the immediate crisis after an emergency.

This has to be a joint effort. It cannot be an effort that the federal government carries by itself, nor it is an effort that the states would want the federal government to carry by itself, because I think you rightly regard yourselves as leaders of state and local communities as wanting to have a major say in the way we respond to crises in your own communities. So that's why partnership is so very, very important here.

FEMA Regional Offices. FEMA has ten regional offices, each headed by a Regional Administrator. The regional field structures are FEMA's permanent presence for communities and States across America. The staff at these offices support development of all-hazards operational plans and generally help States and communities achieve higher levels of readiness. These regional offices mobilize FEMA assets and evaluation teams to the site of emergencies or disasters.

FEMA. Federal Emergency Management Agency. FEMA was formed in 1979 by executive order of the President, combining Federal programs that deal with all phases of emergency management, for disasters of all types, into a single agency.

Field medical controller. Usually a senior medical officer who commands all medical aspects at the disaster site and liaises with ambulance commander and other emergency services commanders on-site, and the medical controller at a distant medical control centre (when operational).

Field medical team leader. A doctor nominated as the leader of each field medical team sent to a disaster site (there may be more than one). Responsible to and reports to the field medical controller. syn. 'medical team leader'.

Field medical team. A team of experienced doctors and nurses, usually sent from a hospital, to provide on-site assessment and emergency treatment of casualties prior to transfer. One member of each team is appointed medical team leader. syn. 'site medical team'.

Field of Interest Register. A method used by the Department of Defense to authorize automatic distribution of documents from the Defense Technical Information Center. Access is controlled by subject category and by classification level.

Field Operations. Field Operations are all activities within the defined scope of the incident (the incident scope is delineated by the incident commander through incident control and operational objectives). The Incident Management Team manages field operations, which are the for direct incident-scene actions for management of the emergency situation. The Incident Commander is the leader of Field Operations.

Final Emergency Report. The report, separate from the Final Occurrence Report, that describes the activities and lessons learned during the response to an Operational Emergency.

Finance/Administration. The ICS functional area that addresses the financial, administrative, and legal/regulatory issues for the incident management system. It monitors costs related to the incident, and provides accounting, procurement, time recording, cost analyses, and overall fiscal guidance.

Finding. A statement of fact, based on objective evidence and criteria by which the functional area or performance was evaluated.

Finger. Long narrow finger of rapidly advancing fire which extends beyond the head or flanks of a fire.

Fire access track. An access track provided in advance for fire protection purposes, designed to stop or check fires that occur, or to be used as a fire control line from which to work.

Fire alarm system. An arrangement of components and apparatus for giving an audible, visible, or other perceptible alarm of fire, and which may also initiate other action.

Fire appliance. A generic term used to describe any fire fighting vehicle or specialist vehicle used by fire services to combat fires or other emergencies.

Fire brand. A piece of burning material, commonly bark from eucalypts.

Fire break. Any natural or constructed discontinuity in a fuel bed used to congregate, stop and control the spread of a wildfire, or to provide a fireline from which to suppress a fire.

Fire containment. A phase in suppression whereby an identifiable barrier, effective under the conditions prevailing, has been established to bring to a halt a spreading flame from at some time in the immediate future.

Fire danger. Factors which determine whether fires start, spread and do damage, and whether and to what extent they can be controlled.

Fire danger index. A relative number denoting an evaluation of rate of spread, or suppression difficulty for specific combinations of fuel, fuel moisture and wind speed.

Fire drill. A practice drill for firemen and occupants of a structure to accustom them to their duties in case of a fire.

Fire effects. The physical, biological and ecological impact of fire on the environment.

Fire ground. The area declared by the senior member of the attending fire agency as the ‘fire ground’. As a guide, it includes the area involved in the actual fire; the area where fire fighters, appliances, hoses and hydrants are located; and may extend to adjoining properties threatened by the fire. The fire ground is controlled by the fire agency.

Fire hazard. Any fuel which if ignited, may be difficult to extinguish.

Fire hazardous area. An area where the combination of vegetation, topography, weather, and the threat of fire to life and property create difficult and dangerous problems.

Fire hydrant. An assembly installed in a water pipeline which provides a valved outlet to permit a controlled supply of water to be taken from the pipeline for firefighting.

Fire indicator panel. A panel on which is mounted an indicator or indicators together with associated equipment for the fire alarm or sprinkler system.

Fire intensity. The rate of energy release per unit length of fire front.

Fire load. The total amount of combustible material expressed in heat units.

Fire management. All activities associated with the management of fire-prone land, including the use of fire to meet land management goals and objectives.

Fire prevention. All pre-fire activities designed to reduce fuel quantities, remove known hazards, and prepare properties for the possibility of fires occurring so that the fire development and spread is minimised and property damage is mitigated.

Fire protection. Provisions made to detect, suppress or limit the spread of fires and particularly design features of buildings aimed at limiting the spread of fire from the area of origin.

Fire refuge. A community fire refuge is a building where people may seek shelter from the danger of wildfire. A building constructed or designated as a fire refuge should have consideration given to its vulnerability to wildfire, parking for users, availability of water, telephone and electric power, and location and accessibility in relation to its service area.

Fire resistance. The extent to which a material or building is resistant to fire.

Fire retardant. A substance or treatment which, under specified conditions, suppresses or delays the combustion of a material.

Fire risk substance. Any readily ignitable solid substance including waste paper, hay, sawdust and wood chips.

Fire risk. 1. A building, structure or object considered especially likely to catch fire, or one which would be especially unsafe in a fire. 2. The risk of loss by fire. 3. The obligation of an insurer to cover the loss caused by a fire.

Fire safety. Safety against a fire, including fire protection, fire prevention and fire fighting.

Fire threat. The impact a fire will have on a community.

Fire tolerance. The ability on the part of a biological environment physically to withstand or recover from potentially adverse effects of fire.

Fire trail. A permanent track cleared through bush to provide firefighters with access to bushfires.

Fire trap. Any location or situation in which it is highly dangerous to implement fire suppression activities.

Fire whirl. A spinning column of ascending hot air and gases rising from a fire and carrying aloft smoke, debris, and flame. Fire whirls range in size from less than a metre in diameter to small tornadoes in intensity.

Fire wind. The inflow of air at the fire source caused by the action of convection. It is not to be confused with a prevailing wind.

Fireball. A ball of flaming gas.

Fireboat. A powered vessel equipped for fighting fires.

Firefighter. One whose activity or employment is to extinguish fires.

Fireline sector. A defined section of the fireline being constructed and/or used to contain or control a **wildfire,** or being constructed as a backup to other lines being used to control a wildfire.

Fireline. A natural or constructed barrier, or treated fire edge, used in fire suppression and **prescribed burning** to limit the spread of fire.

Firestorm. An atmospheric phenomenon caused by a large fire, as after the mass bombing of city, in which a rising column of air above the fire draws in strong winds often accompanied by rain.

FIRM. Flood Insurance Rate Map.

FIRST. Federal Incident Response Support Team.

First aid. Immediate and temporary care given on site to the victims of an accident or sudden illness in order to avert complications, lessen suffering and sustain the person until competent services or a physician can be obtained.

First receivers. Employees at a hospital engaged in decontamination and treatment of victims who have been contaminated by a hazardous substance(s) during an emergency incident. The incident occurs at a site other than the hospital. These employees are a subset of first responders. (OSHA) Because the personnel are located remote from the hazardous materials event site and are receiving live victims, their HAZMAT exposure may be less than that of HAZMAT first responders at the incident site.

First responder. The term first responder refers to those individuals who in the early stages of an incident are responsible for the protection and preservation of life, property, evidence, and the environment, including emergency response providers as defined in section 2 of the Homeland Security Act of 2002 (6 U.S.C. 101), as well as emergency management, public health, clinical care, public works, and other skilled support personnel (such as equipment operators) that provide immediate support services during prevention, response, and recovery operations.

First Responder. The first trained personnel to arrive on the scene of a HAZMAT incident.; usually officials from local emergency services, such as firefighters and police.

Fission Product. An atom produced through the splitting (fissioning) of a larger atom.

Fission. The splitting of an atom resulting in the release of neutrons, energy, and two or more smaller atoms.

Five-Hundred Year Floodplain (or 0.2 percent chance floodplain). That area which includes the base floodplain which is subject to inundation from a flood having a 0.2 percent chance of being equaled or exceeded in any given year.

Flame angle. The angle of the flame in relation to the ground, caused by wind direction or the effect of a slope.

Flame front. The leading edge of a moving fire.

Flame height. The vertical distance between the tip of the flame and ground level, excluding higher flame flashes.

Flammability. The ease with which a substance is set on fire.

Flammable (Explosive) Limits. The concentration of a gas that will burn in air. The Lower Explosive Limit (LEL) is the lowest percentage of a gas that will burn in air. The Upper Explosive Limit (UEL) is the highest percentage of a gas that will burn in air.

Flammable gas. Materials considered by the DOT as flammable: gases having a Lower Explosive Limit of less than 13 % or gases having flammable range wider than 12 percentage points.

Flammable. Capable of being easily ignited and/or burning with extreme rapidity, and has a flashpoint under 100 degrees F.

Flash flood. A flood that rises quite rapidly with little or no advance warning, usually as a result of an intense rainfall over a small area or, possibly, an ice jam, a dam failure, etc.

Flash point. The minimum temperature at which a liquid gives off enough vapors to form an ignitable mixture with the air near the surface of the liquid.

Flexibility. A principle of the NIMS that provides a consistent, flexible, and adjustable national framework within which government and private entities at all levels can work together to manage domestic incidents, regardless of their cause, size, location, or complexity. This flexibility applies across all phases of incident management: prevention, preparedness, response, recovery, and mitigation.

Flood awareness. An appreciation of the likely effects of flooding and a knowledge of the relevant flood warning, response and evacuation procedures. In communities with a high degree of flood awareness, the response to flood warnings is prompt and efficient. In communities with a low degree of flood awareness, flood warnings are liable to be ignored or misunderstood, and residents are often confused about what they should do, when to evacuate, what to take and where it should be taken.

Flood boat. Vessel used for rescue, evacuation and resupply purposes.

Flood classification levels. Definitions used in flood warnings to give a general indication of the types of problems expected in a flood, i. e.

Flood Control and Coastal Emergencies Act (33 U.S.C. § 701n (2005), commonly referred to as Public Law 84-99): The Flood Control Act authorizes an emergency fund for preparation for emergency response to, among other things, natural disasters, flood fighting and rescue operations, repair or restoration of flood control and hurricane protection structures, temporary restoration of essential public facilities and services, and provision of emergency supplies of water.

Flood control dam. A dam which temporarily stores or controls flood runoff and includes dams used to form flood retarding basins.

Flood control. The management of water resources through construction of dams, reservoirs, embankments, etc. to avoid floods.

Flood damage. The tangible and intangible costs of flooding. Tangible costs can be quantified in monetary terms, e. g. Damage to goods and possessions, loss of income or services during the flood aftermath, etc. Intangible damages represent the increased levels of physical, emotional and psychological illness in flood affected people attributed to a flooding episode and are less easy to quantify in monetary terms.

Flood forecast. Prediction of the stage, discharge, beginning and duration of a flood**,** especially of the peak discharge at a specific point on a stream resulting from precipitation and/or snow melt.

Flood frequency curve. A graphical representation of the relationship between peak flood discharge and exceedance probability.

Flood fringe areas. The remaining area of flood prone land after floodway and flood storage areas have been defined.

Flood fringe. Areas outside the regulatory floodway but still inundated by the designated one percent annual chance flood (often referred to as the floodway fringe).

Flood gauge. A device used to measure flood depth at a point in relation to a height datum.

Flood hazard. The potential loss of life, property and services which can be directly attributed to a flood.

Flood Insurance Rate Maps (FIRMs). As part of its administration of the National Flood Insurance Program (NFIP), the Federal Emergency Management Agency (FEMA) publishes flood hazard maps, called Flood Insurance Rate Maps, or FIRMs. The purpose of a FIRM is to show the areas in a community that are subject to flooding and the risk associated with these flood hazards.

Flood Mitigation Assistance (FMA) Program. The FMA program was created as part of the National Flood Insurance Reform Act (NFIRA) of 1994 (42 U.S.C. 4101) with the goal of reducing or eliminating claims under the National Flood Insurance Program (NFIP). FEMA provides FMA funds to assist States and communities implement measures that reduce or eliminate the long-term risk of flood damage to buildings, manufactured homes, and other structures insurable under the National Flood Insurance Program. Three types of FMA grants are available to States and communities:

1. **Planning Grants** to prepare Flood Mitigation Plans. Only NFIP-participating communities with approved Flood Mitigation Plans can apply for FMA Project grants.

2. **Project Grants** to implement measures to reduce flood losses, such as elevation, acquisition, or relocation of NFIP-insured structures. States are encouraged to prioritize FMA funds for applications that include repetitive loss properties; these include structures with 2 or more losses each with a claim of at least $1,000 within any ten-year period since 1978.

3. **Technical Assistance Grants** for the State to help administer the FMA program and activities. Up to ten percent (10 %) of Project grants may be awarded to States for Technical Assistance Grants.

Flood mitigation standard. The flood level, selected as part of the floodplain management process, that forms the basis for physical works to modify the impacts of flooding.

Flood of record. The highest flood historically recorded in a given location. [The U.S. Army Corps of Engineers typically uses the flood of record to determine risk when constructing dams, dikes and levees, etc.]

Flood plains. An area adjacent to a river, formed by the repeated overflow of the natural channel bed. The land which may be covered by water when the river overflows its banks during floods.

Flood planning area. The area of land below the **flood planning level** and **thus subject to flood related development controls.**

Flood planning levels. Flood levels selected for planning purposes, as determined in floodplain management studies and incorporated in floodplain management plans. Selection should be based on an understanding of the full range of flood behaviour and the associated flood risk. It should also take into account the social, economic and ecological consequences associated with floods of different severities. Different FPLS may be appropriate for different categories of land-use and for flood plans.

Flood preparedness plan. A plan of action that sets out the procedures to be followed for the **warning, evacuation** and **welfare** of people in the **event** a flood occurs.

Flood prone land. Land susceptible to inundation by the probable maximum flood (PMF) event. Under the merit policy, the flood prone definition should not be seen as necessarily precluding development. Floodplain management plans should encompass all flood prone land, ie. The floodplain.

Flood proofing. A combination of measures incorporated in the design, construction and alteration of individual buildings or structures subject to flooding, to reduce or eliminate flood damages.

Flood risk. 1. The probability of losses occurring due to flooding. **2.** The chance of failure of the dam over its life due to inadequate spillway capacity and freeboard provisions.

Flood routing. Process of determining progressively the timing and shape of a flood wave at successive points along a river or throughout a reservoir.

Flood series. A record of peak flood heights over a period of time.

Flood stage. That stage, on a fixed river gauge, at which the overflow of the natural banks of a stream begins to cause damage in any portion of the reach for which the gauge is used as an index.

Flood storage areas. Those parts of the floodplain that are important for the temporary storage of floodwaters during the passage of a flood. The extent and behaviour of flood storage areas may change with flood severity, and loss of flood storage can increase the severity of flood impacts by reducing natural flood attenuation. Hence, it is necessary to investigate a range of flood sizes before defining flood storage areas.

Flood surcharge. The maximum rise of still water level above reservoir full supply level during a flood.

Flood warning system. A system defining the level of flooding at which a warning will be initiated, the physical means by which it will be relayed, and the persons to whom it will be given. The system includes All necessary hardware such as water level actuators, and radio transmitting and receiving equipment.

Flood warning. A statement by the bureau of meteorology including all or part of the following items for particular catchments: 1) a summary of the current meteorological situation and expected developments; 2) a summary of the rainfall which has occurred or is expected; 3) river heights at key locations; 4) the class of flooding that is expected; and/or 5) river heights.

Flood wave. Rise in streamflow to a crest to such a magnitude that it causes flooding, and its subsequent recession.

Flood. The overflowing by water of the normal confines of a stream or other body of water, or the accumulation of water by drainage over areas which are not normally submerged.

Flood-bypass channel. Channel built to divert flood flows from a point upstream of a region to a point downstream.

Floodgate. A device to control the flow of water: may be located in or on a dam or weir or in a levee.

Floodplain management measures. The full range of techniques available to reduce flood damage and disruption, as canvassed in floodplain management studies.

Floodplain management options. The measures which might be feasible for the management of a particular area of the floodplain. Preparation of a floodplain management plan requires a detailed evaluation of floodplain management options.

Floodplain management plan. The principal means of managing the risks associated with the use of the **floodplain.** A floodplain management plan. Will usually include both written and diagrammatic information describing how particular areas of flood prone land are to be used and managed to achieve defined objectives.

Floodplain management. Floodplain management means the operation of an overall program of corrective and preventive measures for reducing flood damage, including but not limited to emergency preparedness plans, flood control works and floodplain management regulations.

Floodplain. Low lands adjoining the channel of a river, stream, or watercourse, or ocean, lake or other body of water, which have been or may be inundated by floodwater, and those other areas subject to flooding.

Floodplain. The land which may be covered by water when the river overflows its banks during floods. The extent of a floodplain will normally be greater than the area covered in a 1 % flood.

Floods. Too much water in the wrong place; overflows of areas not normally submerged with water.;

Floodway areas. Those areas of the floodplain where a significant discharge of water occurs during floods. They are often aligned with naturally defined channels. Floodways are areas which, even if only partially blocked, would cause a significant redistribution of flood flow, or a significant increase in flood levels. Floodways are often, but not necessarily, areas of deeper flow or areas where higher velocities occur. As for flood storage areas, the extent and behaviour of floodways may change with flood severity. Areas that are benign for small floods may cater for much greater and more hazardous flows during larger floods. Hence, ie. Is necessary to investigate a range of flood sizes before defining floodway areas that should be zoned accordingly.

Floodway. The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without causing any cumulative increase in the water surface elevation. The floodway is intended to carry the dangerous and fast-moving water.

FMA. Flood Mitigation Assistance.

FMC. Federal Mobilization Center.

FOC. FEMA Operations Center.

Food aid. Assistance rendered on an organised basis, either free or on concessional terms, to provide food to a population group, community or country suffering from food shortage or insufficient development.

Food and nutrition indicators. Quantified data that indicate the quantity and quality of foodstuffs available to a population e. g. Number calories or proteins.

Food safety. The component of food hygiene which deals with the measures necessary to ensure the innocuity, cleanliness, salubrity and intrinsic value of foodstuffs.

Food. Edible substance containing nutrients that, on ingestion, maintain the vital functions of a person or other living organism. Part of the Basic Societal Function Food and Nutrition.

Forecast. 1. Statement of expected meteorological conditions for a specific period and for a specific area or portion of air space. syn. 'meteorological forecast' and 'weather forecast'. 2. Statement or statistical estimate of the occurrence of a future event. This term is used with different meanings in different disciplines, as well as prediction.

Foreshock. An earthquake that precedes the largest quake (mainshock) of an earthquake sequence. Foreshocks may occur seconds to weeks before the mainshock.

Formerly Restricted Data (FRD). Classified information: (1) jointly determined by DOE and DOD to be related primarily to the military utilization of atomic weapons, (2) removed by DOE from the Restricted Data category pursuant to Section 142(d) of the Atomic Energy Act of 1954, as amended, and (3) safeguarded as National Security Information subject to the restrictions of transmission to other countries and regional defense organizations that apply to Restricted Data.

Forward Coordinating Team (FCT). The FCT is a full-time DHS team immediately deployable to an incident or potential incident (particularly for a response to a catastrophic event). The FCT supports State and local operations by integrating with the Incident Command Post on scene and facilitating resource issues. Team members are trained and prepared to assess the situation, identify critical and unmet needs, provide recommendations for protective actions, establish incident support facilities and identify, direct and coordinate acquisition and delivery of required assets and/or resources.

Four Phases. The time and function-based divisions within Comprehensive Emergency Management: Mitigation, Preparedness, Response and Recovery.

FPCs. Federal Preparedness Coordinators.

Framework. A conceptual structure that supports or contains set of systems and/or practices.

FRC. Federal Resource Coordinator.

Freeboard. An additional amount of height above the base flood elevation used as a factor of safety (e.g., 2 feet above the base flood) in determining the level at which a structure's lowest floor must be elevated or floodproofed.

FRMAC. Federal Radiological Monitoring and Assessment Center

Front (atmospheric). The interface or transition zone between air masses of different physical properties (temperature, humidity).

Fujita Tornado Scale. A scale for expressing the relative intensity of tornadoes, consisting of six levels corresponding to increasing levels of damage — light, moderate, considerable, severe, devastating, incredible.

Fujita-Pearson Scale (FPP Scale). A 3-digit scale for tornadoes devised by Fujita (F scale) and Pearson (PP scale) to indicate the tornado intensity (0-5), path length (0-5), and path width (0-7) **(WMO** 1992).

Full participation exercise. An exercise for a particular DOE- or contractor-operated facility that demonstrates the integrated response capability of the facility emergency response organization, the DOE Program Office elements (both Headquarters and Field Element) with responsibilities for

emergency response, along with those regional federal, state, tribal, and local government agencies, regional/area utilities, and private support organizations that elect to participate.

Full scale exercise (FSE). A multi-agency, multi-jurisdictional, multi-organizational activity that tests many facets of preparedness. They focus on implementing and analyzing the plans, policies, procedures, and cooperative agreements developed in discussion-based exercises and honed in previous, smaller, operations-based exercises. In FSEs, the reality of operations in multiple functional areas presents complex and realistic problems that require critical thinking, rapid problem solving, and effective responses by trained personnel. During FSEs, events are projected through a scripted exercise scenario with built-in flexibility to allow updates to drive activity. FSEs are conducted in a real-time, stressful environment that closely mirrors real events.

Fume. Airborne solid particles formed when the material from a volatilised solid condenses in cool air. Fumes are extremely fine — usually less than 1.0 micrometre in diameter. In most cases the hot vapour reacts with the air to form an oxide. Fumes are often associated with molten metals, especially in processes such as welding. At high fume concentrations, agglomeration of particles may result in particles of

Function. Function refers to the five major activities in ICS. Command, Operations, Planning, Logistics, and Finance/Administration. The term function is also used when describing the activity involved, e.g., the planning function. A sixth function, Intelligence, may be established, if required, to meet incident management needs.

Functional approach (planning). While the causes of emergencies vary greatly, the potential effects of emergencies do not. This means that jurisdictions can plan to deal with effects common to several hazards, rather than develop separate plans for each hazard. For example, earthquakes, floods, and hurricanes all can force people from their homes.

The jurisdiction can develop a plan and an organization around the task, or function, of finding shelter and food for the displaced—with minor adjustments for the probable rapidity, duration, location, and intensity of different hazards if desired. It can do the same for other common tasks. In fact, a critical aspect of planning for the response to emergency situations is to identify all of these common tasks, or functions, that must be performed, assign responsibility for accomplishing each function, and ensure that tasked organizations have prepared SOPs that detail how they will carry out critical tasks associated with the larger function. However, the plans for performing each function should not be created in isolation. Since the jurisdiction’s goal is a coordinated response, task-based plans should follow from a Basic Plan that outlines the jurisdiction’s overall emergency organization and its policies.

The following list of functional annexes addresses core functions that warrant attention and may require that specific actions be taken during emergency response operations: Direction and Control Communications: 1. Warning. 2. Emergency Public Information. 3. Evacuation. 4. Mass Care. 5. Health and Medical Services.

Functional area. A category of services involved in preparations for an emergency, including: agriculture and animal services; emergency finance; emergency supply; engineering services; environmental services; health services; media services; welfare services; and australian defence force.

Functional exercise (FE). An activity designed to test and evaluate individual capabilities, multiple functions, activities within a function, or interdependent groups of functions. Events are

projected through an exercise scenario with event updates that drive activity at the management level. An FE simulates the reality of operations in a functional area by presenting complex and realistic problems that require rapid and effective responses by trained personnel in a highly stressful environment.

Functional plan. A document describing roles and responsibilities and arrangements for the performance of a key response or recovery function. It is in support of the main plan.

Functional threshold. The level of service/goods provided for any given component that is insufficient to allow it to continue to provide a minimum level of service essential to meet the needs of the affected population. At levels below the functional threshold, the societal component becomes dysfunctional.

Fusion centers. Fusion centers: provide critical sources of unique law enforcement and threat information; facilitate sharing information across jurisdictions and function; provide a conduit between men and women on the ground protecting their local communities and state and federal agencies.

Future flood hazard. The hazard a community may be exposed to as a result of its placement on the floodplain.

G

Gale warning. Meteorological message intended to warn those concerned of the occurrence or expected occurrence of a wind of beaufort force 8 or 9 over a specific area.

Gale. Wind with a speed between 34 and 40 knots (beaufort scale wind force 8).

Gamma radiation. Radiation consisting of streams of gamma particles, i.e. Rays similar to x-rays, but of higher frequency and penetrating power, forming part of the radiation of a radioactive substance. syn. ‘gamma rays’.

Gamma rays. High-energy, short wavelength electromagnetic radiation emitted from the nucleus. Gamma radiation frequently accompanies alpha and beta emissions and always accompanies fission. Gamma rays are very penetrating and are best stopped or shielded against by dense materials such as lead or uranium. Gamma rays are similar to X rays, but are usually more energetic.

Gas free. A space is considered to be gas free when the concentration of flammable or toxic vapours in it is within safe limits.

Gas. A substance consisting of atoms and molecules which are sufficiently mobile for it to occupy the whole space in which it is contained.

General emergency. An event predicted, in progress, or having occurred that result in one or more of the following situations: 1. Actual or imminent catastrophic reduction of facility safety or security systems with potential for the release of large quantities of hazardous materials (radiological or non-radiological) to the environment. The radiation dose from any release of radioactive material or a concentration in air from any release of other hazardous material is expected to exceed the applicable Protective Action Guide or Emergency Response Planning Guideline at or beyond the site boundary. 2. Actual or likely catastrophic failures in safety or security systems threatening the integrity of a nuclear weapon, component, or test device that may adversely impact the health and safety of workers and the public.

General Staff. Under the Incident Command System, The General Staff normally consists of an Operations Section Chief, Planning Section Chief, Logistics Section Chief and Finance/ Administration Section Chief. An Intelligence/ Investigations section may be established, if required, to meet incident response needs.

Geographic Information System (GIS). A computerized database for the capture, storage, analysis and display of locationally defined information. Commonly, a GIS portrays a portion of the earth’s surface in the form of a map on which this information is overlaid.

Geohazard. A natural earth surface process which may interfere adversely with human activity, including processes of a geological, geomorphological, geophysical, hydrogeological, geographical, physiographical or geotechnical nature.

Global Patient Movements Requirements Center (GPMRC). A component of the United States Transportation Command (USTRANSCOM) that has the responsibility for the management of DoD, VA and NDMS beds, regulating of military and NDMS domestic casualties to those beds, and arranging for the transportation of the casualties to the facilities in which the beds are located.

Goal (emergency management application): A description of the end state — where the organization wants to be at the end of the activity, program, or other entity for which the goal was defined.

Good work practice. A positive lesson or action that has the potential to be the basis of significant improvements or cost savings.

Goods. Commodities, equipment, wares, and merchandises.

Government Coordinating Council. The government counterpart to the SCC for each sector established to enable interagency coordination. The GCC is comprised of representatives across various levels of government (Federal, State, Territorial, local, and tribal) as appropriate to the security and operational landscape of each individual sector.

Government functions. 'Government Functions' means the collective functions of the heads of executive departments and agencies as defined by statute, regulation, presidential direction, or other legal authority, and the functions of the legislative and judicial branches.

Governmental Jurisdictions in the US. Our structure of overlapping federal, state, and local governance.has more than 87,000 different jurisdictions.

Governor's Authorized Representative. As the complexity of the response dictates, the Framework [National Response Framework] contemplates that the Governor may empower a Governor's Authorized Representative to: 1. Execute all necessary documents for disaster assistance on behalf of the State, including certification of applications for public assistance. 2. Represent the Governor of the impacted State in the Unified Coordination Group, when required. 3. Coordinate and supervise the State disaster assistance program to include serving as its grant administrator. 4. Identify, in coordination with the SCO, the State's critical information needs for incorporation into a list of Essential Elements of Information (critical items of specific information required to plan and execute an operation and to support timely, logical decisions).

Graded approach. A process by which the level of analysis, documentation, and actions necessary to comply with the requirements of this part are commensurate with: (1) the relative importance to safety, safeguards, and security; (2) the magnitude of any hazard involved; (3) the life cycle stage of a facility; (4) the programmatic mission of a facility; (5) the particular characteristics of a facility; and (6) any other relevant factor. (10 CFR 830.3) [DOE-EM-STD- 5502-94]

Grand Poo-Bah. A person who holds many offices simultaneously.

Gray (Gy). The absorbed radiation dose unit of the international system of units. One gray equals 100 rad.

Greenhouse effect. 1. The increase in temperature in a greenhouse caused by the radiant heat from the sun passing through the glass, while heat within the greenhouse is trapped there by the glass. 2. The same effect on the temperature of the earth caused by its atmosphere acting as the glass of a greenhouse does, possibly to be increased as man's pollution adds more and more carbon dioxide to the atmosphere.

Grid bearing. The direction from a point of observation to an object in relation to grid north.

Grid map. A map of an area overlaid with a grid system of rectangular coordinates that are used to identify ground locations where no other landmarks exist.

Grid north. The direction of the north-south grid lines on a map.

Grid reference. A group of numbers (either four, six or eight) that describes a point on a map using a given map grid system by means of distance east and north of an arbitrary zero point.

Gross Domestic Product (GDP). The value of all goods and services produced within a nation's boundaries, regardless of ownership.

Gross National Product (GNP). The value of all goods and services produced by a country during a given period. It includes all production by facilities owned by a nation's citizens, even if the facilities are in another country.

Gross World Product (GWP). The value of all goods and services produced on earth.

Ground motion. Seismic vibration of the ground at a particular point, recorded by accelerograph**.**

Groundfire. A fire burning in thick layers of humus and vegetation, found in forest, swampy ground or peat. Fires in rubbish dumps could come into this category.

Groundwater level. The level at which soil and porous rock begins to be saturated with water.

Groundwater. Water present below the soil surface and occupying voids in the porous subsoil; specifically, the porous layer which is completely saturated with water. Upper surface is referred to as the **'water table'.**

Group. Established to divide the incident management structure into functional areas of operation. Groups are composed of resources assembled to perform a special function not necessarily within a single geographic division. Groups, when activated, are located between branches and resources in the Operations Section. See division.

Guarded Condition (Blue). This condition is declared when there is a general risk of terrorist attacks. In addition to the Protective Measures taken in the previous Threat Condition, Federal departments and agencies should consider the following general measures in addition to the agency-specific Protective Measures that they will develop and implement: checking communications with designated emergency response or command locations; reviewing and updating emergency response procedures; and providing the public with any information that would strengthen its ability to act appropriately.

Guidelines. Principle or criterion guiding action; a general rule, principle, or piece of advice. A statement or other indication of policy or procedure by which to determine a course of action.

H

Habitat. The natural home or environment of an organism; area or type of environment in which an organism or ecological community normally lives or occurs: a marine habitat; place in which a person or thing is most likely to be found.

Hachure. A method of indicating rising ground on a map by a shading of lines down the line of the slope — the heavier or more numerous the lines the steeper the slope.

Half life (radioactive). In relation to radioactive decay, the time required for the quantity of a radionuclide to decrease to one half of its initial value.

Half-Life. The time in which half the atoms of a particular radioactive material disintegrate to another nuclear form. Measured half-lives vary from millionths of a second to billions of years. See Radioactive Decay.

Ham radio network. The international amateur radio network, frequently a valuable contribution by the community to disaster response.

Harm. A physical injury or damage to health, property or the environment.

Hazard (*environmental***)..**extreme geophysical events, biological processes and major technological accidents, characterized by concentrated releases of energy or materials, which pose a largely unexpected threat to human life and can cause significant damage to goods and the environment.

Hazard (*global***)..**changes to regional ecosystems which in turn effect global systems, are termed ‘global hazards’. Climate change, soil degradation, and deforestation are examples of global hazards that are directly and indirectly related to the manipulation of technology. Global hazards can be distinguished from the more traditional ones because of their diffused or dispersed effects at the planetary scale—they threaten the long-term survival of t he planet. They are not rare, discrete events but develop over a long period of time. Global hazards are cumulative in nature and are the end result of centuries or decades of human manipulation of technology to control nature and exploit its resources.

Hazard (*intentional***).** Human actions with intent to cause harm to other humans and what they value are termed intentional hazards. Today, terrorism is the source of most of the intentional hazards.

Hazard (*natural***).** While some hazards, such as earthquakes and volcanoes, are the product of natural processes unmodified by human interventions, other ostensibly natural hazards are less and less ‘natural’. The impacts of human activities on global climatic systems, with attendant changes in rainfall patters, storm frequency, and storm severity suggest that meteorological hazards themselves could be influenced by (unintended) human factors cites evidence that both the frequency and severity of meteorological hazards may be increasing as a result of human-induced climatic change. Similarly human modifications of riverine systems, from deforesting and paving watersheds to elaborate levee systems, have taken the ‘natural’ out of many flood hazards.

Hazard (*technological***).** Technological hazards are best seen as accidental failures of design or management affecting large-scale structures, transport systems or industrial activities which present life-threatening risks to the local community. The failure trigger which provokes a technological disaster is likely to arise for one of the following reasons: (1) defective design; (2) inadequate management; (3) sabotage or terrorism.

Hazard analysis. A hazards analysis consists of two parts. The first involves knowledge of the kinds of hazards that might threaten the community. This knowledge includes the probability of the event occurring at varying levels of intensity and at varying locations throughout the community. Determinations of probability, intensity, and location can be made on the basis of historical evidence, empirical research, or community perception.

Hazard and vulnerability analysis (HVA). A study that identifies possible hazards and the susceptibility of an organization to the hazard impact. The HVA provides guidance for mitigation and preparedness plans in an emergency management program.

Hazard assessment. (Sometimes Hazard Analysis/Evaluation) The process of estimating, for defined areas, the probabilities of the occurrence of potentially-damaging phenomenon of given magnitudes within a specified period of time. Hazard assessment involves analysis of formal and informal historical records, and skilled interpretation of existing topographical graphical, geological geomorphological, hydrological, and land-use maps.

Hazard audit. A detailed and comprehensive review of all operational and organisational safety systems and practises.

Hazard Categorization. Evaluation of the consequences of unmitigated releases to categorize facilities or operations into the following categories:

Hazard Category 1 — the hazard analysis shows the potential for significant offsite consequences.

Hazard Category 2 — the hazard analysis shows the potential for significant onsite consequences.

Hazard Category 3 — the hazard analysis shows the potential for only significant localized consequences.

Hazard Classes. Non-nuclear facilities will be categorized as high, moderate, or low hazards based on the following: High — hazards with a potential for onsite and offsite impacts to large numbers of persons or for major impacts to the environment; Moderate — hazards which present considerable potential onsite impacts to people or the environment, but at most only minor offsite impacts, and Low — hazards which present minor onsite and negligible offsite impacts to people and the environment.

Hazard classification. The rating for a dam based on the potential consequences of failure. The rating is based on potential for loss of life and damage to property that failure of that dam could cause. Such classification is related to the amount of development downstream of a dam.

Hazard identification. Hazard Identification locates hazardous areas, often estimates the probability of hazardous events of various magnitudes, and sometimes assesses the separate characteristics of the hazards (e.g., for hurricanes: wind, high water, and wave action).

Hazard identification word diagram. A table describing possible events at given facilities, their cause, possible consequences, and the prevention, detection, and protection systems required.

Hazard Management. Utilizes individual and collective strategies to reduce and mitigate the impacts of hazards on people and places.

Hazard mapping. The process of establishing geographically where and to what extent particular phenomena are likely to pose a threat to people, property, infrastructure, and economic activities. Hazard mapping represents the result of hazard assessment on a map, showing the frequency/probability of occurrences of various magnitudes or duration. Hazard mapping comprises the cartographic depiction of possible future events accompanied by qualitative and quantitative analysis; it is not only the mapping of past events.

Hazard Mitigation Grant Program (HMPG). The Hazard Mitigation Grant Program (HMGP) provides grants to States and local governments to implement long-term hazard mitigation measures after a major disaster declaration. The purpose of the HMGP is to reduce the loss of life and property due to natural disasters and to enable mitigation measures to be implemented during the immediate recovery from a disaster. The HMGP is authorized under Section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act.

Hazard Mitigation. Floods, earthquakes, hurricanes, wildfires, tornadoes, and technological disasters cause billions of dollars of damage annually throughout the United States. The loss of lives, injuries, and damages to homes, businesses, or workplaces cause incalculable hardship and emotional suffering, and tear at the very fabric of our lives and our communities. While we will never be able to completely prevent disasters from occurring, we know how to reduce their impacts. Hazard mitigation is the most proactive and successful method for reducing the physical, financial, and emotional losses caused by disasters. Utilizing mitigation activities such as land use planning, site design, engineering, and retrofitting of homes, structures, schools, public buildings and businesses, we are able to reduce future disaster losses.

Hazard mitigation means actions that reduce or eliminate the long-term risk to people and property from the effects of hazards. FEMA's hazard mitigation efforts consist of three objectives: risk analysis, risk reduction and flood insurance. These objectives work in tandem in enabling the Nation's at-risk population to reap the rewards of good hazard mitigation practices: 1) creation of safer communities by reducing loss of life and property; 2) recovering more rapidly from floods and other disasters; and 3) reducing the financial impact on States, local and tribal communities, and the national treasury.

Hazard probability. The estimated likelihood that a hazard will occur in a particular area. **Hazard Risk.** The probability of experiencing disaster damage.

Hazard risk. A quantitative product of the probability of a hazard occurring and the projected consequence of the impact.

Hazard vulnerability analysis (HVA). A systematic approach to identifying all hazards that may affect an organization and/or its community, assessing the risk (probability of hazard occurrence and the consequence for the organization) associated with each hazard and analyzing the findings to create a prioritized comparison of hazard vulnerabilities. The consequence, or vulnerability, is related to both the impact on organizational function and the likely service demands created by the hazard impact.

A hazard vulnerability analysis identifies the disasters most likely to strike an organization or facility, and estimates the potential impact of the disaster on the surrounding community. The goal of

the analysis is to prioritize potential disasters that could affect a facility based on likelihood of occurrence and impact. The analysis can then be used as a starting point for emergency plans, enabling communities to use their resources most effectively.

Hazard vulnerability. The susceptibility of life, property, or the environment to damage if a hazard occurs.

Hazard conflict. A subset of intentional hazards, including war, acts of terrorism, civil unrest, riots, and revolutions. Intentional Hazards from criminal intent would not be included in this term.

Hazard. Hazard is best viewed as a naturally occurring or human-induced process or event with the potential to create loss, i.e. a general source of danger. Risk is the actual exposure of something of human value to a hazard and is often regarded as the combination of probability and loss. Thus, we may define hazard (or cause) as 'a potential threat to humans and their welfare' and risk (or consequence) as 'the probability of a specific hazard occurrence'. The distinction was illustrated by Okrent (1980) who considered two people crossing an ocean, one in a liner and the other in a rowing boat. The main hazard (deep water and large waves) is the same in both cases but the risk (probability of drowning) is very much greater for the person in the rowing boat. Thus while an earthquake hazard can exist in an uninhabited region, an earthquake risk can occur only in an area where people and their possessions exist. People, and what they value, are the essential point of reference for all risk assessment and for all disasters. Despite their diverse sources, most disasters have a number of common features: 1. The origin of the damaging process or event is clear and produces characteristic threats to human life or well-being, e.g. a flood causes death by drowning. 2. The warning time is normally short, i.e. the hazards are often known as rapid-onset events. This means that they can be unexpected even though they occur within a known hazard zone, such as the floodplain of a small river basin. 3. Most of the direct losses, whether to life or property, are suffered fairly shortly after the event, i.e., within days or weeks. 4. The exposure to hazard, or assumed risk, is largely involuntary, normally due to the location of people in a hazardous area, e.g. the unplanned expansion of some Third World cities onto unstable hillslopes. 5. The resulting disaster occurs with an intensity that justifies an emergency response, i.e. the provision of specialist aid to the victims. The scale of response can vary from local to international

Hazardous air pollutant. A pollutant to which no ambient quality standard is applicable and that may cause or contribute to an increase in mortality or in serious illness.

Hazardous chemicals. The U.S. Occupational Safety and Health Administration (OSHA) uses the term hazardous chemical to denote any chemical that would be a risk to employees if exposed in the work place. Hazardous chemicals cover a broader group of chemicals than the other chemical lists.

Hazardous classes. A series of nine descriptive terms that have been established by the U.N. Committee of Experts to categorize the hazardous nature of chemical, physical, and biological materials. These categories are flammable liquids, explosives, gases, oxidizers, radioactive materials, corrosives, flammable solids, poisonous and infectious substances, and dangerous substances.

Hazardous facility. A facility which incorporates hazards which may pose a significant risk to the employees in the facility, the surrounding community and environment, and/or the facility itself. Sometimes this term is used of facilities which are more properly described as 'potentially hazardous'. syn. 'hazardous installation' and 'hazardous industry'.

Hazardous location. An area where a flammable atmosphere may be present continuously or intermittently, or be present due to an abnormal or transient condition.

Hazardous material (HAZMAT). Any material which is explosive, flammable, poisonous, corrosive, reactive, or radioactive (or any combination), and requires special care in handling because of the hazards posed to public health, safety, and/or the environment.

Hazardous material incident. A situation in which a hazardous material is or may be released into the environment.

Hazardous Substance. As defined by the NCP, any substance designated pursuant to section 311(b)(2)(A) of the Clean Water Act; any element, compound, mixture, solution, or substance designated pursuant to section 102 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); any hazardous waste having the characteristics identified under or listed pursuant to section 3001 of the Solid Waste Disposal Act (but not including any waste the regulation of which under the Solid Waste Disposal Act (42 U.S.C. § 6901 et seq.) has been suspended by act of Congress); any toxic pollutant listed under section 307(a) of the Clean Water Act; any hazardous air pollutant listed under section 112 of the Clean Air Act (42 U.S.C. § 7521 et seq.); and any imminently hazardous chemical substance or mixture with respect to which the EPA Administrator has taken action pursuant to section 7 of the Toxic Substances Control Act (15 U.S.C. § 2601 et seq.).

Hazardous waste management. A program for controlling the generation, storage, collection, transportation, treatment, use, conversion or disposal of hazardous wastes; includes administrative, financial, legal and planning activities as well as operational aspects of hazardous. Waste handling, disposal and resource recovery systems.

Hazardous waste. Waste materials or mixtures of waste which require special handling and disposal because of their potential to damage health and the environment.

Hazards assessment. The identification and characterization of hazardous materials specific to a facility/site, analyses of potential accidents or events, and evaluation of potential consequences. The Hazards Assessment also includes a determination of the size of the geographic area surrounding the site, known as the Emergency Planning Zone (EPZ), within which special planning and preparedness activities are required to reduce the potential health and safety impacts from an event involving hazardous materials. The Hazards Assessment provides the technical basis for the Hazardous Materials Program.

Hazards survey. A qualitative examination of the events or conditions specific to the facility/site which may require an emergency response. It is used to identify the generic emergency events or conditions that define the scope of the emergency management program at a facility/site. The description of the potential impacts of such events or conditions contained in the Hazards Survey determines the planning and preparedness requirements that apply. The Hazards Survey is the formal mechanism to determine the scope and extent of the Base Program.

HAZMAT team. Term used to describe a team of highly skilled professionals who specialize in dealing with hazardous material incidents.

HAZMAT. The common acronym for hazardous materials.

HAZUS MH (Hazards US Multi Hazard): HAZUS-MH is a powerful risk assessment software program for analyzing potential losses from floods, hurricane winds and earthquakes. In HAZUS-MH, current scientific and engineering knowledge is coupled with the latest geographic information systems (GIS) technology to produce estimates of hazard-related damage before, or after

a disaster occurs. **(FEMA,** HAZUS — FEMA's Software Program for Estimating Potential Losses From Disaster, September 10, 2007 update)

HAZUS. Hazards US.

HCFs. Healthcare Facilities.

HD. Homeland Defense.

Head. 1. The pressure due to elevation of water, amounting to 9.7 kilopascals/metre. 2. The most rapidly advancing edge of a bushfire.

Health care facility. A hospital, nursing home or other facility which provides health care services to in-patients, out-patients or day patients.

Health Insurance Portability and Accountability Act (HIPAA). Public Law 104-191 (August 21, 1996) addresses many aspects of healthcare practice and medical records. This federal act most notably addresses the privacy of personal health information, and directs the development of specific parameters as to how personal health information may be shared.

Health Resources and Services Administration (HHS). The Health Resources and Services Administration (HRSA), an agency of the U.S. Department of Health and Human Services, is the primary Federal agency for improving access to health care services for people who are uninsured, isolated or medically vulnerable. Goal 6 of HRSA's 7 goals is to: 'Enhance the Ability of the Health Care System to Respond to Public Health Emergencies'.

Health surveillance. The monitoring of individuals for the purpose of identifying changes in health status due to occupational exposure to a hazardous substance.

Health. The state of complete physical, mental and social well being, and not merely the absence of disease or infirmity.

Healthcare facility. Any asset where point-of-service medical care is regularly provided or provided during an incident. It includes hospitals, integrated healthcare systems, private physician offices, outpatient clinics, long-term care facilities and other medical care configurations. During an incident response, alternative medical care facilities and sites where definitive medical care is provided by EMS and other field personnel would be included in this definition.

Healthcare system. A system that may include one or several healthcare facilities that provides patient evaluation and medical interventions (for illness and injury) and/or preventive medicine/health services (see healthcare facility, see system).

Heat stress index. A four-step index, based on the thi (temperature humidity index) or 'humiture' index, expressing the likelihood of heat stroke, sunstroke, or other acute symptoms of bodily stress.

Heat wave. Marked warming of the air, or the invasion of very warm air, over a large area; it usually lasts from a few days to a few weeks.

Height of dam. Normally the difference in level between the natural bed of the stream or watercourse at the downstream toe of the barrier or, if it is not across a stream channel or watercourse, between the lowest elevation of the outside limit of the barrier, and the top of dam. In some instances where a dam has a free- overflow spillway only or has a gated spillway, it may be difficult to define the top of dam level as the normal abutment sections may not exist; in such cases the height is to be measured to the level arrived at by adding the design flood rise in water level to the level of the spillway crest, or to the full supply level.

Heritage Emergency National Task Force. A partnership of 41 national service organizations and federal agencies created to protect cultural heritage from the damaging effects of natural disasters

and other emergencies. The Task Force was founded in 1995 and is co- sponsored by Heritage Preservation and the Federal Emergency Management Agency. Its primary goals are to: 1. Help cultural heritage institutions and sites be better prepared for emergencies and obtain needed resources when disaster strikes. 2. Encourage the incorporation of cultural and historic assets into disaster planning and mitigation efforts at all levels of government. 3. Facilitate a more effective and coordinated response to all kinds of emergencies, including catastrophic events. 4. Assist the public in recovering treasured heirlooms damaged by disasters.

HFA. Hyogo Framework for Action.

HHS. U.S. Department of Health and Human Services.

High Condition (Orange). A High Condition is declared when there is a high risk of terrorist attacks. In addition to the Protective Measures taken in the previous Threat Conditions, Federal departments and agencies should consider the following general measures in addition to the agency-specific Protective Measures that they will develop and implement: coordinating necessary security efforts with Federal, State, and local law enforcement agencies or any National Guard or other appropriate armed forces organizations; taking additional precautions at public events and possibly considering alternative venues or even cancellation; preparing to execute contingency procedures, such as moving to an alternate site or dispersing their workforce; and restricting threatened facility access to essential personnel only.

High hazard. In relation to flooding, possible danger to life and limb; evacuation by trucks difficult; able- bodied adults would have difficulty in wading to safety; potential for significant structural damage to buildings.

High risk enterprise. A livestock or livestock-related enterprise with a high potential for disease spread, eg. An abattoir, milk factory, artificial breeding centre or livestock market.

High wind. Air moving from one place to another with an extraordinarily high speed capable of producing damage on different societies and environments.

High-risk, high-population areas. Heavily populated areas of the United States, particularly susceptible to high-intensity earthquakes, for which federal emergency response may be necessary in the event of an earthquake. FEMA has identified the following areas as meeting this definition: Honolulu, HI; San Diego, Los Angeles, and San Francisco, CA; Puget Sound, WA; Anchorage, AK; Salt Lake City, UT; the seven-state area of the central United States (MO, KY, TN, MS, AR, IN, IL); Charleston, SC; Boston, MA; New York; Puerto Rico; and the Virgin Islands.

HITRAC. Homeland Infrastructure Threat and Risk Analysis Center.

HLS. Homeland Security.

HLT. Hurricane Liaison Team.

HMPG. Hazard Mitigation Grant Program.

Homeland Defense Current Trends Security Environment Strategic Guidance. While no one can predict exactly how the future will unfold, current trends indicate a security environment with the following characteristics that are of particular interest to NORAD and USNORTHCOM: 1. Some states will continue to pose challenges with increasingly capable traditional capabilities including aircraft, kinetic weapons, ballistic and cruise missiles. 2. Terrorism will remain a focus because it will continue to be unpredictable, yet credible, well organized, and well financed. 3. Current asymmetric threats will be accomplished by new asymmetric threats such as information attacks or kinetic and non-kinetic attacks on space systems. 4. Globalization will continue, creating

opportunities for economic growth and providing an impetus for political freedoms, but also accelerating the spread of disease, weapons of mass destruction, extremist ideologies, and terrorism.

Homeland defense. Homeland defense is the protection of US sovereignty, territory, domestic population, and critical defense infrastructure against external threats and aggression, or other threats as directed by the President. The Department of Defense is responsible for homeland defense.

Homeland Infrastructure Threat and Risk Analysis Center. DHS has established the Homeland Infrastructure Threat and Risk Analysis Center (HITRAC) to develop products to help inform infrastructure owners and operators of any threats they may potentially face, as well as to better inform their security planning and investment decisions. HITRAC is currently working in partnership with industry to develop an updated threat assessment for the chemical sector detailing plausible terrorist threats on a sector basis. This effort includes available intelligence as well as operational tactics, techniques, and procedures derived from study of overseas terrorist operations.

Homeland Security Act of 2002. Public Law 107-296, 6 U.S.C. 101 et seq, November 25, 2003, established the Department of Homeland Security (DHS) with the mandate and legal authority to protect the American people from the continuing threat of terrorism. In the Act, Congress assigned DHS the primary missions to:

- Prevent terrorist attacks within the United States,
- Reduce the vulnerability of the United States to terrorism at home,
- Minimize the damage and assist in the recovery from any attacks that may occur, and
- Act as the focal point regarding natural and manmade crises and emergency planning.

The Homeland Security Act gives the Secretary of Homeland Security full authority and control over the Department and the duties and activities performed by its personnel, and it vests him with the broad authority necessary to fulfill the Department's statutory mission to protect the American homeland. This statutory authority, combined with the President's direction in Homeland Security Presidential Directive 5, supports the NRP's unified, effective approach to domestic prevention, preparedness, response, and recovery activities.

Homeland Security Advisory Council. The HSAC provides advice and recommendations to the Secretary of Homeland Security on relevant issues. The Council members, appointed by the DHS Secretary, include experts from State and local governments, public safety, security and first-responder communities, academia, and the private sector.

Homeland Security Advisory System. The advisory system provides measures to remain vigilant, prepared, and ready to deter terrorist attacks. The following Threat Conditions each represent an increasing risk of terrorist attacks. Beneath each Threat Condition are suggested protective measures, recognizing that the heads of Federal departments and agencies are responsible for developing and implementing appropriate agency-specific protective measures.

Homeland Security and Defense Education Consortium (HSDEC). The Homeland Security and Defense Education Consortium, or HSDEC, is a network of teaching and research institutions focused on promoting education, research, and cooperation related to and supporting the homeland security / defense mission. The consortium is committed to building and maintaining a community of higher education institutions supporting this mission and the overall homeland security effort through the sharing and advancement of knowledge.

Homeland Security Council Deputies Committee (HSC/DC). The HSC Deputies Committee (HSC/DC) shall serve as the senior sub-Cabinet interagency forum for consideration of policy issues affecting homeland security. The HSC/DC can task and review the work of the HSC

interagency groups discussed below. The HSC/DC shall help ensure that issues brought before the HSC/PC or the HSC have been properly analyzed and prepared for action. T

he HSC/DC shall have the following as its regular members: the Deputy Secretary of the Treasury; the Deputy Secretary of Defense; the Deputy Attorney General; the Deputy Secretary of Health and Human Services; the Deputy Secretary of Transportation; the Deputy Director of the Office of Homeland Security (who serves as Chairman); the Deputy Director of Central Intelligence; the Deputy Director of the Federal Bureau of Investigation; the Deputy Director of the Federal Emergency Management Agency; the Deputy Director of the Office of Management and Budget; and the Assistant to the President and Chief of Staff to the Vice President. The Assistant to the President and Deputy National Security Advisor shall be invited to attend all meetings of the HSC/DC.

The following people shall be invited to attend when issues pertaining to their responsibilities and expertise are to be discussed: the Deputy Secretary of State; the Deputy Secretary of the Interior; the Deputy Secretary of Agriculture; the Deputy Secretary of Commerce; the Deputy Secretary of Labor; the Deputy Secretary of Energy; the Deputy Secretary of Veterans Affairs; the Deputy Administrator of the Environmental Protection Agency; the Deputy National Security Advisor for Combating Terrorism; and the Special Advisor to the President for Cyberspace Security. The Executive Secretary of the Office of Homeland Security shall serve as Executive Secretary of the HSC/DC. Other senior officials shall be invited, when appropriate.

Homeland Security Council Policy Coordination Committees (HSC/PCCs). HSC Policy Coordination Committees (HSC/PCCs) shall coordinate the development and implementation of homeland security policies by multiple departments and agencies throughout the Federal government, and shall coordinate those policies with State and local government. The HSC/PCCs shall be the main day-to-day fora for interagency coordination of homeland security policy. They shall provide policy analysis for consideration by the more senior committees of the HSC system and ensure timely responses to decisions made by the President. Each HSC/PCC shall include representatives from the executive departments, offices, and agencies represented in the HSC/DC.

Eleven HSC/PCCs are hereby established for the following functional areas, each to be chaired by the designated Senior Director from the Office of Homeland Security: 1. Detection, Surveillance, and Intelligence (by the Senior Director, Intelligence and Detection). 2. Plans, Training, Exercises, and Evaluation (by the Senior Director, Policy and Plans). 3. Law Enforcement and Investigation (by the Senior Director, Intelligence and Detection). 4. Weapons of Mass Destruction (WMD) Consequence Management (by the Senior Director, Response and Recovery). 5. Key Asset, Border, Territorial Waters, and Airspace Security (by the Senior Director, Protection and Prevention). 6. Domestic Transportation Security (by the Senior Director, Protection and Prevention). 7. Research and Development (by the Senior Director, Research and Development). 8. Medical and Public Health Preparedness (by the Senior Director, Protection and Prevention). 9. Domestic Threat Response and Incident Management (by the Senior Director, Response and Recovery). 10. Economic Consequences (by the Senior Director, Response and Recovery); and 11. Public Affairs (by the Senior Director, Communications).

Homeland Security Council Principals Committee (HSC/PC). The HSC Principals Committee (HSC/PC) shall be the senior interagency forum under the HSC for homeland security issues. The HSC/PC is composed of the following members: the Secretary of the Treasury; the Secretary of Defense; the Attorney General; the Secretary of Health and Human Services; the Secretary of Transportation; the Director of the Office of Management and Budget; the Assistant to

the President for Homeland Security (who serves as Chairman); the Assistant to the President and Chief of Staff; the Director of Central Intelligence; the Director of the Federal Bureau of Investigation; the Director of the Federal Emergency Management Agency; and the Assistant to the President and Chief of Staff to the Vice President.

The Assistant to the President for National Security Affairs shall be invited to attend all meetings of the HSC/PC. The following people shall be invited to HSC/PC meetings when issues pertaining to their responsibilities and expertise are discussed: the Secretary of State; the Secretary of the Interior; the Secretary of Agriculture; the Secretary of Commerce; the Secretary of Labor; the Secretary of Energy; the Secretary of Veterans Affairs; the Administrator of the Environmental Protection Agency; and the Deputy National Security Advisor for Combating Terrorism. The Counsel to the President shall be consulted regarding the agenda of HSC/PC meetings and shall attend any meeting when, in consultation with the Assistant to the President for Homeland Security, the Counsel deems it appropriate. The Deputy Director of the Office of Homeland Security shall serve as Executive Secretary of the HSC/PC. Other heads of departments and agencies and senior officials shall be invited, when appropriate.

Homeland Security Council. Securing Americans from terrorist threats or attacks is a critical national security function. It requires extensive coordination across a broad spectrum of Federal, State, and local agencies to reduce the potential for terrorist attacks and to mitigate damage should such an attack occur. The Homeland Security Council (HSC) shall ensure coordination of all homeland security-related activities among executive departments and agencies and promote the effective development and implementation of all homeland security policies.

Homeland Security Data Network (HSDN). A communications system and IT infrastructure used by the Department of Homeland Security to streamline and merge classified networks into a single, integrated network which is being designed to become a major secure information thoroughfare joining together intelligence agencies, law enforcement, disaster management, and front-line disaster response organizations.

Homeland Security Education. In order to ensure the success of the Homeland Security Management System, our Nation must further develop a community of homeland security professionals. This requires establishing multidisciplinary education in homeland and relevant national security policies and strategies; the planning process; execution of operations and exercises; and overall assessment and evaluation. Furthermore, this should include an understanding and appreciation of appropriate regions, religions, cultures, legal systems, and languages.

Homeland Security Exercise and Evaluation Program (HSEEP). The NEP utilizes the HSEEP as the common methodology for exercises. HSEEP is a capabilities- and performance based exercise program that provides standardized policy, doctrine, and terminology for the design, development, conduct, and evaluation of homeland security exercises. HSEEP also provides tools and resources to facilitate the management of self-sustaining homeland security exercise programs. The terminology and descriptions related to exercise in this document is a homeland security industry application of emergency management concepts and principles.

Homeland Security Four Foundations. The Strategy [NSHS].describes four foundations, that cut across all of the mission areas, across all levels of government, and across all sectors of our society. These foundations: law, science and technology, information sharing and systems, and international cooperation, provide a useful framework for evaluating our homeland security investments across the federal government.

Homeland Security Grant Program. One of the core missions of the Department of Homeland Security (DHS) is to enhance the ability of state, local, and tribal governments to prevent, protect against, respond to, and recover from terrorist attacks and other disasters. The Homeland Security Grant Program (HSGP) is a primary funding mechanism for building and sustaining national preparedness capabilities. HSGP is comprised of five separate grant programs: Urban Areas Security Initiative (UASI), State Homeland Security Program (SHSP), Law Enforcement Terrorism Prevention Program (LETPP), Metropolitan Medical Response System (MMRS), Citizen Corps Program (CCP). Together, these grants fund a range of preparedness activities, including planning, organization, equipment purchase, training, exercises, and management and administration costs. HSGP programs support objectives outlined in the National Preparedness Guidelines and related national preparedness doctrine, such as the National Incident Management System, National Response Plan, and the National Infrastructure Protection Plan. Current and prior year funding levels for each of the grants is detailed in the following table.

Homeland Security Higher Education. One concern often noted by university leaders that have, or have considered, establishing a homeland security academic program was defining what the disciplines entails. The federal government defines homeland security as a concerted national effort to prevent terrorist attacks within the United States, reduce America's vulnerability to terrorism, and minimize the damage and recover from attacks that do occur. The National Strategy for Homeland Security lists essential areas of focus that appear to have been considered by many academic programs. However, it is important to note that the current national strategy for homeland security definition was largely developed by the federal government and is void of issues relating to natural disasters. If the federal definition of homeland security is to be the basis of homeland security programs, but lacks recognition of the non-federal entities with homeland security responsibilities and is also shortsighted in recognizing the all-hazards nature of incidents, academia may wish to expand its view of the homeland security environment when establishing relevant curriculum.

As the discipline evolves, issues deemed homeland security-related appear to be expanding outside the current working definition of homeland security. Whether a terrorist incident, natural disaster, or incident of unknown cause, one might argue that the current trend is to deem any activity that may have tangential negative societal security implications as having a nexus to homeland security. If the future of homeland security continues the trend toward a boundless view of the field, school administrators may struggle with determining the courses to be taught in a program that purports to prepare students for this new discipline.

Homeland Security Information Bulletins. Guidance for Federal, State, local, and other governments; private sector organizations; and international partners concerned with our Nation's critical infrastructures that do not meet the timeliness, specificity, or significance thresholds of warning messages. Bulletins often include statistical reports, periodic summaries, incident response or reporting guidelines, common vulnerabilities and patches, and configuration standards or tools.

Homeland Security Information Network (HSIN). A communications system and IT infrastructure used by.[DHS] to transmit sensitive but unclassified information. The HSIN serves as a nationwide information-sharing and collaboration tool and is intended to offer realtime chat and instant messaging capability as well as a document library that contains reports from multiple Federal, State, and local sources. HSIN features suspicious incident information and analysis of terrorist threats, tactics, and weapons. HSIN includes over 35 communities of interest, such as emergency management, law enforcement, counterterrorism, States, and private sector communities.

Each community of interest has Web pages that are tailored for the community and contain general and community-specific news articles, links, and contact information. HSIN features include a document library, a discussion thread/bulletin board capability, and a chat tool among others.

Homeland Security Information. Experience has shown that there is no single source for information related to terrorism. It is derived by gathering, fusing, analyzing, and evaluating relevant information from a broad array of sources on a continual basis. Important information can come through the efforts of the Intelligence Community, Federal, State, tribal, and local law enforcement and homeland security authorities, other government agencies (e.g., the Department of Transportation, the Department of Health and Human Services), and the private sector (e.g., the transportation, healthcare, financial, and information technology sectors). Commonly referred to as homeland security information, terrorism information, or law enforcement information, this wide-ranging information can be found across all levels of government as well as in the private sector.

Homeland Security Institute (HSI). The Homeland Security Institute (HSI) is a Studies and Analysis Federally Funded Research and Development Center established pursuant to Section 312 of the Homeland Security Act of 20021. HSI delivers independent and objective analyses and advises in core areas important to its sponsor in support of policy development, decisionmaking, analysis of alternative approaches, and evaluation of new ideas on issues of significance.

Homeland Security Management System. In order to continue strengthening the foundations of a prepared Nation, we will establish and institutionalize a comprehensive Homeland Security Management System that incorporates all stakeholders. Relevant departments and agencies of the Federal Government must take the lead in implementing this system, and State, local, and Tribal governments are highly encouraged to ultimately adopt fully compatible and complementary processes and practices as part of a full-scale national effort. Our current approach to managing homeland security has focused on doctrine and planning through the National Preparedness Guidelines (NPG). This new Homeland Security Management System will involve a continuous, mutually reinforcing cycle of activity across four phases:

Phase One. Guidance. The first phase in our Homeland Security Management System encompasses overarching homeland security guidance. It is the foundation of our system, and it must be grounded in clearly articulated and up-to-date homeland and relevant national security policies, with coordinated supporting strategies, doctrine, and planning guidance flowing from and fully synchronizing with these policies.

Phase Two. Planning. The second phase is a deliberate and dynamic system that translates our policies, strategies, doctrine, and planning guidance into a family of strategic, operational, and tactical plans.

Phase Three. Execution. The third phase in the Homeland Security Management System encompasses the execution of operational and tactical-level plans.

Phase Four. Assessment and Evaluation. The fourth phase involves the continual assessment and evaluation of both operations and exercises. This phase of the system will produce lessons learned and best practices that must be incorporated back into all phases of the Homeland Security Management System.

Homeland Security Mission Areas. The National Strategy for Homeland Security aligns and focuses homeland security functions into six critical mission areas: intelligence and warning, border and transportation security, domestic counterterrorism, protecting critical infrastructure and key assets, defending against catastrophic terrorism, and emergency preparedness and response. The first

three mission areas focus primarily on preventing terrorist attacks; the next two on reducing our Nation's vulnerabilities; and the final one on minimizing the damage and recovering from attacks that do occur.

Homeland Security Objectives. Homeland security is an exceedingly complex mission. It involves efforts both at home and abroad. It demands a range of government and private sector capabilities. And it calls for coordinated and focused effort from many actors who are not otherwise required to work together and for whom security is not always a primary mission. This Strategy establishes three objectives based on the definition of homeland security: prevent terrorist attacks within the United States; reduce America's vulnerability to terrorism; and minimize the damage and recover from attacks that do occur. The order of these objectives deliberately sets priorities for America's efforts to secure the homeland.

Homeland Security Operations Center (HSOC). The HSOC is the primary national-level hub for operational communications, information and resource coordination pertaining to domestic incident management. Homeland Security Presidential Directive — 5, Management of Domestic Incidents, February 28, 2003, is intended to enhance the ability of the United States to manage domestic incidents by establishing a single, comprehensive national incident management system. In HSPD-5 the President designates the Secretary of Homeland Security as the principal federal official for domestic incident management and empowers him to coordinate Federal resources used in response to or recovery from terrorist attacks, major disasters, or other emergencies in specific cases.

The directive assigns specific responsibilities to the Attorney General, Secretary of Defense, Secretary of State, and the Assistants to the President for Homeland Security and National Security Affairs, and directs the heads of all Federal departments and agencies to provide their full and prompt cooperation, resources, and support, as appropriate and consistent with their own responsibilities for protecting national security, to the Secretary of Homeland Security, Attorney General, Secretary of Defense, and Secretary of State in the exercise of leadership responsibilities and missions assigned in HSPD-5. The directive also notes that it does not alter, or impede the ability to carry out, the authorities of Federal departments and agencies to perform their responsibilities under law.

Homeland Security Presidential Directive (HSPD-21), Public Health and Medical Preparedness. This directive establishes a National Strategy for Public Health and Medical Preparedness (Strategy), which builds upon principles set forth in Biodefense for the 21st Century (April 2004) and will transform our national approach to protecting the health of the American people against all disasters.

Homeland Security Presidential Directive (HSPD-9), Defense of United States Agriculture and Food. Purpose: This directive establishes a national policy to defend the agriculture and food system against terrorist attacks, major disasters, and other emergencies. Background: The United States agriculture and food systems are vulnerable to disease, pest, or poisonous agents that occur naturally, are unintentionally introduced, or are intentionally delivered by acts of terrorism. Americas agriculture and food system is an extensive, open, interconnected, diverse, and complex structure providing potential targets for terrorist attacks. We should provide the best protection possible against a successful attack on the United States agriculture and food system, which could have catastrophic health and economic effects.

Homeland Security Presidential Directive 8 (HSPD-8), National Preparedness. HSPD-8 directed DHS to lead a national initiative to develop a National Preparedness System—a common

and unified approach to strengthen the preparedness of the United States to prevent and respond to threatened or actual domestic terrorist attacks, major disasters and other emergencies.

The requirements of HSPD-8 led to the National Preparedness Guidelines, which was developed to provide the means for the Nation to answer three fundamental questions:

1. How prepared do we need to be?
2. How prepared are we?
3. How do we prioritize efforts to close the gap?

HSPD-8 also required DHS to develop mechanisms for the improved delivery of Federal preparedness assistance to State, tribal, and local governments and to strengthen the Nation's preparedness capabilities. Fifteen National Planning Scenarios were developed to illustrate the range, scope, magnitude, and complexity of incidents for which the Nation should prepare. Using this wide range of possible scenarios, including terrorism, natural disasters, and health emergencies, helps reduce uncertainty in planning.

Homeland Security Presidential Directive-5 (HSPD-5). A Presidential directive issued February 28, 2003 on the subject of Management of Domestic Incidents. The purpose is to enhance the ability of the United States to manage domestic incidents by establishing a single, comprehensive national incident management system.

Homeland Security Presidential Directive-7 (HSPD-7), Critical Infrastructure Identification, Prioritization, and Protection. HSPD-7 directed DHS to establish a national policy for Federal departments and agencies to identify and prioritize critical infrastructure and key resources in order to prevent, deter, and mitigate the effects of deliberate efforts to destroy, incapacitate, or exploit them. Federal departments and agencies are to work with State, tribal, and local governments, the private sector, and NGOs to accomplish this objective. This effort includes completion and implementation of the National Infrastructure Protection Plan.

Homeland Security Presidential Directive-8 (HSPD-8). A Presidential directive issued December 17, 2003 on the subject of National Preparedness. The purpose is to establish policies to strengthen the preparedness of the United States to prevent and respond to threatened or actual domestic terrorist attacks, major disasters, and other emergencies by requiring a national domestic all-hazards preparedness goal, establishing mechanisms for improved delivery of Federal preparedness assistance to State and local governments, and outlining actions to strengthen preparedness capabilities of Federal, State, and local entities. (White House web site)

Homeland Security Threat Advisories. Guidance provided to Federal, State, local, and other governments; private sector organizations; and international partners with actionable information about an incident involving, or a threat targeting, critical national networks, infrastructures, or key assets. The Threat Advisories includes products formerly named alerts, advisories, and sector notifications.

Homeland Security Threat Level System. A color-coded system used to communicate with public safety officials and the public at-large through a threat-based, color-coded system so that protective measures can be implemented to reduce the likelihood of impact of an attack.

Homeland Security. Homeland security should not be viewed as exclusively or even primarily a military task. Securing the domestic battlespace — a highly complex environment— requires Federal departments and agencies, state and local governments, the private sector, and individual citizens to perform many strategic, operational, and tactical level tasks in an integrated

fashion. These actions must be synchronized with others that are being taken on the international front to prosecute the war against global terrorism.

Homeland Security..a concerted national effort to prevent terrorist attacks within the United States, reduce America's vulnerability to terrorism, and minimize the damage and recover from attacks that do occur. (Office of Homeland Security- No superseding definition has been published.)

Horizontal Evacuation. Partial evacuation of personnel and/or patients from one area of the health care facility to another — typically on the same floor, using fire doors as barriers from the hazard impact.

Hospital Preparedness Program (HPP). The Hospital Preparedness Program (HPP) enhances the ability of hospitals and health care systems to prepare for and respond to bioterrorism and other public health emergencies. Current program priority areas include interoperable communication systems, bed tracking, personnel management, fatality management planning and hospital evacuation planning. During the past five years HPP funds have also improved bed and personnel surge capacity, decontamination capabilities, isolation capacity, pharmaceutical supplies, training, education, drills and exercises. Hospitals, outpatient facilities, health centers, poison control centers, EMS and other healthcare partners work with the appropriate state or local health department to acquire funding and develop healthcare system preparedness through this program. Funding is distributed directly to the Health Department of the State or political subdivision of a State (cities and counties are considered political subdivisions of States).

Hot spot. A particularly active part of a fire.

Hot zone. The area immediately surrounding a dangerous goods incident which extends far enough to prevent adverse effects from dangerous goods releases to personnel outside the zone. syn. 'exclusion zone', 'combat zone' or 'restricted zone'.

Hotline. The outer boundary of the EZ on site where highest concentration of chemicals is found.

Hotwash. A systems performance review that is generally less formal and detailed than the After- Action Report (AAR) meeting, and occurs in close proximity to the end of the incident or exercise. Preparation for a hot wash is commonly less extensive than for an AAR meeting. The results of the hot wash may serve as a starting point for a later, more formal AAR meeting. It should never be considered the endpoint to an after-action report process for an incident or exercise, or replace formal AAR meetings.

Howling terrors. An australian term for small destructive, **tropical cyclones** with an eye diameter of less than 20 kilometres; also called 'kooinar' by some aborigines.

Human development. Progress of individuals — and by extension of their community — towards fulfilment of their manual, intellectual and cultural capacities and of their personal potentialities.

Humanitarian action. Action undertaken for the advancement of the welfare of humanity without regard to race, religion or politics.

Human-Made disasters. are disasters or emergency situations where the principal, direct cause(s) are identifiable human actions, deliberate or otherwise. Apart from technological and ecological disasters, this mainly involves situations in which civilian populations suffer casualties, losses of property, basic services and means of livelihood as a result of war or civil strife, for example: Human-made disasters/emergencies can be of the rapid or slow onset types, and in the case of internal conflict, can lead to complex emergencies as well.

Human-made disaster acknowledges that all disasters are caused by humans because they have chosen, for whatever reason, to be where natural phenomena occurs that result in adverse impacts of people. This mainly involves situations in which civilian populations suffer casualties, losses of property, basic services and means of livelihood as a result of war, civil strife, or other conflict.

Hurricane Category 1. The lowest of five levels of relative hurricane intensity on the Saffir/Simpson hurricane scale. A Category 1 hurricane is defined by winds of 74 to 95 MPH, or a storm surge of 4 to 5 feet above normal. This category normally does not cause real damage to permanent structures, although damage to unanchored mobile homes, shrubbery, and trees can be expected. Also some coastal road flooding and minor pier damage.

Hurricane Category 2. The second of five levels of relative hurricane intensity on the Saffir/Simpson hurricane scale. A Category 2 hurricane is defined by winds of 96 to 110 MPH, or a storm surge of 6 to 8 feet above normal. This category normally causes some roofing material, door, and window damage to buildings. Considerable damage to vegetation, mobile homes, and piers can be expected. Coastal and low lying escape routes can be expected to flood 2 to 4 hours before arrival of storm center. Small craft in unprotected anchorages will bread mooring.

Hurricane Category 3. The third of five levels of relative hurricane intensity on the Saffir/Simpson hurricane scale. A Category 3 hurricane is defined by winds of 111 to 130 MPH, or a storm surge of 9 to 12 feet above normal. This category normally does some structural damage to small residences and utility buildings, with a minor amount of curtain wall failures. Mobile homes are destroyed. Flooding near the coast can be expected to destroy smaller structures, with larger structures damaged by floating debris. Terrain continuously lower than 5 feet above sea level may be flooded inland as far as 6 miles.

Hurricane Category 4. The fourth of five levels of relative hurricane intensity on the Saffir/Simpson hurricane scale. A Category 4 hurricane is defined by winds of 131 to 155 MPH, or a storm surge of 13 to 18 feet above normal. This category normally causes more extensive curtain wall failures, with some complete roof structure failure on small residences. Major erosion will occur at beach areas. Major damage to lower floors of structures near the shore can be expected. Terrain continuously lower than 10 feet above sea level may be flooded, requiring massive evacuation of residential areas inland as far as 6 miles.

Hurricane Category 5. The severest of five levels of relative hurricane intensity on the Saffir/Simpson hurricane scale. A Category 5 hurricane is defined by winds greater than 155 MPH, or a storm surge greater than 18 feet above normal. This category normally causes complete roof failure on many residential and industrial buildings; some are blown over or away. Major damage to lower floors of all structures located less than 15 feet above sea level and within 500 yards of the shoreline can be expected. Massive evacuation of residential areas on low ground within 5 to 10 miles of the shoreline may be required.

Hurricane Liaison Team (HLT). The HLT is a small team designed to enhance hurricane disaster response by facilitating information exchange between the National Hurricane Center in Miami and other National Oceanic and Atmospheric Administration components and Federal, State and local government officials. The HLT is an initial response and coordination tool deployed by FEMA in conjunction with declared emergencies and disasters.

Hurricane. Name given to a warm core **tropical cyclone** with maximum surface wind of 118 kilometres/hour (64 knots) or greater (hurricane force wind) in the north Atlantic, the Caribbean and the gulf of Mexico, and in the eastern pacific ocean.

HVA. Hazard and Vulnerability Analysis.

Hydrological warning. Emergency information on an expected hydrological phenomenon which is considered to be dangerous.

Hydrology the study of the rainfall runoff process as it relates to the development of flooding and the derivation of **hydrographs** at different locations in a river system for given floods.

Hydrology. Science that deals with the waters above and below the land surfaces of the Earth, their occurrence, circulation and distribution, both in time and space, their biological, chemical and physical properties, their reaction with their environment, including their relation to living beings.

Hypothermia. The severe accidental cooling of the body.

I

IAP. Incident Action Plan.

IBC. International Building Code.

IC. Incident Commander, under Incident Command System (ICS).

ICAF. Industrial College of the Armed Forces.

ICC. Increased Cost of Compliance (NFIP).

Ice storm. Intense formation of ice on objects by the freezing, on impact, of rain or drizzle.

ICEPP. Incident Communications Emergency Policy & Procedures.

ICP. Incident Command Post. **ICS.** Incident Command System.

ICS-100. Introduction to ICS. Entry level first responders (including firefighters, police officers, emergency medical services providers, public works on-scene personnel, public health on-scene personnel, and other emergency responders) and other emergency personnel that require an introduction to the basic components of the ICS.

IEMC. Integrated Emergency Management Course, FEMA Emergency Management Istitute. **IEMS.** Integrated Emergency Management System.

Ignition temperature (Auto-Ignition). The minimum temperature required to initiate or cause self sustained combustion in a substance. The temperature that the vapors of a product must be heated to for ignition to occur.

IIMG. Interagency Incident Management Group.

IMAAC. Interagency Modeling and Atmospheric Assessment Center.

Immediate danger to life and health. An atmospheric concentration of a hazardous material that can cause irreversible health effects within a short time period.

Imminent failure flood. The flood event which, when routed through the reservoir, with the existing **spillway,** just threatens failure of the dam.

Immunisation. Rendering a person or animal immune to certain infections by the process of injecting either antigen or a serum containing specific antibodies.

Impact analysis. Impact Analysis [Business Impact Analysis (BIA)]. A management level analysis that identifies the impacts of losing the entity's resources. This analysis measures the effect of resource loss and escalating losses over time in order to provide the entity with reliable data upon which to base decisions concerning hazard mitigation, recovery strategies, and continuity planning. The impact analysis is a broad description and quantification of a potential event that can impact an entity.

This analysis should give a clear idea of what hazards are most likely to occur; what entity facilities, functions, or services are affected based on their vulnerability to that hazard; what actions will most effectively protect them; and the potential impact on the entity in quantifiable terms. Within the impact analysis, the entity should consider the impact external to its area of influence that can affect the entity's ability to cope with an emergency. One example is the cascade effects of a hurricane. Direct impacts can include wind and flood damage. Secondary impacts can include

communications, power, and transportation disruptions, both inside and outside the direct impact area, and the potential impact on the entity in quantifiable terms.

A.5.3.3(3) In order to maintain continuity of operations, the entity should identify essential or critical functions and processes, their recovery priorities, and internal and external interdependencies, so that recovery time objectives can be set.

A.5.3.3(7) An economic and financial impact analysis allows the quantification of the impacts without considering the cause of the emergency. This analysis is closely related to the process of identifying essential or critical functions or processes and helps decide where to place the emphasis in planning efforts. The analysis examines potential economic or financial loss resulting from disruption of the functions, processes, or services over time. The purpose of an economic and financial impact analysis is to arrive at a general loss expectancy that demonstrates what is at risk and to guide measures to mitigate the effects of an emergency. An impact analysis could include a cost-benefit analysis. The cost-benefit analysis should not be the overriding factor in establishing a prevention strategy.

Impact. Impact is defined as the actual process of contact between an event and a society or a society's immediate perimeter; an effect or influence, especially when strong; Impact has a broad connotation and refers to both positive and negative influences produced by events on the environment.

Impact area. Any area which is likely to bear, is bearing, or has borne the full impact of any disaster and in which major lifesaving operations are necessary.

Implementation Plan. A document prepared by a contractor that sets forth: when and how the actions appropriate to comply with the requirements of a section of this part, including the requirements of a plan or program required by this section, shall be taken, and what relief will be sought if a contractor cannot attain full compliance with a requirement in a reasonable manner.

Implicit. Implied though not plainly expressed; implicit standards are implied, usually through judgments of experts in the field through consensus among the experts. Such standards generally are used when the science cannot provide sufficient data for the explicit definition of a standard.

Improvement actions. Actions taken to improve the efficiency of operations based on a good work practice or an innovative approach.

Improvement plan. The portion of an After Action Report that converts lessons learned from the exercise or incident response into concrete, measurable steps that result in improved response capabilities.

IMT. Incident Management Team.

Incidence. The number of new cases of a disease or injury or of sick persons or casualties, in a given population in a specified period of time. It should not be confused with 'prevalence'.

Incident Action Plan (IAP). A clear, concise IAP template is essential to guide the initial incident management decision process and the continuing collective planning activities of incident management teams. The planning process should provide the following: current information that accurately describes the incident situation and resource status; predictions of the probable course of events; alternative strategies to attain critical incident objectives; and an accurate, realistic IAP for the next operational period. Five primary phases should be followed in sequence to ensure a comprehensive IAP. These phases are designed to enable the accomplishment of incident objectives within a specified time.

The IAP must provide clear strategic direction and include a comprehensive listing of the tactics, resources, reserves, and support required to accomplish each overarching incident objective. The comprehensive IAP will state the sequence of events in a coordinated way for achieving multiple incident objectives. However, the IAP is a living document prepared based on the best available information at the time of the planning meeting. Planning meetings should not be delayed in anticipation of future information. The five primary phases in the planning process are to understand the situation; establish incident objectives and strategy; develop the plan; prepare and disseminate the plan; and execute, evaluate, and revise the plan.

Incident Annexes. The Incident Annexes describe how the Framework [NRF] is applied to various types of incidents and the unique incident-specific aspects of that response. Specifically, the Incident Annexes describe incident-specific policies and procedures for biological, cyber, food and agriculture and nuclear/radiological incidents, for incidents involving mass evacuation, and for terrorism incident law enforcement and investigation, and for catastrophic incidents.

Incident Command Post (ICP). The field location at which the primary tactical-level, on-scene incident command functions are performed. The ICP may be collocated with the incident base or other incident facilities and is normally identified by a green rotating or flashing light.

Incident Command Post (ICP). Under the Incident Command System, At the tactical level, on-scene incident command and management organization are located at an Incident Command Post, which is typically comprised of local and mutual aid responders. When multiple command authorities are involved, the Incident Command Post may be led by a unified command comprised of officials who have jurisdictional authority or functional responsibility for the incident under an appropriate law, ordinance or agreement. The unified command provides direct, on-scene control of tactical operations.

Incident Command Post. A facility established close to the incident scene (or elsewhere for a diffuse incident or one with multiple scenes), which serves as a base location for managing field operations — all activities within the defined scope of the incident. Located within the ICP are designated representatives of the major response agencies for that incident, filling designated positions in the Incident Management Team. The ICP location is designated by the Incident Commander. If the ICP and EOC are co-located in the same building, their personnel and procedures should remain physically separated and functionally distinct.

Incident Command System (ICS) Core Concepts and Principles (for DHS Purposes). ICS in DHS — Concepts and Principles — The core concepts and principles of the ICS as taught by DHS and as defined in the NIMS Document and consistent with the National Wildfire Coordinating Group (NWCG) incorporate the following components:

1. The overwhelming majority of incidents nationwide are typically handled by a single jurisdiction. Most responses need go no further. In other instances the response may rapidly expand requiring additional resources and operational support. Whether for incidents which additional resources are required or are provided from different organizations within a single jurisdiction or outside the jurisdiction, or for complex incidents with state-level or national level implications, the ICS provides a core mechanism for coordinated and collaborative incident management.

2. The NIMS requires that field command and management functions be performed in accordance with a standard set of ICS organizations, doctrine, and procedures. However, the incident commanders generally retain the flexibility to modify procedures or organizational structure as necessary to accomplish the mission.

3. ICS is modular and scalable and is readily adaptable to any emergency or incident to which domestic incident management agencies would be expected to respond.

4. ICS has interactive management components that set the stage for effective and efficient incident management and emergency response.

5. ICS establishes common terminology, standards, and procedures that enable diverse organizations to work together effectively.

6. ICS incorporates measurable objectives to ensure fulfillment of incident management goals.

7. The implementation of ICS should have the least possible disruption on existing systems and processes.

8. The ICS should be user friendly and be applicable across a wide spectrum of emergency response and incident management disciplines.

Incident Command System (ICS). A standardized on-scene emergency management construct specifically designed to provide for the adoption of an integrated organizational structure that reflects the complexity and demands of single or multiple incidents, without being hindered by jurisdictional boundaries.

ICS is the combination of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure, designed to aid in the management of resources during incidents. It is used for all kinds of emergencies and is applicable to small as well as large and complex incidents. ICS is used by various jurisdictions and functional agencies, both public and private, to organize field-level incident management operations.

Incident Command System (ICS). The combination of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure with responsibility for management of assigned resources to effectively direct and control the response to an incident. Intended to expand as the situation requires greater resources without requiring new, reorganized, command structures.

Incident command. Responsible for overall management of the incident and consists of the Incident Commander, either single or unified command, and any assigned supporting staff.

Incident Commander (IC). The individual responsible for all incident response activities, including the development of strategies and tactics and the ordering and release of resources. The Incident Commander has overall authority and responsibility for conducting incident operations and is responsible for the management of all incident operations at the incident site.

Incident Communications Emergency Policy & Procedures (ICEPP). Provides detailed guidance to Federal incident communicators on activities to be initiated in conjunction with incidents requiring a coordinated Federal response. It is applicable to all Federal departments and agencies responding under the NRF. The ICEPP establishes mechanisms to prepare and deliver coordinated and sustained messages regarding these incidents, and provides for prompt Federal acknowledgement of an incident and communication of emergency information to the public during incident management operations.

Incident Complex. An Incident Complex refers to two or more individual incidents located in the same general area that are assigned to a single IC or UC. When an Incident Complex is established over several individual incidents, the general guideline is that the previously identified incidents would become Branches within the Operations Section of the IMT.

Incident control system. Command structure to systematically and logically manage suppression of emergency incidents including wildfires, from small, simple incidents to large, difficult or multiple situations. It is designed to develop in a modular fashion from the top **(incident controller)** downwards.

Incident controller. The individual responsible for the management of all incident operations.

Incident Information. While timely information is valuable, it also can be overwhelming. We must be able to identify what is required to assist decision makers and then rapidly summarize and prioritize the information we receive from multiple reporting systems. In order to be successful, our new approach to incident management also must have an information management system that integrates key information and defines national information requirements.

Incident Management Assist Team (IMAT). In coordination with the RRCC [Regional Response Coordination Center], FEMA may deploy an IMAT. IMATs are interagency teams composed of subject-matter experts and incident management professionals. IMAT personnel may be drawn from national or regional Federal department and agency staff according to pre- established protocols. IMAT teams make preliminary arrangements to set up Federal field facilities and initiate establishment of the JFO.

Incident Management Planning Team (DHS). DHS, supported by a wide range of interagency resources, has established an interagency Incident Management Planning Team that will be a nucleus around which interagency planning work will be drafted for wider review and, ultimately, for incorporation into the [NRF] Resource Center.

Incident management point. The location from which the **incident manager** controls and coordinates the activities of the response agencies.

Incident Management System (IMS). In disaster/emergency management applications, the combination of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure with responsibility for the management of assigned resources to effectively accomplish stated objectives pertaining to an incident.

Incident Management Team (IMT). An Incident Management Team (IMT) is an incident command organization made up of the Command and General Staff members and other appropriate personnel in an ICS organization and can be deployed or activated, as needed. National, State, and some local IMTs have formal certification and qualification, notification, deployment, and operational procedures in place. In other cases, ad hoc IMTs are formed at an incident or for specific events. The level of training and experience of the IMT members, coupled with the identified formal response requirements and responsibilities of the IMT, are factors in determining the type, or level, of IMT.

Incident management. The organized process of responding to an emergency event (or incident), protecting lives (human and animal) from further harm, and creating a safe environment for restoring order to critical infrastructures. Good (i.e. effective) IM answers the four big questions of emergency response: (1) Who is in charge? (2) How are we going to respond? (3) What resources are available? And (4) How are we going to pay for the response. Incident Management: the three phases of incident management [are]: prepare, respond and recover. (DHS, NRF Comment Draft, 2007, p. 25) Preparedness is discussed in the National Response Plan thusly: the NRP focuses on those activities that are directly related to an evolving incident or potential incident rather than steady-state preparedness or readiness activities conducted in the absence of a specific threat or hazard.

Incident objectives. Statements of guidance and direction necessary for the selection of appropriate strategies, and the tactical direction of resources. Tactical incident objectives address the tactical response issues while management incident objectives address the incident management issues. Tactical incident objectives are based on realistic expectations of what can be accomplished when all allocated resources have been effectively deployed. Incident objectives must be achievable and measurable, yet flexible enough to allow for strategic and tactical alternatives.

Incident of national significance. For the purpose of this plan, incidents that require DHS operational and/or resource coordination are termed *Incidents of National Significance* (also referred to as nationally significant incidents or national incidents in this plan). DHS establishes reporting requirements and conducts ongoing communications with Federal, State, local, tribal, and private sector and non- governmental organizations to maintain situational awareness, analyze threats and assess national implications of potential or actual incidents.

Incidents of National Significance requiring DHS action can include the following:

1. Credible threats, indications of terrorism or acts of terrorism within the United States;

2. Major disasters or emergencies as defined under the Robert T. Stafford Disaster Relief and

3) Emergency Assistance Act, as amended, to include hurricanes, tornadoes, storms, earthquakes, fires, flood, or explosion regardless of cause; or any other occasion or instance for which the President determines that Federal assistance is needed to supplement State, local and tribal efforts to save lives and to protect property and public health and safety;

4) Catastrophic incidents, which, for the purposes of the NRP, are any natural or manmade incidents, including terrorism that leaves extraordinary levels of mass casualties, damage, and disruption severely affecting the population, infrastructure, environment, economy, and government functions. A catastrophic event results in sustained national impacts over a prolonged period of time; exceeds resources normally available in the local, State, Federal, and private sectors; and significantly interrupts governmental operations and emergency services to such an extent that national security could be threatened; or

5) Unique situations that may require involvement of the Secretary of Homeland Security to aid in coordination of incident management efforts.

Incident plan. The plan of action developed by the incident manager, usually in conjunction with the incident management team, to deal with an incident. The plan may be issued orally or in writing.

Incident recognition. The first stage of Response. Incident recognition is the process that identifies an anomaly (independently or through communication from others), develops a situational assessment of the anomaly and related details, and determines whether an incident response by the organization may be indicated.

Incident response. The term used to indicate the management and operational actions conducted to address an impending hazard threat and/or actual hazard impact. It connotes a condition that is larger or more complex than the usual organizational actions, and that is usually accomplished by activating the organization's Emergency Operations Plan. Incident response requires a management system (usually the Incident Command System under NIMS) that is commonly different than everyday management and everyday response, even in an everyday emergency organization such as fire or police.

Incident review (IR). A brief review of the event conducted with the relevant section leaders and other response personnel (as appropriate). This is conducted as soon as possible after the event,

with a primary goal of clearing up any misunderstandings and providing relevant parties with a more complete picture of what happened and why. This IR is distinct from the formal After-Action Review (usually conducted at a later time) that serves to capture valuable information for EOP improvement.

Incident strategies. The incident strategies will be developed from the incident objective and will describe how the incident management team plan to combat the incident. There is a requirement for strategies to be developed throughout the incident and they should be reviewed for each operational period.

Incident. Multiple definitions. An unexpected occurrence that requires immediate response actions through an ICS organization. (*ICS 300, Unit 4*) Activity resulting from an actual or impending hazard impact, that requires action by emergency personnel to prevent or minimize loss of life or damage to property and/or natural resources. For organizations other than public safety agencies, this action is generally beyond the normal everyday actions of the organization. The emergency action is managed using the Incident Command System through the organization's Emergency Operations Plan.

Incompatibility. A situation where any substance or residue which, by combining chemically with the incompatible substances or promoting self-reaction or decomposition of the incompatible substances, may create a hazard.

Increased cost of compliance. The Standard Flood Insurance Policy has a provision that will pay the policy holder to comply with a State or local floodplain management law or ordinance affecting repair or reconstruction of a structure suffering flood damage. Mitigation activities eligible for payment are: elevation, floodproofing, relocation, or demolition (or any combination of these activities) of the structure. Policyholders may receive up to $20,000 under this coverage.

Incremental flood hazard. The potential incremental loss of life, property and services which can be directly attributable to the failure of a dam due to inadequate spillway capacity.

Independence. Defined as not having direct responsibilities in the areas being assessed.

Indicate. To point out, make known, show; a sign or symptom of; show to be necessary.

Indicator. An evaluation metric that is more a narrowly described requirement than a standard or benchmark. It is commonly used in summative evaluation in an attempt to present objective criteria that can be associated with overall, more subjective quality in the evaluated entity. The indicator may therefore focus upon criteria that are only an indirect assessment of the quality of a program or service. Because of its narrow and indirect nature, an indicator that becomes used as a formative guide may be applied out of context and therefore become disassociated from indicating any actual level of performance during response and recovery. This corruptibility of indicators must be acknowledged and carefully addressed when developing and applying indicators.

Indirect attack. The use of backburning as a method of suppression to confine the fire within a defined area bounded by existing or prepared control lines. Control lines may be a considerable distance ahead of the fire.

Individual and Family Grant (IFG) Program. A program through which the Federal government makes a grant to a State for the purpose of making grants to individuals and families adversely affected by a major disaster. Individual and family grants are intended to meet disaster-related necessary expenses or serous needs in those cases where such individuals or families are unable to meet their expenses or needs through assistance under other provisions of the Stafford Act or through other means.

Individual assistance. This includes those services and programs that benefit individuals, households, businesses, and farmers. FEMA's Individual Assistance programs include Assistance to Individuals and Households (providing for housing assistance and other needs), crisis counseling, legal services, disaster unemployment assistance, and referrals to other appropriate forms of aid. Other Federal agencies' Individual Assistance programs include: tax refund assistance (Internal Revenue Service), disaster loans (the Small Business Administration and Farm Service Agency), veterans' assistance (Veterans Affairs), and health and social security recipients' assistance (Health and Human Services).

Individual risk criteria. Criteria which can be used to determine the acceptability of a given **individual risk** level at a given site.

Individual risk. The frequency at which an individual may be expected to sustain a given level of harm from the realisation of specified hazards.

Individual with a disability. The term 'individual with a disability' means an individual with a disability as defined in section 3(2) of the Americans with Disabilities Act of 1990 (42 U.S.C. 12102(2)).

Induced seismicity earthquake activity resulting from man-made activities such as mining, large explosions, or forcing large quantities of liquid deep into the ground, eg. Oil-fields, waste disposal or reservoir filling.

Industry application. Refers to variations in terminology or concepts from foundational management principles and definitions when the principles and terminology are applied and accepted by a particular occupation or profession. These variations may be appropriate for the discipline that has developed them, but should not be considered controlling for other disciplines. In Emergency Management, many variations on foundational principles and term definitions have been promulgated in recent years.

Infected premises. A defined area (which may be all or part of a property) in which an **exotic animal disease** exists, is believed to exist, or in which the infective agent of that exotic animal disease exists or is believed to exist. An infected premises is subject to quarantine served by notice and to eradication or control procedures.

In-flight emergency. An emergency which affects the occupants or operational integrity of an aircraft while in flight/

Informal debriefing. A structured meeting of emergency workers, coordinated by a trained 'peer debriefer', conducted in an informal environment, to: a. Provide an information briefing on the event, including a status report on the condition of victims, etc; b. Offer support; c. Provide an opportunity to express feelings and demystify reactions associated with response to the event; d. Enable the team leader to monitor the reactions of his/her teams members; and e. Enable the opportunity to assess the need for formal debriefing.

Information (or cyber) security. Actions taken for the purpose of reducing information system risk, specifically, reducing the probability that a threat will succeed in exploiting critical Automated Information System infrastructure vulnerabilities using electronic, radio frequency (RF) or computer-based means.

Information centre. A facility established near an emergency operations centre (to protect the emergency operations centre from interruptions and general inquiries) to provide visitors with, and

answer inquiries for, information concerning the emergency or operation in progress. It includes the supply of information of a general nature to assist the victims.

Information management. The collection, organization, and control over the structure, processing, and delivery of information from one or more sources and distribution to one or more audiences who have a stake in that information.

Information Security Office. Individual within the organization, designated by the Medical Center Director, who has responsibility for the security of medical center information systems. (VHA Emergency Management Guidebook 2005)

Information Sharing Environment (ISE). In December 2004, Congress passed and the President signed the Intelligence Reform and Terrorism Prevention Act of 2004 (IRTPA). IRTPA calls for, among other things, the creation of the Information Sharing Environment (ISE) — a trusted partnership among all levels of government, the private sector, and our foreign partners to detect, prevent, disrupt, preempt, and mitigate the effects of terrorism against the territory, people, and interests of the United States through the appropriate exchange of terrorism information.

Information. The interpretation and processing of available and new data for a specific context, giving the data a purposeful meaning.

Infrastructure. The built environment; encompasses all societal structures including buildings, bridges, roads, sanitary facilities, railroads, waterways, water facilities, and other essential societal structures and functions.

Ingestion. The term used when radioactive materials are taken into the body through the mouth, such as by eating or drinking. Also applies when breathing results in the inhaled materials being swallowed.

Inhalation. The term used when radioactive materials are taken into the lungs by breathing.

Initial action. The actions taken by those responders first to arrive at an incident site.

Initial attack. The first suppression work on a fire.

Initial nuclear radiation. Nuclear radiation emitted from the fireball and the cloud column during the first minute after a nuclear explosion.

Initial protective action zone. The area downwind from an incident in which persons may become incapacitated and unable to take protective action and/or incur serious or irreversible health effects.

Initial response. Resources initially committed to an incident.

Injection. The introduction of chemicals into the body through puncture.

Injury. Harm of any kind done or sustained.

Inner perimeter. That area which is secured to allow effective command, communication and coordination control, and to allow for safe operations while dealing with an emergency, including the immediate ingress and egress needs of emergency response personnel and vehicles/ syn. ‘inner cordon’.

Inquiry. The facility established to provide information gathered in the registration process, to concerned persons seeking such information.

Installation Support Center (ISC). A VAMC that has support responsibility, under the VA/DoD Contingency Plan, for a local military installation in a military contingency or national emergency.

Instruction. Those activities designed to impart knowledge, skills, and in some instances abilities to personnel within an organization. These activities typically consist of education, training, and instructional drills.

Insurrection Act Rider of 2006. In [Congressional] conference, the chairs adopted a provision that simultaneously amended the federal Insurrection Act and authorized the President to take control of the Guard in response to any natural disaster, epidemic or other serious public emergency, terrorist attack or incident, or other condition in any State or possession of the United States because this was done under an expansion of the President's Insurrection Act powers, military forces operating at the President's direction in such circumstances are not subject to the Posse Comitatus Act and can be used to force compliance with laws by any rules for use of lethal force (RUF) or rules of engagement (ROE) authorized by the President or those acting under his delegated authority. The conference report was agreed to in the House on the same day as its filing (September 29, 2006) and in the Senate the following day (September 30, 2006).

Without any hearing or consultation with the governors and without any articulation or justification of need, Section 1076 of the 2007 NDAA changed more than 100 years of well-established and carefully balanced state-federal and civil -military relationships. One hundred years of law and policy were changed without any publicly or privately acknowledged author or proponent of the change. As written, the Act does not require the President to contact, confer or collaborate in any way with a governor before seizing control of a state's National Guard forces. It requires only notice to Congress that the President has taken the action but no explanation, justification or consent of congress is required.

Insurrection Act Rider of 2006. The changes made to the Insurrection Act by Section 1076 of the National Defense Authorization Act confuse the issue of who commands the Guard during a domestic emergency. By granting the President specific authority to use the Guard during a natural disaster or emergency without the consent of a governor, Section 1076 could result in confusion and an inability to respond to residents' needs. As currently written, it calls into question whether the governor or the President has primary responsibility during a domestic emergency.

Insurrection Act. The Insurrection Act (enacted in 1807) delegates authority to the President to federalize and deploy the National Guard domestically during an insurrection or civil disturbance (10 U.S.C. Sections 331-335). Section 331 authorizes the President to use federal military forces to suppress an insurrection at the request of a state government. Section 332 authorizes the President to use armed forces in such manner as he deems necessary to enforce the laws or suppress a rebellion. Section 333 authorizes the President to use federal military forces to protect individuals from unlawful actions that obstruct the execution of federal laws or which impede the course of justice under federal laws. Section 333 was enacted to implement the Fourteenth Amendment and does not require the request or consent of the governor of the affected state.

Insurrection Act. The Insurrection Act governs when the President can declare a form of martial law. When the act is invoked, the military, including the National Guard, can carry out law enforcement functions without the consent of a Governor. Posse comitatus, a broad law that generally prevents the military from policing within the domestic United States, does not apply when the act is invoked. Until the Insurrection Act Rider was enacted in the fall of 2006, U.S. law focused on enabling the President to invoke the Insurrection Act during violent situations where the states or local communities were resisting lawful orders. The intent of the law, as the title suggests, was to deal with insurrection from individuals or groups.

The law was not designed to address other situations, including natural disasters, or attacks from outside the country. In its original form, the Act has been invoked sparingly — only ten times in the past five decades. Over the past 40 years, the act has only been invoked with the consent of the governors, using authorities under other sections of the U.S. Code that allow states to invite in federal military forces for police functions. Under the new language, added to the law in the fall of 2006, the President can invoke the act and declare martial law in cases where public order breaks down as a result of a natural disaster, epidemic, terrorist attack, or under the nebulous term of other conditions. This change makes it easier for the President to invoke the Act in cases beyond an insurrection — cases which were not intended under the previous purpose of the Act. With these succinct but sweeping changes, the President now does not have to contact or collaborate with any state agency in taking control of the Guard and injecting federal military forces, to carry out patrols or make arrests.

The President has to notify but not explain to Congress that he or she believes that states cannot handle the situation. The change goes against practical and historical arrangements for handling emergencies, which constitutionally and practically have been headed and handled by governors and local officials. When operating under a governor in a state status, the National Guard is not bound by posse comitatus and can integrate seamlessly with local, state, and federal law enforcement agencies and first responders.

Insurrection Statutes. The Insurrection Statutes, 10 U.S.C. 331-334. Recognizing that the primary responsibility for protecting life and property and maintaining law and order in the civilian community is vested in State and local governments, the Insurrection Statutes authorize the President to direct the armed forces to enforce the law to suppress insurrections and domestic violence. Military forces may be used to restore order, prevent looting, and engage in other law enforcement activities. Given this specific statutory authority, the Posse Comitatus Act does not apply to such civil disturbance missions.

Integrated (core principle of emergency management). Integrated: emergency managers ensure unity of effort among all levels of government and all elements of a community.

Integrated Appraisals. Appraisals that may be administered and planned by DOE contractor or Headquarters offices. They may include the emergency management component, which is an aspect of a larger, multi-disciplinary examination of site compliance and performance. Examples of integrated appraisals include Operational Readiness Reviews, Operational Readiness Evaluations, Tiger Team Evaluations, and Technical Safety Appraisals. Integrated appraisals also identify problems and appropriate corrective actions.

Integrated Emergency Management System (IEMS). A strategy for implementing emergency management activities which builds upon those functions common to preparedness for any type of occurrence and provides for special requirements of individual emergency situations. FEMA will be the Department’s and U.S. Government’s focal point for building our Nation’s preparedness to defend and secure the United States of America from terrorist attack, and to respond to and recover from attacks, major disasters, and other emergencies. To accomplish this we will lead the preparedness efforts across the Department, coordinate preparedness efforts across the U.S. government, and partner with State and local governments, tribal organizations, the private sector, and the American people to ensure a Nation prepared.

The primary goals of Integrated Preparedness are to: 1. Build, sustain, and improve the Nation’s capability to prevent terrorist attacks in the United States. 2. Build, sustain, and improve the Nation’s capability to protect against terrorist attacks in the United States and other catastrophic

threats to the Nation. 3. Build, sustain, and improve the Nation's capability to respond to and recover from terrorist attacks, major disasters, and other emergencies, with an emphasis on catastrophic incidents. 4. Ensure development of national standards and measures of effectiveness for preparedness. 5. Promote and institutionalize mechanisms for information sharing and collaboration to enhance preparedness. 6. Foster an adaptive, risk-based approach to preparedness that maintains an all-hazard incident management foundation and focuses on preparedness enhancements for catastrophic threats, where appropriate. 7. Demonstrate good stewardship of public resources by identifying opportunities for synergy between terrorism preparedness and non-terrorism preparedness. 8. Create, operate and promote a premier learning organization by providing professional development, education and other opportunities to ensure the highest caliber of staff working in a professional environment in support of the goals and objectives of the Department. 9. Streamline and speed delivery of preparedness activities and services.

Integrated Emergency Management System (IEMS). The Integrated Emergency Management System (IEMS) was developed by FEMA to help states implement CEM. IEMS is: a philosophy of inclusiveness — the groups that will respond to disasters are brought into the planning process; a process of program development steps tied to the four phases of CEM: mitigation, preparedness, response and recovery; plans focused on functions generic to all disasters, not on specific hazards, agencies or people; a formal emergency management strategy promulgated by FEMA in the early 1980s. Its goal was to develop and maintain a credible emergency management capability nationwide by integrating activities along functional lines at all levels of the government and, to the fullest extent possible, across all hazards.

Integrated Public Alert Warning System (IPAWS). Pursuant to Executive Order 13407, IPAWS is a comprehensive DHS/FEMA program, in partnership with NOAA, the FCC, and other public and private stakeholders, begun in 2004 to improve public alert and warning. The system will deliver digitally-based alert and warning messages to radio and television stations, personal computers, cell phones and other consumer wireless devices. The System seeks to upgrade EAS, enhance NAWAS, and begin other pilot programs, among other initiatives for current technological options.

Integrated Systems Approach. An integrated systems approach recognizes the necessity of cooperation and partnerships between schools and systems outside of the school. These may include law enforcement, social services and mental health providers, the courts, community agencies, families, worksites, religious organizations, and others.

Intelligence Officer. The intelligence officer is responsible for managing internal information, intelligence, and operational security requirements supporting incident management activities. These may include information security and operational security activities, as well as the complex task of ensuring that sensitive information of all types (e.g., classified information, law enforcement sensitive information, proprietary information, or export-controlled information) is handled in a way that not only safeguards the information, but also ensures that it gets to those who need access to it to perform their missions effectively and safely.

Intelligence. Information that has been evaluated.

Intensity. Refers to the damage-generating attributes of a hazard. For example, water depth and velocity are commonly used measures of the intensity of a flood. For hurricanes, intensity typically is characterized with the Saffir/Simpson scale, which is based on wind velocity and storm surge depths. The absolute size of an earthquake is given by its Richter magnitude (and other similar

magnitude scales), but its effects in specific locations are described by the Modified Mercalli Intensity (MMI) Scale.Earthquake intensity is also ascertained by physical measures such as peak ground acceleration (expressed as a decimal fraction of the force of gravity, e.g., 0.4 g), peak velocity, or spectral response, which characterizes the frequency of the energy content of the seismic wave.

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Intensive care unit. That section of a hospital in which intensive care is given.

Intensive care. Medical therapy for the critically ill, usually given under hospital supervision and for a short period of time.

Intentional hazard. A hazard produced primarily by threatened or executed intentional actions, threatening or resulting in human or property impact of sufficient severity to be deemed an emergency. Intentional hazards cover a very wide range of forces (chemical, biological, radiations, incendiary and explosive, cyber, disruption of services or products, and others). The intent may be sabotage, criminal actions, conflict and civil disobedience or disturbance, or acts of terrorism.

Interagency Coordinating Council on Emergency Preparedness and Individuals with Disabilities. Created by Presidential Executive Order: Individuals with Disabilities in Emergency Preparedness, July 22, 2004.

To ensure that the Federal Government appropriately supports safety and security for individuals with disabilities in situations involving disasters, including earthquakes, tornadoes, fires, floods, hurricanes, and acts of terrorism, it shall be the policy of the United States that executive departments and agencies of the Federal Government (agencies): 1) consider, in their emergency preparedness planning, the unique needs of agency employees with disabilities and individuals with disabilities whom the agency serves; 2) encourage, including through the provision of technical assistance, as appropriate, consideration of the unique needs of employees and individuals with disabilities served by State, local, and tribal governments and private organizations and individuals in emergency preparedness planning; and 3) facilitate cooperation among Federal, State, local, and tribal governments and private organizations and individuals in the implementation of emergency preparedness plans as they relate to individuals with disabilities.

Interagency Group on Energy Vulnerability. A forum chartered under the Senior Interagency Group for National Security Emergency Preparedness pursuant to National Security Decision Directive 188, Government Coordination for National Security Emergency Preparedness. It consists of representatives with national security emergency preparedness responsibilities. The Interagency Group on Energy Vulnerability facilitates federal government-wide coordination of national policy issues relating to the vulnerability of U.S. energy systems in advance of crises, and coordinates crisis assessments and response recommendations in an emergency.

Interagency Incident Management Group (IIMG). The IIMG facilitates headquarters level domestic incident management and coordination. The Secretary of Homeland Security activates the IIMG based on the nature, severity, magnitude, and complexity of the threat or incident. The IIMG is comprised of senior representatives from DHS components, Department of Justice, Department of Defense, Department of State, and other Federal departments and agencies and Non-Governmental Organizations (NGOs), as required. The IIMG membership is flexible and can be tailored to provide the appropriate subject matter expertise required for the specific incident at hand.

Interagency Modeling and Atmospheric Assessment Center (IMAAC). The IMAAC is responsible for the production, coordination, and dissemination of consequence predictions for an airborne hazardous material release. The IMAAC generates the official Federal prediction of atmospheric dispersions and their consequences utilizing the best available resources from the Federal Government. Guided by an interagency memorandum of agreement, several Federal agencies and departments support IMAAC planning and activities.

Interconnected customer. Other utilities, direct service customers, military installations, cooperatives, rural electric cooperatives, irrigation districts, tribes, and municipalities that are electrically and/or contractually connected with the Power Administration.

Internal emergency. A sudden event which arises internally and which may be caused by an internal or external source, and may adversely affect the safety of persons in a health care facility, requiring an immediate response by the occupants.

International atomic energy agency. United nations specialised agency for the peaceful uses of atomic energy; promotes the contribution of this energy to peace, health and prosperity, and ensures that it is not used for military purposes. Supervises the safety and monitors accidents of nuclear installations, but is not involved in non-peaceful nuclear (weapons) questions.

International civil aviation organisation. A world-wide organisation formed for the primary purpose of administering the convention on international civil aviation, which was designed to promote the safe, orderly and efficient growth of international civil aviation, including both commercial and general aviation.

International civil defence organization. Intergovernmental organisation with major role in society's response to serious emergencies. It develops, strengthens and coordinates civil protection for all people in different countries, collaborates with governments and other organisations in preparedness and response to natural and man-made disasters, and promotes safer environment conducive to development.

International federation of Red Cross and Red Crescent societies. An international humanitarian organisation that is part of the international red cross and red crescent movement. Its mission is to improve the situation of the world's most vulnerable people.

International humanitarian law. A set of international rules, whether treaty based or customary, specifically intended to govern the humanitarian problems which are the direct consequences of international and non-international armed conflicts. These rules limit, for humanitarian reasons, the right of parties to a conflict to use whatever means and methods of warfare they choose, and protect persons and the objects which could be affected by the conflict.

International rescue committee. A non-profit, nonsectarian voluntary organisation providing relief, protection, and resettlement services for refugees and victims of oppression or violent conflict.

International society for traumatic stress studies. An organisation that provides a forum for the sharing of research, clinical strategies, public policy concerns and theoretical formulations on trauma in the united states and around the world.

International Strategy for Disaster Reduction (ISDR). Mission: The ISDR aims at building disaster resilient communities by promoting increased awareness of the importance of disaster reduction as an integral component of sustainable development, with the goal of reducing human, social, economic and environmental losses due to natural hazards and related technological and environmental disasters.

Interoperability & Compatibility. A principle of the NIMS that holds that systems must be able to work together and should not interfere with one another if the multiple jurisdictions, organizations, and functions that come together under the NIMS are to be effective in domestic incident management. Interoperability and compatibility are achieved through the use of such tools as common communications and data standards, digital data formats, equipment standards, and design standards.

Interoperable and survivable communications. To achieve interoperability, we must have compatible equipment, standard operating procedures, planning, mature governance structures, and a collaborative culture that enables all necessary parties to work together seamlessly. Survivable communications infrastructure is even more fundamental. To achieve survivability, our national security and emergency preparedness communications systems must be resilient — either able to withstand destructive forces regardless of cause or sufficiently redundant to suffer damage and remain reliable.

Interplate earthquake. Earthquake with its focus on a plate boundary.

Inundation map. A map delineating the area that would be flooded by a particular flood event.

Inventory of interest. For facilities where criticality accidents are considered credible, the total yield of gaseous and volatile fission products from the postulated criticality event(s). Analyses of these postulated criticality events will generally be available in the facility SAR.

Inventory. A list of the type and quantity of hazardous materials in transport, stored or in process.

Ionising radiation. Radiation which is capable of causing ionisation, either directly (for example: for radiation in the form of gamma rays and charged particles) or, indirectly (for example: for radiation in the form of neutrons).

IPAWS. Integrated Public Alert Warning System.

ISAC. Information Sharing and Analysis Center.

ISDR. International Strategy for Disaster Reduction (United Nations)

Isobar. A line represented on a map or chart, connecting points on the surface that have equal barometric pressure over a given time or period.

Isohyet. A line drawn on a map or chart connecting points with equal amounts of precipitation, for equal periods of time.

Isolation and Quarantine. Individuals who are ill, exposed, or likely to be exposed are separated, movement is restricted, basic necessities of life are available, and their health is monitored in order to limit the spread of a newly introduced contagious disease (e.g., pandemic influenza). Legal authority for those measures is clearly defined and communicated to all responding agencies

and the public. Logistical support is provided to maintain measures until danger of contagion has elapsed.

Isoseismal. Contour lines drawn to separate one level of seismic intensity from another.

Isotherm. Line drawn on a map or chart connecting points with equal temperature.

Item. 1. An all-inclusive term used in place of the following: appurtenance, sample, assembly, component, equipment, material, module, part, structure, subassembly, subsystem, system, unit, or support systems, documented concepts, or data. 2. When used in reference to nuclear material, a visible, single piece or container of nuclear material with a unique identification and known nuclear material mass.

J

JCDSG. Joint Catastrophic Disaster Steering Group (FEMA Catastrophic Incident Planning Initiative).

Job card. A written list of tasks to be carried out by an individual as part of an emergency response.

Joint Field Office (JFO). A temporary Federal facility established locally to provide a central point for Federal, State, local, and tribal executives with responsibility for incident oversight, direction, and/or assistance to effectively coordinate protection, prevention, preparedness, response, and recovery actions. The JFO will combine the traditional functions of the JOC, the FEMA DFO, and the JIC within a single Federal facility.

Joint Field Office (JFO). The JFO is the primary Federal incident management field structure. The JFO is a temporary Federal facility that provides a central location for the coordination of Federal, State, tribal and local governments and private sector businesses and NGOs with primary responsibility for response and short-term recovery. The JFO structure is organized, staffed and managed in a manner consistent with NIMS principles and is led by the Unified Coordination Group. Personnel from Federal and State departments and agencies, other jurisdictional entities and private sector businesses and NGOs may be requested to staff various levels of the JFO, depending on the requirements of the incident. When incidents impact the entire nation or multiple States or localities, multiple JFOs may be established. In these situations, coordination will occur following the principles of Unified Area Command.

The physical location of such a coordination entity depends on the situation. As the primary field structure, the JFO provides the organizing structure to integrate diverse Federal authorities and capabilities and coordinate Federal response and recovery operations. For additional information on staffing and procedures, see the JFO Standard Operating Procedure. The JFO is internally organized and operated using the concepts and principles of the NIMS Incident Command System.

Joint Field Office (JFO). A temporary Federal facility established locally to coordinate operational Federal assistance activities to the affected jurisdiction(s) during Incident of National Significance.

Joint Information Center (JIC). A joint information center is a physical location where public affairs professionals from organizations involved in incident management activities can colocate to perform critical emergency information, crisis communications, and public affairs functions. It is important for the center to have the most current and accurate information regarding incident management activities at all times. The center provides the organizational structure for coordinating and disseminating official information. Centers should be established at each level of incident management, as required.

Joint Information Center (JIC). In order to coordinate the release of emergency information and other public affairs functions, a State or tribal government may establish a Joint Information Center (JIC), a physical location from which external affairs professionals from all the organizations

involved in an incident work together. The JIC serves as a focal point for coordinated and timely release of incident-related information to the public and the media.

Joint Nuclear Accident Coordination Center. A DOE/Department of Defense organization that deploys response teams in the event of a nuclear weapon accident or significant incident.

Joint Operations Center (JOC). The JOC is an interagency command post established by the FBI to manage terrorist threats or incidents and investigative and intelligence activities. The JOC coordinates the necessary interagency law enforcement assets required to prepare for, respond to and resolve the threat or incident with State, tribal and local law enforcement agencies.

Joint Operations Center (JOC). The JOC is the focal point for all Federal investigative law enforcement activities during a terrorist or potential terrorist incident or any other significant criminal incident, and is managed by the SFLEO. The JOC becomes a component of the JFO when the NRP is activated.

Joint probability. The probability that two or more variables will assume certain values simultaneously or within particular time intervals.

Joint Task Force (JTF) Commander. Based on the complexity and type of incident, and the anticipated level of DOD resource involvement, DOD may elect to designate a JTF to command Federal (Title 10) military activities in support of the incident objectives. If a JTF is established, consistent with DOD operational requirements, its command and control element will establish effective liaison with the JFO to ensure coordination and unity of effort. The JTF Commander exercises operational control of all allocated DOD resources (excluding U.S. Army Corps of Engineers resources). National Guard forces operating under a Governor's control are not DOD-controlled resources. The use of a JTF does not replace the requirement for a Defense Coordinating Officer as part of the JFO Coordination Staff. The JTF does not coordinate requests for assistance from DOD.

Joint Task Force (JTF). Based on the magnitude, type of incident and anticipated 1 level of resource involvement, the combatant commander may utilize a JTF to command Federal military forces in support of the incident response. If a JTF is established, consistent with operational requirements, its command and control element will be co-located with the senior DHS on-scene leader at the JFO to ensure coordination and unity of effort. The co-location of the JTF command and control element does not replace the requirement for a Defense Coordinating Officer (DCO)/Defense Coordinating Element as part of the JFO Unified Coordination Staff. The DCO remains the Department of Defense (DOD) single point of contact in the JFO for requesting assistance from DOD.

JRC. Joint Requirements Council.

JTF. Joint Task Force.

JTIF. Joint Terrorism Task Force.

Jurisdiction. Multiple definitions are used. Each is context dependent: a range or sphere of authority. Public agencies have jurisdiction at an incident related to their legal responsibilities and authority. Jurisdictional authority at an incident can be political or geographical (e.g., city, county, tribal, State, or Federal boundary lines) or functional (e.g., law enforcement, public health); a political subdivision (federal, state, county, parish, and/or municipality) with the responsibility for ensuring public safety, health and welfare within its legal authorities and geographic boundaries.

K

Katabatic wind. Downslope wind caused by greater air density on the slope than at some distance, horizontally, from it. The wind is associated with surface cooling of the slope.

Key resources. As denied in the Homeland Security Act, ‘key resources’ are publicly or privately controlled resources essential to the minimal operations of the economy and government.

Keyword. A word used to convey related concepts or topics stated in the lesson; used to assist in sorting and locating lessons.

Kilogram-force (kgf). A non-SI unit of force, equal to 9.806,65 newtons.

Kind (NIMS Resource Typing). Kind refers to broad classes that characterize like resources, such as teams, personnel, equipment, supplies, vehicles, and aircraft.

Knot. Unit of speed equal to one nautical mile per hour (1.852 kilometres per hour).

L

La Nina. The opposite of an **El Nino** event, during which waters in the west pacific are warmer than normal, trade winds or walker circulation is stronger and, consequently, rainfalls heavier in southeast asia.

Lahar. A mudslide induced by volcanic eruption either at the time of the eruption (by the mixing of hot gases, melted ice or water, and ash) or years later (by the failure of volcanic ash deposits in the presence of heavy rain).

Land Use Planning. Branch of physical and socio-economic planning that determines the means and assesses the values or limitations of various options in which land is to be utilized, with the corresponding effects on different segments of the population or interests of a community taken into account in resulting decisions.

Land-use planning involves studies and mapping, analysis of environmental and hazard data, formulation of alternative land-use decisions and design of a long-range plan for different geographical and administrative scales. Land-use planning can help to mitigate disasters and reduce risks by discouraging high-density settlements and construction of key installations in hazard-prone areas, control ofpopulation density and expansion, and in the siting of service routes for transport, power, water, sewage and other critical facilities.

Landslide. The general term given to movement of material downslope in a mass.

Lapilli. Volcanic fragments about 2–60 millimetres in diameter.

Lava flow. Molten rock which flows down-slope from a volcanic vent, typically moving at between a few metres to several tens of kilometres per hour.

Lava. Molten rock. Different terms are used to describe the nature of the lava, mainly as determined by viscosity.

Law Enforcement Terrorism Prevention Program (LETPP).focuses upon the prevention of terrorist attacks and provides law enforcement and public safety communities with funds to support the following activities: intelligence gathering and information sharing through enhancing/establishing fusion centers; hardening high-value targets; planning strategically; continuing to build interoperable communications; and collaborating with non-law enforcement partners, other government agencies and the private sector.

Lead agency. An organisation which, because of its expertise and resources, is primarily responsible for dealing with a particular hazard.

Lead time. The period which elapses between the time and date of determining that an item is required until it is actually received by the user or the time for events to occur before an action can be taken.

Leak Path Factor (LPF). The fraction of airborne materials transported from containment or confinement deposition or filtration mechanism (e.g., fraction of airborne material in a glovebox leaving the glovebox under static conditions, or fraction of material passing through a HEPA filter).

Learning objective. A precise statement describing what the student is to be capable of demonstrating, under the specified conditions, upon successful complete of the instruction. In competency-based instruction, learning objectives should clearly and concisely describe the relevant competencies a student should be capable of performing after successful completion of the instructional experience.

Learning organization. An organization that conducts continuous evaluation of its experience and transforms that experience into lasting improvements in performance. This is accomplished through change to objectives, structure, process, personnel qualifications (including competencies, which describe knowledge/skills/abilities), facilities, equipment, supplies and other parameters. This learning process is accessible to the whole organization and relevant to its core mission and objectives.

LEPC. Local Emergency Planning Committee.

Lessons Learned Information Sharing System (LLIS). LLIS.gov is a national on-line network of lessons learned and best practices designed to help emergency response providers and homeland security officials prevent, prepare for, respond to, and recover from all hazards, including terrorism. LLIS.gov will enhance national preparedness by allowing response professionals to tap into a wealth of validated front-line expertise on effective planning, training, equipping, and operational practices for homeland security.

Lessons Learned. A good work practice or innovative approach that is identified and shared, or an adverse work practice or experience that is shared to avoid recurrence. The emergency management program shall include a system to track and verify correction of findings or lessons learned from training, drills, exercises, and actual responses.

Lethality. The lethality of a flood is the potential that flood has to cause deaths and injuries for those within its boundaries. This potential varies as a function of water depth, velocity, temperature and amount of debris carried.

LETPP. Law Enforcement Terrorism Prevention Program.

Letter of Map Revision (LOMR). An official amendment, by letter, to the currently effective Flood Insurance Rate Map; issued by the Federal Emergency Management Agency and changes flood zones, delineations, and elevations.

Letter of Map Revision based on Fill (LOMR-F). An official revision, by letter, to an effective National Flood Insurance Program map. A LOMR-F provides the Federal Emergency Management Agency's determination whether a structure or parcel has been elevated on fill above the base flood elevation and excluded from the Special Flood Hazard Area.

Letters of Map Change (LOMC). A LOMC is a letter which reflects an official revision to an effective NFIP map. LOMCs are issued in place of the physical revision and republication of the effective map.

Level of Concern. The concentration of an EHS in air above which there may be serious irreversible health effects or death as a result of a single exposure for a relatively short period of time. Levels of concern are identified in the EPA guidance for the EHSs listed in 40 CFR 355 Appendix A. Emergency Response Planning Guidelines (ERPGs) take precedence over Levels of Concern.

Liaison (*noun*). In ICS, it is a position(s) assigned to establish and maintain direct coordination and information exchange with agencies and organizations outside of the specific incident's ICS/IMS structure.

Liaison (*verb*). A form of communication for establishing and maintaining mutual understanding and cooperation.

Liaison officer. A representative of an agency/organisation. Liaison officers should have the capability to communicate with the agency they represent. They should have the authority to commit their agencies resources.

Lifeline systems. Public works and utilities such as electrical power, gas and liquid fuels, telecommunications, transportation, and water and sewer systems.

Life-safety. In emergency response, this indicates safety issues that are important in preventing injury or death for exposed responders or victims during an incident.

Lightning. Luminous manifestation accompanying a sudden electrical discharge which takes place from or inside a cloud or, less often, from high structures on the ground or from mountains.

Lightning. Luminous manifestation accompanying a sudden electrical discharge which takes place from or inside a cloud or, less often, from high structures on the ground or from mountains.

LIMS. Logistics Inventory Management System.

Liquefaction. The process that occurs when an earthquake shakes wet sandy soil until it behaves like a liquid, allowing sand to boil up to the surface, buildings to sink, or sloping ground to move.

Liquefied natural gas. Liquefied natural gas is natural gas and other gaseous hydrocarbons that have been cooled under high pressure and converted into liquid form, shrinking considerably in volume, so they can be more easily transported by ship. Upon delivery at the destination, the liquefied gas is regasified and the gas is distributed to the consumer by pipeline.

LLIS. Lessons Learned Information Sharing System.

Local Emergency Planning Committee (LEPC). Group appointed by State Emergency Response Commission made up of elected state and local officials, police, fire, civil defense, public health professional, environmental, hospital, and transportation officials, as well as representatives of facilities subject to emergency planning requirements, community groups and the news media. The LEPC is responsible for preparing local emergency plan(s) that comply with Title III, Emergency Planning and Community Right-to-Know Act (EPCRA) requirements.

Local Emergency Planning Committees (LEPCs)..the Emergency Planning and Community Right-to-Know Act (EPCRA) establishes the LEPC as a forum at the local level for discussions and a focus for action in matters pertaining to hazardous materials planning. LEPCs also help to provide local governments and the public with information about possible chemical hazards in their communities. The major legal responsibilities of LEPCs are listed below. The citations are from EPCRA, Public Law 99-499. Each LEPC:

1. Shall review local emergency management plans once a year, or more frequently as circumstances change in the community or as any facility may require (Section 303 (a)).

2. Shall make available each MSDS, chemical list described in Section 311 (a) (2) or Tier II report, inventory form, and follow-up emergency notice to the general public, consistent with Section 322, during normal working hours at a location designated by the LEPC (Section 324(a)).

3. Shall establish procedures for receiving and processing requests from the public for information under Section 324, including Tier II information under Section 312. Such procedures shall include the designation of an official to serve as coordinator for information (Section 301(c)).

4. Shall receive from each subject facility the name of a facility representative who will participate in the emergency planning process as a facility emergency coordinator (Section 303(d)).

5. Shall be informed by the community emergency coordinator of hazardous chemical releases reported by owners or operators of covered facilities (Section 304(b) (1) (a)).

6. Shall be given follow-up emergency information as soon as practical after a release, which requires the owner/operator to submit a notice (Section 304 (c)).

7. Shall receive from the owner or operator of any facility a MSDS for each such chemical (upon request of the LEPC or fire department), or a list of such chemicals as described (Section 311(a)).

8. Shall, upon request by any person, make available an MSDS to the person in accordance with Section 324 (Section 311(a)).

9. Shall receive from the owner or operator of each facility an emergency and hazardous chemical inventory form (Section 312(a)).

10. Shall respond to a request for Tier II information no later than 45 days after the date of receipt of the request (Section 312 (e)). May commence a civil action against an owner or operator of a facility for failure to provide information under Section 303 (d) or for failure to submit Tier II information under Section 312 (e) (1) (Section 32 6(a) (2) (B)).

Local government. Local is defined as (A) a county, municipality, city, town, township, local public authority, school district, special district, intrastate district, council of governments (regardless of whether the council of governments is incorporated as a nonprofit corporation under State law), regional or interstate government entity, or agency or instrumentality of a local government; (B) an Indian tribe or authorized tribal organization, or in Alaska a Native village or Alaska Regional Native Corporation; and (C) a rural community, unincorporated town or village, or other public entity.

Local overland flooding. Inundation by local runoff rather than overbank discharge from a stream, river, estuary, lake or dam.

Logistics. The range of operational activities concerned with supply, handling, transportation, and distribution of materials. Also applicable to the transportation of people.

LOMA. Letter of Map Amendment. **(FEMA,** Letter of Map Amendment, October 17, 2007) **LOMR-F.** Letter of Map Revision Based on Fill.

lonization. The process of adding one or more electrons to, or removing one or more electrons from, atoms or molecules, thereby creating ions. High temperatures, electrical discharges, or nuclear radiations are possible causes of ionization.

Loss. Any negative consequence, financial or otherwise.

Lost Workdays. The number of days (consecutive or not) after, but not including, the day of injury or illness during which employees would have worked but could not do so; that is, could not perform all or any part of their normal assignment during all or any part of the workday or shift because of their occupational injury or illness.

Low Condition (Green). This condition is declared when there is a low risk of terrorist attacks. Federal departments and agencies should consider the following general measures in addition to the agency-specific Protective Measures they develop and implement: refining and exercising as appropriate preplanned Protective Measures; ensuring personnel receive proper training on the Homeland Security Advisory System and specific preplanned department or agency Protective Measures; and institutionalizing a process to assure that all facilities and regulated sectors are regularly assessed for vulnerabilities to terrorist attacks, and all reasonable measures are taken to mitigate these vulnerabilities.

Low hazard. In relation to flooding, should it be necessary, people and their possessions could be evacuated by trucks; able-bodied adults would have little difficulty in wading to safety.

M

Macroseismic effects. Those effects that can be observed on a large scale in the field without instrumental aid.

Magma. The molten matter including liquid rock and gas under pressure which may emerge from a volcanic vent.

Magnetic bearing. The direction from a point of observation to an object in relation to magnetic north.

Magnetic north. The direction from any point on the earth's surface to the magnetic north pole; the direction a compass points.

Magnetic variation. The angle between the magnetic north line and the grid north line at any given place — this varies over time and from place to place.

Magnitude source. The seismological centre whose methods or results are used for magnitude determination.

Magnitude. A number that represents the size of an earthquake source, as determined from seismographic observations. The original earthquake magnitude scale was the Richter or local scale (ML), defined by Charles Richter in 1935, but it has limited range and applicability. Modern magnitude scales are based on the area of fault rupture times the amount of slip (seismic moment).The moment magnitude (MW) is the preferred magnitude scale, as it provides the most reliable estimate of the size of the largest quakes.

For smaller quakes, ML and MW values are nearly the same. An increase of one unit of moment magnitude (for example, from 4.6 to 5.6) corresponds approximately to a 31.6-fold increase in energy released [by definition, a two-unit increase in magnitude —for example, from 4.7 to 6.7— represents an increase in energy released of 1,000 times (31.6_31.6)]. Quakes below magnitude 2.5 are not generally felt by humans.

Main plan. A document describing roles/responsibilities and management arrangements (including specific control and coordination arrangements) for community emergency management.

Main shock. The biggest of a particular sequence of earthquakes.

Mainstream flooding. Inundation of normally dry land occurring when water overflows the natural or artificial banks of a stream, river, estuary, lake or dam.

Major accident. A sudden occurrence (including in particular a major emission, loss of containment, fire, explosion or release of energy) leading to serious danger or harm to people, property or the built or natural environment, whether immediate or delayed.

Major Disaster Declaration Procedures, Stafford Act (Sec. 401, 42 U.S.C. 5170). All requests for a declaration by the President that a major disaster exists shall be made by the Governor of the affected State. Such a request shall be based on a finding that the disaster is of such severity and magnitude that effective response is beyond the capabilities of the State and the affected local governments and that Federal assistance is necessary. As part of such request, and as a prerequisite to

major disaster assistance under this Act, the Governor shall take appropriate response action under State law and direct execution of the State's emergency plan.

The Governor shall furnish information on the nature and amount of State and local resources which have been or will be committed to alleviating the results of the disaster, and shall certify that, for the current disaster, State and local government obligations and expenditures (of which State commitments must be a significant proportion) will comply with all applicable cost-sharing requirements of this Act. Based on the request of a Governor under this section, the President may declare under this Act that a major disaster or emergency exists.

Major Disaster Declaration. Under the Stafford Act, A Presidential major disaster declaration puts into motion long-term Federal recovery programs, some of which are matched by State programs, and designed to help disaster victims, businesses and public entities.

Major Disaster. 'Major disaster' means natural catastrophe (including any hurricane, tornado, storm, high water, wind-driven water, tidal wave, tsunami, earthquake, volcanic eruption, landslide, mudslide, snowstorm, or drought) or, regardless of cause, any fire, flood, or explosion, in any part of the United States, which, in the determination of the President, causes damage of sufficient severity and magnitude to warrant major disaster assistance under this Act to supplement the efforts and available resources of States, local governments, and disaster relief organizations in alleviating the damage, loss, hardship, or suffering caused thereby.

Major Disaster. As defined under the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5122), a major disaster is any natural catastrophe (including any hurricane, tornado, storm, high water, wind-driven water, tidal wave, tsunami, earthquake, volcanic eruption, landslide, mudslide, snowstorm, or drought), or, regardless of cause, any fire, flood, or explosion, in any part of the United States, which in the determination of the President causes damage of sufficient severity and magnitude to warrant major disaster assistance under this Act to supplement the efforts and available resources of States, tribes, local governments, and disaster relief organizations in alleviating the damage, loss, hardship, or suffering caused thereby.

Major Event. Refers to terrorist attacks, major disasters, and other emergencies within the United States.

Major flooding. Flooding where appreciable urban areas are flooded and/or extensive rural areas are flooded. Properties, villages and towns can be isolated.

Major hazard facility. The whole area under the control of an operator: • upon or within which an activity takes place involving or likely to involve the processing, production, disposal, handling, use or storage, either temporarily or permanently, of a quantity of materials which exceeds the threshold or aggregate quantity, as determined in accordance with schedule 1 of the national standard for the control of major hazard facilities, the identification of a major hazard facility; or that the relevant public authority classifies, in accordance with section 5.6 of the national standard for the control of major hazard facilities, to be a major hazard facility. And also includes all areas, such as associated production equipment, permanent or in-transit storage, ancillary equipment or processes, marshalling yards, docks, piers, jetties, depots, pipelines or similar structures whether floating or not.

Major hazards. Hazardous activities with a potential for causing more than a few fatalities at once, especially among people who are not employees of the plant.

Major incident. An event which requires response by police, emergency services and the community which may affect a wider area over a longer period of time but is not a declared disaster.

Malevolent Acts. Acts which are performed with an intent to cause harm to others, such as sabotage or terrorism.

Malnutrition. A diseased state resulting from an absence or deficiency in the diet of one or more essential nutrients, either manifest or detectable by tests. Malnutrition can also be due to an excess of the wrong food.

Management. Management consists of decision-making activities undertaken by one or more individuals to direct and coordinate the activities of other people in order to achieve results that could not be accomplished by any one person acting alone. Effective management focuses on group effort, various forms of coordination, and the manner of making decisions. Management is required whenever two or more persons combine their efforts and resources to accomplish a goal that cannot be accomplished by acting alone. Coordination is necessary when the actions of group participants constitute parts of a total task. If one person acts alone to accomplish a task, no coordination may be required; but when that person delegates a part of the task to others, the individual efforts must be coordinated.

Management (*general*). Management consists of decision-making activities undertaken by one or more individuals to direct and coordinate the activities of other people in order to achieve results that could not be accomplished by any one person acting alone. Effective management focuses on group effort, various forms of coordination, and the manner of making decisions. Management is required whenever two or more persons combine their efforts and resources to accomplish a goal that cannot be accomplished by acting alone.

Coordination is necessary when the actions of group participants constitute parts of a total task. If one person acts alone to accomplish a task, no coordination may be required; but when that person delegates a part of the task to others, the individual efforts must be coordinated.

Management by objective. A management approach that involves a five-step process for achieving the incident goal. The Management by Objectives approach includes the following: establishing overarching incidents objectives; developing strategies based on overarching incidents objectives; developing and issuing assignments, plans, procedures, and protocols; establishing specific, measurable tactics or tasks for various incident management, functional activities, and directing efforts to attain them, in support of defined strategies; and documenting results to measure performance and facilitate corrective action.

Management Meeting, transitional. The initial meeting (preferably in person) in which the IC/IM is determined (if not already clear) and/or unified command is established. Staff that participated in the initial reactive activities briefs the selected IC/IM on incident parameters as they are known. Initial organizational decisions are made and initial response objectives are established.

Management meeting. In the incident management process, the meeting that establishes or revises the incident goals and objectives, and may alter the ICS response structure for the incident. NIMS/ICS does not separate this meeting from the Planning Meeting, although they are commonly separated in wildland fire and Urban Search and Rescue incident management.

Management structure. A framework for control and coordination arrangements, during multi-service operations, normally prescribed through legislation or government direction.

Mandatory or Directed Evacuation. This is a warning to persons within the designated area that an imminent threat to life and property exists and individuals MUST evacuate in accordance with the instructions of local officials.

Map modernization. Map Modernization is responding to National Flood Insurance Program (NFIP) requirements and feedback provided by Federal, State, and local Program stakeholders. Flood hazard conditions are dynamic, and many NFIP maps may not reflect recent development and/or natural changes in the environment. Updated NFIP maps can take advantage of revised data and improved technologies for identifying flood hazards. Up-to-date maps support a flood insurance program that is more closely aligned with actual risk, encourage wise community- based floodplain management, and improve citizens' flood hazard awareness. Local communities and various stakeholders desired more timely updates of flood maps and easier access to the flood hazard data used to create the maps. Map Modernization is a cornerstone for helping community officials and citizens be better prepared for flood-related disasters.

Marine oil spill equipment system. A computer-based register of selected oil spill equipment in Australia accessible via AMSA's external web site. Previously known as 'selected pollution equipment availability register (spear)'.

Marine pollutants. Substances which are potentially harmful to the environment and, if released, could cause serious damage. These substances are prescribed under the international maritime dangerous goods code.

Marine search and rescue incident. An imminent or actual incident when any of the following conditions exist: 1) a surface vessel has requested assistance; 2) a surface vessel has transmitted a distress signal; 3) it is apparent that a surface vessel is in distress; 4) a surface vessel is reported to be sinking or to have sunk; 5) the crew is reported to have abandoned ship or is about to do so; 6) reports indicate that the operating efficiency of the craft is so impaired that the craft may sink or the crew may be forced to abandon; 7) the surface vessel is overdue or unreported.

Marshalling area. The designated area where evacuees are assembled, and organised for onward movement

Martial Law. Martial law is not explicitly mentioned in the Constitution, but the suspension of habeas corpus is mentioned in Article 1, Section 9, and the activation of the militia in time of rebellion or invasion is mentioned in Article 1, Section 8. In strict dictionary terms, martial law is the suspension of civil authority and the imposition of military authority. When we say a region or country is under martial law, we mean to say that the military is in control of the area, that it acts as the police, as the courts, as the legislature. The degree of control might vary — a nation may have a civilian legislature but have the courts administered by the military. Or the legislature and courts may operate under civilian control with a military ruler. In each case, martial law is in effect, even if it is not called 'martial law.'. Article 1, Section 9 states, 'The privilege of the Writ of Habeas Corpus shall not be suspended, unless when in Cases of Rebellion or Invasion the public Safety may require it.' Habeas corpus is a concept of law, in which a person may not be held by the government without a valid reason for being held. A writ of habeas corpus can be issued by a court upon a government agency (such as a police force or the military). Such a writ compels the agency to produce the individual to the court, and to convince the court that the person is being reasonably held.

The suspension of habeas corpus allows an agency to hold a person without a charge. Suspension of habeas corpus is often equated with martial law. Because of this connection of the two concepts, it is often argued that only Congress can declare martial law, because Congress alone is granted the power to suspend the writ. The President, however, is commander-in-chief of the military, and it has been argued that the President can take it upon himself to declare martial law.

Mass. A large number or amount.

Mass casualties. A large number of casualties.

Mass casualty event. An event in which: (1) the numbers of patients and the nature of the injuries make the normal level of stabilization and care unachievable; and/or (2) the number of Emergency Medical Service personnel that can be brought to the site within the time allowed is not enough; and/or (3) the stabilization capabilities of the hospitals that can be reached within the time allowed are insufficient to handle all the patients.

Mass casualty incident (MCI). A casualty-creating hazard incident in which the available organizational and medical resources (both first and second response), or their management systems, are severely challenged or become insufficient to adequately meet the medical needs of the affected population. Insufficient management, response, or support capability or capacity can result in increased morbidity and mortality among the impacted population. Mass casualty equates to a disaster, whereas multiple casualty incident equates to an emergency.

Mass effect incident. A hazard impact that primarily affects the ability of the organization to continue its usual operations (in contrast to a mass casualty incident). For healthcare systems, the usual medical care capability and capacity can be compromised.

Mass emergency. An unexpected or undesirable event which requires the resources from most of all municipal departments and limited assistance from outside agencies may be needed.

Mass explosion. A mass explosion which affects almost the entire load virtually instantaneously.

Mass prophylaxis. The process by which an entire community is to receive prophylactic drugs and vaccines over a defined period of time in response to possible exposure to a biological agent.

Master Interagency Agreement. A written agreement entered into between two federal agencies for the purpose of generally defining areas of respective cooperation within their respective areas of responsibility. The Master Interagency Agreement will prescribe the policy and procedures to be applied in accomplishing or furnishing the materials and/or services to be provided pursuant to such agreement. The Master Interagency Agreement establishes the basic framework under which specific task orders can be issued pursuant to its terms and conditions.

Master Scenario Event List (MSEL). An MSEL lists all exercise messages and key events in a table that specifies the time the message is expected to be delivered, who delivers it to whom, a message number, and a short description of the message. Some MSELs also contain the responder-expected actions and associated exercise objectives to assist the controllers and evaluators in performing their functions. The MSEL identifies the timing and summary content of all key events, messages or injects, contingency messages, and expected responder actions for the duration of the exercise.

Material at Risk (MAR). The MAR is the amount and type of material available to be acted on by a given physical stress. For facilities, processes, and activities, the MAR is a value representing some maximum quantity of material present or reasonably anticipated for the process or structure being analyzed.

Material control and accountability. That part of safeguards that detects or deters theft or diversion of nuclear materials and provides assurance that all nuclear materials are accounted for appropriately.

Material needs. Clothing, bedding and other personal requisites provided to emergency affected persons.

Material safety data sheet. A document that describes the properties and uses of a substance, that is, identity, chemical and physical properties, health hazard information, precautions for use and safe handling information.

Maximum credible earthquake. The most severe earthquake that can be expected to occur at a given site on the basis of geologic and seismological evidence.

Maximum design earthquake. A postulated seismic event, specified in terms of specific bedrock motion parameters at a given site, which is used to evaluate the seismic resistance of manmade structures or other features at the site.

Maximum inventory. The maximum inventory for a process is the maximum quantity of a hazardous material that a process produces during the process cycle. For storage tanks the maximum inventory is equivalent to the physical capacity of the tank. If a physical barrier prevents the tank from being completely filled (e.g., overflow pipe), the maximum inventory can be adjusted accordingly.

Measure. A determination of a jurisdiction's specific level of NIMS compliance, evaluated according to that jurisdiction's responses to the NIMS metrics that have been established by the NIMS Integration Center (NIC).

Measures and metrics. Performance measures of quantitative or qualitative levels against which achievement of a task or capability outcome can be assessed. They describe how much, how well, and/or how quickly an action should be performed and are typically expressed in way that can be observed during an exercise or real event. The measures and metrics are not standards. They serve as guides for planning, training, and exercise activities. However, nationally accepted standards of performance, benchmarks, and guidelines are reflected, if applicable.

Measures of effectiveness. Defined criteria that can be used when evaluating for determining whether satisfactory progress is being accomplished toward achieving the incident objectives.

Measures, input. Input evaluation measures the quality as well as the quantity of resources applied to the system (i.e., inputs). An input is effort, funding, personnel and materiel resources.

Measures, outcome. An outcome is the actual final performance of the system for the circumstances in which the system is being used. The outcomes may be goods and/or services. Outcomes in an emergency management program are defined by the overall system's goals and objectives.

Measures, performance. The specific data sets, objective observations, or other findings captured during the performance-based evaluation process. Performance measures may address the adequacy of resources applied to the program (inputs), the type, level, and quality of program activities conducted (process), the direct products and services delivered by the program (outputs), or the results of those products and services (outcomes).

Measures, process. A process is a defined activity, related to planning and/or implementation, carried out to achieve the objectives of the program. It is therefore also referred to as an implementation measure. Process evaluation focuses on these activities as critical components of the system and/or program.

Medical care. The Basic Societal Function that relates to the system that provides medical treatment to individual patients. The Medical System provides for the detection of signs and symptoms, and the diagnosis and treatment of patients. It includes primary, secondary, and tertiary care. It also includes psychological support and treatment.

Medical command post. A command post situated near to the patient treatment post at which medical and ambulance commanders can

Medical controller. Usually a senior medical officer, located distant from the disaster site at a medical control centre, responsible for controlling all medical aspects of the disaster.

Medical emergency. Any event in which trained personnel are required to respond effectively to a medical crisis beyond the accepted routine of a

Medical Surge Capacity and Capability (MSCC) Management System. The Medical Surge Capacity and Capability (MSCC) Management System describes a management methodology based on valid principles of emergency management and the Incident Management System (IMS). Medical and health disciplines may apply these principles to coordinate effectively with one another, and to integrate with other response organizations that have established IMS and emergency management systems (fire service, law enforcement, etc.). This promotes a common management system for all response entities—public and private—that may be brought to bear in an emergency. In addition, the MSCC Management System guides the development of health and medical response that is consistent with the new National Incident Management System.

The MSCC Management System emphasizes responsibility rather than authority alone for assigning key response functions and advocates a management-by- objectives approach. In this way, the MSCC Management System describes a framework of coordination and integration across six tiers of response:

1. **Management of Individual Healthcare Assets (Tier 1).** A well-defined IMS to collect and process information, to develop incident plans, and to manage decisions is essential to maximize MSCC. Robust processes must be applicable both to traditional hospital participants and to other healthcare facilities (HCFs) that may provide hands on patient care in an emergency. Thus, each healthcare asset must have information management processes to enable integration among HCFs (at Tier 2) and with higher management tiers.

2. **Management of a Healthcare Coalition (Tier 2).** Coordination among local healthcare assets is critical to provide adequate and consistent care across an affected jurisdiction. The healthcare coalition provides a central integration mechanism for information sharing and management coordination among healthcare assets, and also establishes an effective and balanced approach to integrating medical assets into the jurisdiction's IMS.

3. **Jurisdiction Incident Management (Tier 3).** A jurisdiction's IMS integrates healthcare assets with other response disciplines to provide the structure and support needed to maximize MSCC. In certain events, the jurisdictional IMS promotes a unified incident management approach that allows multiple response entities, including health and medicine, to assume significant management responsibility.

4. **Management of State Response (Tier 4).** State Government participates in medical incident response across a range of capacities, depending on the specific event. The State may be the lead incident management authority, it may primarily provide support to incidents managed at the jurisdictional (Tier 3) level, or it may coordinate multijurisdictional incident response. Important concepts are delineated to accomplish all of these missions, ensuring that the full range of State health and medical resources is brought to bear to maximize MSCC.

5. **Interstate Regional Management Coordination (Tier 5).** Effective mechanisms must be implemented to promote incident management coordination between affected States. This ensures consistency in regional response through coordinated incident planning, enhances information

exchange between interstate jurisdictions, and maximizes MSCC through interstate mutual aid and other support. Tier 5 incorporates existing instruments, such as the Emergency Management Assistance Compact (EMAC), and describes established incident management and mutual aid concepts to address these critical needs.

6. **Federal Support to State and Jurisdiction Management (Tier 6).** Effective management processes at the State (Tier 4) and jurisdiction (Tier 3) levels facilitate the request, receipt, and integration of Federal health and medical resources to maximize MSCC. The current status of the Federal health and medical response is described, emphasizing the management aspects that are important for State and local managers to understand.

Medical transportation area. That portion of the triage area where injured persons are staged for transportation to medical facilities under the direct supervision of a medical transportation officer.

Medical triage officer. The most appropriately experienced health professional, appointed by the field medical controller, who undertakes triage of patients entering the patient treatment post.

Medevac. Medical evacuation.

Member of the public. Persons who are not occupationally associated with the DOE facility or operations; i.e., persons whose assigned occupational duties do not require them to enter the DOE site.

Merit approach. That social, economic and ecological impacts of land use options and not just flooding behaviour need to be taken into account in determining the floodplain management plan and the appropriate types of land use for different areas of the floodplain.

MERS. Mobile Emergency Response Support.

Meteorological information. Characteristics of the atmosphere (e.g., wind direction, wind speed, temperature, and precipitation) used to determine how the material will be transported through the atmosphere to the receptors, and how rapidly the receptors will be affected.

Methodologies. A system of methods used in a particular field; A body of practices, procedures, and rules used by those who work in a discipline or engage in an inquiry; a set of working methods.

Metric. A nationwide system of assessment developed by the NIC for the purpose of evaluating a jurisdiction's specific level of NIMS compliance. This system consists of a collection of questions derived from the NIMS compliance statements. Answers to these questions are analyzed to determine a jurisdiction's level of compliance with the NIMS.

Metrics, performance. Specific evaluation criteria that objectively describes the desired performance state, and against which the performance measures may be compared (see measures, performance). They should be clearly stated, measurable, and realistically attainable under reasonable circumstances.

Metropolitan Medical Response System (MMRS). The MMRS program began by awarding contracts to municipalities, requiring the submission of disaster response plans as the contract deliverable. The program's scope now includes planning as well as exercising, training, and equipment purchasing. Currently, MMRS awards are provided annually to 124 of the nation's most populous cities to develop plans and conduct related activities for mass casualty incidents by coordinating efforts among first responders, healthcare providers, public health officials, emergency managers, volunteer organizations, and other local entities.83 In FY2007, each MMRS jurisdiction received $258,145 to establish or sustain local mass casualty preparedness capabilities. Each fiscal

year, MMRS guidance explicitly requires grantees to update or revise their plans as needed to address new benchmarks.

Metropolitan Medical Response System (MMRS). The MMRS grant program funds support MMRS jurisdictions to further enhance and sustain an integrated, systematic mass casualty incident preparedness program that enables a first response during the first crucial hours of an incident.

Microzonation. Subdivision of a region into areas where similar hazard- related effects can be expected. Seismic microzonation is the mapping of a local seismic hazard using a large scale (order of magnitude from 1/5000 to 1/10 000).

Mil. A unit of direction from a given point used in the defence forces — there are 6400 mils in a circle.

Military Support to Civil Authorities (MSCA). Those activities and measures taken by Department of Defense components to foster mutual assistance and support between DoD and any civil government agency in planning or preparedness for, or in the application of resources for response to, the consequences of civil emergencies or attacks, including national security emergencies. MSCA is described in DoD Directive 3025.1. The Secretary of the Army is designated as the DoD executive agent for MSCA. (Title 32 CFR 185)

Military Support to Civil Authorities (MSCA). Those activities and measures taken by Department of Defense components to foster mutual assistance and support between DoD and any civil government agency in planning or preparedness for, or in the application of resources for response to, the consequences of civil emergencies or attacks, including national security emergencies. MSCA is described in DoD Directive 3025.1. The Secretary of the Army is designated as the DOD executive agent for MSCA.

Mineral earth. A term used to describe the ideal condition of a constructed firebreak, being completely free of any vegetation or other combustible material.

Minor flooding. Flooding that causes inconvenience such as closing of minor roads and the submergence of low level bridges. The lower limit of this class of flooding on the reference gauge is the initial flood level at which landholders and townspeople begin to be flooded.

Mission. In emergency management, an organization’s primary goal and expected control objectives.

Mission Assignment (MA). An MA is a work order issued by FEMA to another Federal Agency directing completion of a specific task, and citing funding, other managerial controls, and guidance during a federally declared disaster or emergency.

Mission Assignment. The term ‘mission assignment’ means a work order issued to a Federal agency by the Agency [FEMA], directing completion by that agency of a specified task and setting forth funding, other managerial controls, and guidance.

Mission critical systems. The combination of personnel, facilities, equipment, supplies and operating systems that are vital to for an organization to accomplish its mission.

Mission essential functions. The limited set of department- and agency-level government functions that must be continued throughout, or resumed rapidly after, a disruption of normal activities.

Mist. Airborne droplets of substances that are normally liquid at ambient temperatures. Mists may form through condensation of **vapour** or through spraying of liquids.

Mitigate. To lessen in force or intensity. This definition does not preclude Lessening to Zero when mitigation or to mitigate are used in relation to hazards that could cause or contribute to a peacetime civil emergency.

Mitigation. Mitigation activities provide a critical foundation across the incident management spectrum from prevention through response and recovery. Examples of key mitigation activities include the following: 1. Ongoing public education and outreach activities designed to reduce loss of life and destruction of property. 2. Structural retrofitting to deter or lessen the impact of incidents and reduce loss of life, destruction of property, and impact on the environment. 3. Code enforcement through such activities as zoning regulation, land management, and building codes. 4. Flood insurance and the buy-out of properties subjected to frequent flooding, etc. Any action taken to eliminate or reduce the long-term risk to human life and property from natural hazards. Mitigation actions are accomplished by:

1. **Acting on the hazard.** Seeding hurricanes or triggering avalanches may eliminate a hazard before a disaster occurs.

2. **Redirecting the hazard.** A seawall or dune restoration program helps keep water away from people by redirecting the impact areas away from vulnerable locations.

3. **Interacting with the hazard.** Seismic safety provisions incorporated into building codes result in structures that are more able to withstand impacts and earthquakes.

4. **Avoiding the hazard.** River corridor projects create multiple beneficial uses of the floodplain while relocating structures to less vulnerable locations.

Examples of mitigation activities include the following: ongoing public education and outreach activities designed to reduce loss of life and destruction of property; complying with or exceeding floodplain management and land-use regulations; enforcing stringent building codes, seismic design standards, and wind-bracing requirements for new construction, or repairing and/or retrofitting existing buildings; supporting measures to ensure the protection and resilience of critical infrastructure and key resources designed to ensure continuity of business and the economic stability of communities; acquiring damaged homes or businesses in flood-prone areas, relocating the structures, and returning the property to open space, wetlands, or recreational uses; identifying, utilizing, and refurbishing shelters and safe rooms to help protect people in their homes, public buildings, and schools in hurricane- and tornado-prone areas; implementing a vital records program at all levels of government to prevent loss of crucial documents and records; intelligence sharing and linkage leading to other law enforcement activities, such as infiltration of a terrorist cell to prevent an attack; periodic remapping of hazard or potential hazard zones, using geospatial techniques; and management of data regarding historical incidents to support strategic planning and analysis.

Mitigation (*disaster mitigation***).** Alterations that are achieved before an event occurs that decrease vulnerability.

Mitigation Strategy. The mitigation strategy should include the following: 1) use of applicable building construction standards; 2) hazard avoidance through appropriate land use practices; 3) relocation, retrofitting, or removal of structures at risk; 4) removal or elimination of the hazard; 5) reduction or limitation of the amount or size of the hazard; 6) segregation of the hazard from that which is to be protected; 7) modification of the basic characteristics of the hazard; 8) control of the rate of release of the hazard; 9) provision of protective systems or equipment for both cyber and physical risks; 10) establishment of hazard warning and communication procedures; 11) redundancy or diversity of essential personnel, critical systems, equipment, information,

operations, or materials; 12) acceptance/retention/transfer of risk (insurance programs); 13) protection of competitive/proprietary information. The mitigation strategy should establish interim and long-term actions to reduce the risks from hazards.

MMMS. Map Modernization Management Support (FEMA).

MMRS. Metropolitan Medical Response System.

MOA. Memorandum of Agreement.

Mobile communications vehicle. A vehicle equipped with a range of communication equipment including radios, telephones, facsimile, data links, etc. That enables it to provide vital communications links in support of an incident management team at a forward command or **control** point.

Mobile emergency hospital. A specialised, self-contained vehicle that can provide a clinical environment in which a physician may provide definitive treatment for serious injuries at the accident **scene.**

Mobile Emergency Response Support (MERS). The primary function of MERS is to provide mobile telecommunications capabilities and life, logistics, operational and power generation support required for the on-site management of disaster response activities. MERS support falls into three broad categories: (1) operational support elements; (2) communications equipment and operators; and (3) logistics support. MERS supports Federal, State and local responders in their efforts to save lives, protect property and coordinate disaster operations. Staged in six strategic locations, one with offshore capabilities, the MERS detachments can concurrently support multiple field operating sites within a disaster area.

Mobile satellite communication system. Used after breakdown of other communication facilities in disaster-affected areas by disaster aid teams to perform via satellite exchange of detailed information by telex, phone, fax with their headquarters concerning detailed requirements ensuring a most effective way for the delivery of appropriate relief supplies.

Mobile welfare teams. A mobile team of trained workers (with their own transport and a required amount of equipment) who can be used to start unplanned welfare centres or to boost existing welfare centres.

Mobility-impaired person. A person with physical, mental or sensory impairment, either temporary or permanent, who requires assistance during emergency evacuation.

Mobilization center. An off-incident location at which emergency service personnel and equipment are temporarily located pending assignment, release, or reassignment.

Mobilization. Activities and procedures carried out that ready an asset to perform incident operations according to the EOP. During the response phase of CEM, it is the stage that transitions functional elements from a state of inactivity or normal operations to their designated response state. This activity may occur well into the response phase, as additional assets are brought on line or as surge processes are instituted to meet demands.

Model State Emergency Health Powers Act (MSEHPA). In the spring of 2001, officials of the Centers for Disease Control and Prevention (CDC) asked the staff of the Center for Law and the Public's Health (based at Georgetown University and the Johns Hopkins University) to draft a Model State Emergency Health Powers Act. This Model Act would enable states to revise their public health statutes in order to take account of contemporary scientific knowledge, communications technology, and case law on the rights of individuals and the duties of government. Many states had not substantially revised their public codes for a half century or longer. Drafting the Model Act

accelerated after September 11th and especially after the first anthrax case was identified on October 4th.

The Georgetown/Hopkins lawyers posted a draft on the World Wide Web in late October (and revised it in December). Secretary of Health and Human Services Tommy G. Thompson enthusiastically endorsed the draft. Across the political spectrum, however, but especially among liberals and libertarians, attacks began immediately on the need for the act and its major provisions—especially on its recommendations for planning, surveillance, public information, taking property, directing the work of health professionals and immunizing them from liability, and interfering with the privacy and liberty of persons to prevent the spread of infectious disease. Nevertheless, legislation inspired by the Model Act has been introduced in more than 30 states.In some states, legislators and governors who supported the main thrust of the act decided that archaic provisions were better than anarchy.

They feared that opening the entire public health code to amendment risked the repeal of substantial sections of it. In other states, lawmakers have used the Model Act as a checklist against which to review and revise their public health statute. No state, to our knowledge, has adopted the Model Act posted on the Web. The Model Act has become a contentious document in a process of policymaking that is likely to continue as long as the threat of bioterrorism persists. This new fact of life is recognized in the new Department of Health and Human Services grant program to improve public health infrastructure for better defense against terrorism, which requires states to conduct ongoing review and revision of pertinent laws and regulations.

Moderate flooding. Flooding where low-lying areas are inundated requiring removal of stock and/or evacuation of some houses. Main traffic bridges may be covered.

Moderate scenarios. Scenarios that could be initiated by a single individual using materials or tools readily available in the facility, or small quantities of flammables.

Modification. The aggregate of all approaches and measures to modify the amplitude, intensity, scope, scale, and/or magnitude of an event, or measures that change the hazard and/or the risk that a hazard will evolve into an event.

Modify. To make partial changes in.

Modular Organization (ICS). The ICS organizational structure develops in a top-down fashion that is based on the size and complexity of the incident, as well as the specifics of the hazard environment created by the incident. When needed separate functional elements can be established, each of which may be further subdivided to enhance management and coordination. Responsibility for the establishment and expansion of the ICS rests with the Incident Commander (IC), who bases these on requirements of the situation. As incident complexity increases, the organization expands from top down as functional responsibilities are delegated.

Monitor. To check, supervise, observe critically, or record the progress of an activity, action or system on a regular basis in order to identify change.

Monitoring. The process of measuring certain environmental parameters on a real-time basis for spatial and time variations. For example, air monitoring may be conducted with direct-reading instruments to indicate relative changes in air contaminant concentrations at various times.

Monsoon. Seasonally heavy rains and wind the direction of which varies from one season to another. They occur particularly in the Indian ocean and south Asian areas.

Mopping up. Making a fire safe after it has been controlled, by extinguishing or removing burning material along or near the fireline, felling stags, trenching logs to prevent rolling, and the like.

Morbidity. The number of sick persons or of diseases in a given period among a given population.

Mortality rate. The ratio of the number of deaths in a given population to the total number of that population.

Mortality. The number, magnitude or frequency of deaths over a period of time among the total sick and well population of an area. * the numerical expression of deaths, usually given as a mortality rate.

Moulage. A reproduction of a skin tumor, wound, or other pathological state which is applied to volunteer victims to simulate realistic injuries in emergency exercises.

Movement control. Restrictions placed on movement of animals, people and things to prevent dissemination of disease.

MSCC. Medical Surge Capacity and Capability.

MSEHPA. Model State Emergency Health Powers Act (Proposed).

MSEL. Master Scenario Event List.

MS-ISAC. Multi-State Information Sharing and Analysis Center. **(DHS,** NIPP 2006, p. 101)

Mudflow. The down-slope transfer of fine earth material mixed with water.

Multi-Agency Coordination (MAC) Centers. A seventh requirement of incident management consists of the various multi-agency coordination centers that exist throughout all levels of government. They are essential to maintaining situational awareness and overall incident management, and they assist in the flow of information, the reporting of actions and activities, and ultimately the development of a common operating picture, but they also are hubs for coordinating operational activities during an incident.

Examples include State, local, and Tribal emergency operations centers; State, local, and Tribal fusion centers; the National Operations Center, National Infrastructure Coordination Center, and the Federal Emergency Management Agency's National Response Coordination Center (all part of the Department of Homeland Security); the Federal Bureau of Investigation's Strategic Information and Operations Center and National Joint Terrorist Task Force (both part of the Department of Justice); and the National Counterterrorism Center (part of the Office of the Director of National Intelligence).

Multiagency Coordination (MAC) Group. Typically, administrators/executives, or their appointed representatives, who are authorized to commit agency resources and funds, are brought together and form MAC Groups. MAC Groups may also be known as multiagency committees, emergency management committees, or as otherwise defined by the System. It can provide coordinated decisionmaking and resource allocation among cooperating agencies, and may establish the priorities among incidents, harmonize agency policies, and provide strategic guidance and direction to support incident management activities.

Multi-Agency Coordination (MAC). A generalized term which describes the functions and activities of representatives of involved agencies and/or jurisdictions who come together to make decisions regarding the prioritizing of incidents, and the sharing and use of critical resources. The MAC organization is not a part of the on-scene ICS and is not involved in developing incident strategy or tactics.

Multiagency Coordination Entity. A multiagency coordination entity functions within a broader multiagency coordination system. It may establish the priorities among incidents and associated resource allocations, deconflict agency policies, and provide strategic guidance and direction to support incident management activities.

Multi-Agency Coordination System in DHS — Concepts and Principles. The core concepts and principles of the Multi-Agency Coordination System as taught by DHS (and as defined in the NIMS Document) incorporate the following components:

1. A multi-agency coordination system is a combination of facilities, equipment, personnel, procedures, and communications integrated into a common system with responsibility for coordinating and supporting domestic incident management activities.

2. The primary functions of multi-agency coordination systems are to support incident management policies and priorities, facilitate logistics support and resource tracking, inform resource allocation decisions using incident management priorities, coordinate incident management related information, and coordinate interagency and intergovernmental issues regarding incident management policies, priorities, and strategies.

3. A typical multi-agency coordination system may contain one or several Emergency Operations Centers (EOCs). A typical multi-agency coordination system may contact numerous Department Operations Center (DOCs). Depending upon the type and location of the emergency/disaster various command elements (i.e. area commands, unified command or the incident commander) will have to coordinate activities within an established multi- agency coordination system.

Training dealing with the NIMS multi-agency coordination system shall describe to participants the components of a multi-agency coordination system and establish relationships between all elements of the system. It shall also increase the participant's knowledge of NIMS relevant to the multi-agency coordination system. It shall increase the participant's knowledge of the integrated nature of emergency management throughout the nation and advocate the adoption of the guidelines established in the NIMS document. The training shall contain specific disaster/emergency related examples that relate to multi-agency coordination systems at the local, state and federal levels of government.

Multiagency Coordination System(s) (MACS). Multiagency coordination systems provide the architecture to support coordination for incident prioritization, critical resource allocation, communications systems integration, and information coordination. The elements of multiagency coordination systems include facilities, equipment, personnel, procedures, and communications. Two of the most commonly used elements are EOCs and MAC Groups. These systems assist agencies and organizations responding to an incident.

Multiagency Coordination Systems. Multiagency coordination systems provide the architecture to support coordination for incident prioritization, critical resource allocation, communications systems integration, and information coordination. The components of multiagency coordination systems include facilities, equipment, emergency operation centers (EOCs), specific multiagency coordination entities, personnel, procedures, and communications. These systems assist agencies and organizations to fully integrate the subsystems of the NIMS.

Multi-casualty event. An event that produces many casualties, but is managed completely with the resources available within the area in which the event occurred.

Multihazard. Multihazards include significant events such as infrastructure deterioration, natural disasters, accidents, and malevolent acts. Today's preparedness needs require a comprehensive, multihazards regional approach that addresses natural disasters of all types, human error, systems failures, pandemics, and malevolent acts, including those involving cyber systems and weapons of mass destruction (chemical, biological, radiological, and nuclear devices).

Multijurisdiction Incident. An incident that extends across political boundaries and/or response disciplines, requiring action from multiple governments and agencies to manage certain aspects of an incident. These incidents may best be managed under Unified Incident Management.

Multijurisdictional Incident. An incident requiring action from multiple agencies that each have jurisdiction to manage certain aspects of an incident. In ICS, these incidents will be managed under Unified Command.

Multi-modal redundant communications. Communications which use multiple modes (eg. Radio, telephone, microwave, satellite) and have in-built redundancy (if one link fails there are alternative routes), eg. Telephone lines through separate exchanges.

Multiple Casualty Incident. A hazard impact with casualties in which the available organizational and medical resources, or their management systems, are severely challenged. A stepped up capacity and capability beyond the normal first response, usually involving the use of ICS for expanded management, is required to adequately meet the medical needs of the affected population. Multiple casualty incident equate to an emergency, whereas Mass casualty equates to a disaster.

Multisectorial. Action or discipline that implies and needs coordination at all levels between and among the various activities involved in managing a situation, eg. A disaster, such as the health sector, transport agriculture, housing, public works, water supply, communications, finance etc.

Mutual Aid Agreements. Mutual aid/assistance agreements between entities are an effective means to obtain resources and should be developed whenever possible. Mutual aid/assistance agreements should be in writing, be reviewed by legal counsel, be signed by a responsible official, define liability, and detail funding and cost arrangements. The term mutual aid/assistance agreement as used here includes cooperative assistance agreements, intergovernmental compacts, or other terms commonly used for the sharing of resources.

Mutual aid/assistance agreements are the means for one entity to provide resources, facilities, services, and other required support to another entity during an incident. Each entity should be party to a mutual aid/assistance agreement (such as the Emergency Management Assistance Compact) with appropriate entities from which they expect to receive or to which they expect to provide assistance during an incident. This would normally include all neighboring or nearby entities, as well as relevant private sector and nongovernmental organizations. States should participate in interstate compacts and look to establish intrastate agreements that encompass all local entities. Mutual aid/assistance agreements are also needed with private organizations, such as the International Red Cross, to facilitate the timely delivery of private assistance at the appropriate entity level during incidents.

At a minimum, mutual aid/assistance agreements should include the following elements or provisions: 1. Definitions of key terms used in the agreement. 2. Roles and responsibilities of individual parties. 3. Procedures for requesting and providing assistance. 4. Procedures, authorities, and rules for payment, reimbursement, and allocation of costs. 5. Notification procedures. 6. Protocols for interoperable communications. 7. Relationships with other agreements among entities.

8. Workers' compensation. 8. Treatment of liability and immunity. 9. Recognition of qualifications and certifications. 10. Sharing agreements, as required.

Mutual Aid Response. A mutual aid response is one in which (1) Facility first responders and facility Emergency Medical Service personnel are able to mitigate life threatening injuries in all victims to the same level that they would be able to mitigate similar injuries in a single victim; **and** (2) Within 10 to 20 minutes, enough other responders and ambulances can be at the site to provide normal levels of care and transportation; **and** (3) The hospitals that can be reached within the normally accepted time for transport of patients can provide adequate stabilization until definitive care can be provided.

Mutual Aid. Voluntary aid and assistance by the provision of services and facilities including but not limited to: fire, police, medical and health, communications, transportation, and utilities. Mutual aid is intended to provide adequate resources, facilities, and other support to jurisdictions whenever their own resources prove to be inadequate to cope with a given situation. (SEMS)Some authorities differentiate mutual aid from cooperative assistance, where the assisting resources are compensated for their response costs. Other authorities designate this as compensated mutual aid.

Mutual-Aid Agreement. Written agreement between agencies and/or jurisdictions that they will assist one another on request, by furnishing personnel, equipment, and/or expertise in a specified manner. National. Of a nationwide character, including the Federal, State, local, and tribal aspects of governance and polity.

N

NAC. National Advisory Committee (FEMA).

National Alert Warning System (NAWAS). Operated and maintained by FEMA, the NAWAS was originally created as part of the Civil Defense Act of 1950 in order to pass emergency information to the American public regarding an actual attack or an accidental missile launch against the United States. The NAWAS is available on a 24/7 basis as a non- secure, continuous, private line, telephone system and is used to convey warnings to Federal, State, and local governments, as well as the military and civil populations. Although the original mission of NAWAS was to warn of an enemy attack or missile launch, the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1974 expanded the NAWAS mission to include warning for acts of terrorism, as well as natural and technological disasters and events.

NAWAS is used by the National Oceanic and Atmospheric Administration (NOAA) to pass severe weather alerts as conditions develop as well and to pass critical sheltering information in the event these severe weather conditions materialize. There are currently approximately 2050 NAWAS drops (referred to as Warning points) across the Nation, to include Alaska, Hawaii, Puerto Rico, and the US Virgin Islands.

National Bioterrorism Hospital Preparedness Program (NBHPP). The purpose of the National Bioterrorism Hospital Preparedness Program (NBHPP) is to prepare hospitals and supporting healthcare systems, in collaboration with other partners, to deliver coordinated and effective care to victims of terrorism and other public health emergencies. Cooperative agreement funds may be used for activities that include increasing surge capacity, which encompasses beds, personnel, pharmaceuticals, PPE, decontamination capacity, isolation capacity and interoperable communications, as well as the enhancement of EMS services, competency based training, and exercises.

National Capital Region (NCR). The National Capital Region was created pursuant to the National Capital Planning Act of 1952. The Act defined the NCR as the District of Columbia; Montgomery and Prince George's Counties of Maryland; Arlington, Fairfax, Loudon, and Prince William Counties of Virginia; and all cities now or here after existing in Maryland or Virginia within the geographic area bounded by the outer boundaries of the combined area of said counties. The NCR includes the District of Columbia and eleven local jurisdictions in the State of Maryland and the Commonwealth of Virginia.

National Command and Coordination Capability (NCCC). The NCCC is the means to provide the President and Vice President with the ability to respond deliberately and appropriately to any crisis. It includes responsive, reliable, survivable, and robust processes and systems to command, control, and coordinate operations among Federal, State, tribal, insular, and local governments, as required.

National Communications System. President Kennedy established the National Communications System by a Presidential Memorandum on August 21, 1963. The NCS mandate

included linking, improving, and extending the communications facilities and components of various Federal agencies, focusing on interconnectivity and survivability. After nearly 40 years with the Secretary of Defense serving as its Executive Agent, President George W. Bush transferred the National Communications System to the Department of Homeland Security (DHS). The NCS was one of 22 Federal agencies transferred to the Department on March 1, 2003, in accordance with Executive Order 13286. A revised Executive Order 12472 reflects the changes of E.O. 13286. On November 15, 2005, the NCS became part of the Department's Directorate for Preparedness after nearly two years under the Information Analysis and Infrastructure Protection Directorate. Currently, the DHS Under Secretary for National Protection and Programs serves as the NCS Manager.

National Contingency Plan (National Oil and Hazardous Substances Pollution Contingency Plan). Policies and procedures of the federal agency members of the National Oil and Hazardous Materials Response Team. This document provides guidance for responses, remedial action, enforcement, and funding mechanisms for hazardous materials incident responses.

National Continuity Coordinator. The President shall lead the activities of the Federal Government for ensuring constitutional government. In order to advise and assist the President in that function, the Assistant to the President for Homeland Security and Counterterrorism (APHS/CT) is hereby designated as the National Continuity Coordinator. The National Continuity Coordinator, in coordination with the Assistant to the President for National Security Affairs (APNSA), without exercising directive authority, shall coordinate the development and implementation of continuity policy for executive departments and agencies. The Continuity Policy Coordination Committee (CPCC), chaired by a Senior Director from the Homeland Security Council staff, designated by the National Continuity Coordinator, shall be the main day- to-day forum for such policy coordination.

National Continuity Implementation Plan. The NCIP includes prioritized goals and objectives, a concept of operations, performance metrics by which to measure continuity readiness, procedures for continuity and incident management activities, and clear direction to executive department and agency continuity coordinators, as well as guidance to promote interoperability of Federal Government continuity programs and procedures with State, local, territorial, and tribal governments, and private sector owners and operators of critical infrastructure, as appropriate.

National Continuity Policy. It is the policy of the United States to maintain a comprehensive and effective continuity capability composed of Continuity of Operations and Continuity of Government programs in order to ensure the preservation of our form of government under the Constitution and the continuing performance of National Essential Functions under all conditions. For continuity purposes, each executive department and agency is assigned to a category in accordance with the nature and characteristics of its national security roles and responsibilities in support of the Federal Government's ability to sustain the NEFs. The Secretary of Homeland Security shall serve as the President's lead agent for coordinating overall continuity operations and activities of executive departments and agencies.

National Counterterrorism Center (NCTC). In August 2004, the President established the National Counterterrorism Center (NCTC) to serve as the primary organization in the United States Government (USG) for integrating and analyzing all intelligence pertaining to terrorism and counterterrorism (CT) and to conduct strategic operational planning by integrating all instruments of national power. In December 2004, Congress codified the NCTC in the Intelligence Reform and Terrorism Prevention Act (IRTPA) and placed the NCTC in the Office of the Director of National

Intelligence. NCTC is a multi-agency organization dedicated to eliminating the terrorist threat to US interests at home and abroad.

National Disaster Medical System (NDMS). The National Disaster Medical System (NDMS) is a federally coordinated system that augments the Nation's medical response capability. The overall purpose of the NDMS is to establish a single integrated National medical response capability for assisting State and local authorities in dealing with the medical impacts of major peacetime disasters and to provide support to the military and the Department of Veterans Affairs medical systems in caring for casualties evacuated back to the U.S. from overseas armed conventional conflicts.

National Disaster Medical System (NDMS). A federally coordinated initiative to augment the nation's emergency medical response capability by providing medical assets to be used during major disasters or emergencies. NDMS has three major components: Disaster Medical Assistance Teams and Clearing-Staging Units to provide triage, patient stabilization, and austere medical services at a disaster site; an evacuation capability for movement of patients from a disaster area to locations where definitive medical care can be provided; and a voluntary hospital network to provide definitive medical care. NDMS is administered by the Department of Health and Human Services/U.S. Public Health Service, in cooperation with the Department of Defense, the Department of Veterans Affairs, FEMA, State and local governments, and the private sector.

National Domestic Preparedness Consortium. The National Domestic Preparedness Consortium (NDPC) is the principal vehicle through which G&T [DHS] identifies, develop, tests, and delivers training to state and local emergency responders. The NDPC membership includes G&T's Center for Domestic Preparedness (CDP) in Anniston, Alabama, the New Mexico Institute of Mining and Technology (NMIMT), Louisiana State University (LSU), Texas A&M University (TEEX), and the Department of Energy's Nevada Test Site (NTS); each member brings a unique set of assets to the domestic preparedness program.

National Earthquake Hazard Reduction Program. The National Earthquake Hazards Reduction Program (NEHRP), which is authorized by the Earthquake Hazards Reduction Act of 1977 (Public Law 95-124), as amended, seeks to mitigate earthquake losses in the United States through both basic and directed research and implementation activities in the fields of earthquake science and engineering.

For 30 years, NEHRP has reduced the vulnerability of the people and property of the United States through the following: 1. Improvement in the understanding of the processes that generate earthquakes. 2. Improvement in the understanding of the effects of earthquakes in terms of ground shaking and ground failure, building shaking and damage, and on the general infrastructure and economic fabric of the United States. 3. Development of earthquake hazards and risk assessments and earthquake resistant building codes and practices. 4. Implementation of earthquake risk reduction measures through the adoption of building codes, land use practices, and earthquake response exercises at all levels of government and in the private sectors.

National Earthquake Hazards Reduction Program Interagency Coordinating Committee (ICC). The NEHRP ICC is composed of the directors of the four NEHRP agencies, the Federal Emergency Management Agency (FEMA), the National Institute of Standards and Technology (NIST), the National Science Foundation (NSF), and the U.S. Geological Survey (USGS), as well as the directors of the White House Office of Science and Technology Policy (OSTP) and Office of Management and Budget (OMB). The ICC is chaired by the Director of NIST.

National Emergencies Act of 1976. The **National Emergencies Act of 1976,** 50 U.S.C. 1601 et seq, establishes procedures for Presidential declaration and termination of national emergencies. The Act requires the President to identify the specific provision of law under which he will act in dealing with a declared national emergency and contains a sunset provision requiring the President to renew a declaration of national emergency to prevent its automatic expiration. The Presidential declaration of a national emergency under the Act is a prerequisite to exercising any special or extraordinary powers authorized by statute for use in the event of national emergency.

National Emergency Coordination Center (NECC). The FEMA facility that provides notification to Headquarters and Regional responders of implementation of the Plan.

National Emergency Management Association. NEMA is the professional association of and for state* emergency management directors. NEMA's mission is to: 1. Provide national leadership and expertise in comprehensive emergency management. 2. Serve as a vital emergency management information and assistance resource. 3. Advance continuous improvement in emergency management through strategic partnerships, innovative programs, and collaborative policy positions. National Emergency Management Baseline Capability Assessment Program (NEMB- CAP) is an ongoing effort sponsored by the Federal Emergency Management Agency (FEMA) that is analyzing existing emergency management programs planning efforts at the State level using the EMAP Standard. To date, 40 States have completed the NEMB-CAP process.

Of the 40 States, only two met all criteria for planning, only five were compliant with most or all standards, and only two states were fully compliant in all 14 functional areas. The process has highlighted the importance of ensuring that roles and responsibilities are not only well understood, but also operationalized at the State and local level; additionally, findings from this process have revealed critical national weaknesses in key operational areas and catastrophic planning efforts, including: incident management, planning, including continuity of operations and recovery strategies, hazard identification, risk assessment, and impact analysis, resource management, including identification of resource objectives, by hazard, predisaster.

National Essential Functions (NEFs). 'National Essential Functions,' or 'NEFs,' means that subset of Government Functions that are necessary to lead and sustain the Nation during a catastrophic emergency and that, therefore, must be supported through COOP and COG capabilities. The following NEFs are the foundation for all continuity programs and capabilities and represent the overarching responsibilities of the Federal Government to lead and sustain the Nation during a crisis, and therefore sustaining the following NEFs shall be the primary focus of the Federal Government leadership during and in the aftermath of an emergency that adversely affects the performance of Government Functions:

1. Ensuring the continued functioning of our form of government under the Constitution, including the functioning of the three separate branches of government.

2. Providing leadership visible to the Nation and the world and maintaining the trust and confidence of the American people.

3. Defending the Constitution of the United States against all enemies, foreign and domestic, and preventing or interdicting attacks against the United States or its people, property, or interests.

4. Maintaining and fostering effective relationships with foreign nations.

5. Protecting against threats to the homeland and bringing to justice perpetrators of crimes or attacks against the United States or its people, property, or interests.

6. Providing rapid and effective response to and recovery from the domestic consequences of an attack or other incident.

7. Protecting and stabilizing the Nation's economy and ensuring public confidence in its financial systems.

8. Providing for critical Federal Government services that address the national health, safety, and welfare needs of the United States.

National Exercise Program (NEP). HSPD-8 directed the establishment of the NEP under the leadership of the Secretary of Homeland Security. The NEP is the Nation's overarching exercise program formulated by the National Security Council/Homeland Security Council, and executed by the Federal Interagency. The NEP serves as the principal mechanism for examining the preparation of the Federal executive branch and adopting policy changes that might improve such preparation.

The NEP is DHS's principal mechanism for training and exercising officials at all levels of government, as well as members of the private sector, and, at times, our international partners. The NEP has developed common policy and guidance and has established collaborative management processes and tools to link its partners and stakeholders nationwide. Lessons learned and peer-validated best practices identified through exercises and actual incidents are made available to the homeland security community.

National Flood Insurance Act of 1968..the National Flood Insurance Act of 1968 (NFIA, or the Act), 42 U.S.C. 4030, as amended by the Bunning-Bereuter-Blumenauer Flood Insurance Reform Act of 2004, Public Law 108-264, [has]. the goal of reducing flood damages to individual properties for which one or more claim payments for losses have been made under flood insurance coverage and that will result in the greatest savings to the NFIF in the shortest period of time. The Catalog of Federal Domestic Assistance (CFDA) number is 97.092.

National Flood Insurance Program (NFIP). The U.S. Congress established the National Flood Insurance Program (NFIP) with the passage of the National Flood Insurance Act of 1968. The NFIP is a Federal program enabling property owners in participating communities to purchase insurance as a protection against flood losses in exchange for State and community floodplain management regulations that reduce future flood damages.

Participation in the NFIP is based on an agreement between communities and the Federal Government. If a community adopts and enforces a floodplain management ordinance to reduce future flood risk to new construction in floodplains, the Federal Government will make flood insurance available within the community as a financial protection against flood losses. This insurance is designed to provide an insurance alternative to disaster assistance to reduce the escalating costs of repairing damage to buildings and their contents caused by floods.

National Implementation Plan. Early this summer [2006], a new strategy for combating terrorism, described by its authors as revolutionary in concept, arrived on President Bush's desk. The highly classified National Implementation Plan for the first time set government-wide goals and assigned responsibility for achieving them to specific departments and agencies. Written by officials at the National Counterterrorism Center, under a directive signed by the president last winter, the 160-page plan aspires to achieve what has eluded the Bush administration in the five years since the Sept. 11, 2001, attacks: bringing order and direction to the fight against terrorism.

New initiatives such as the National Implementation Plan were launched to eliminate overlap and set priorities for what the administration now calls the long war. Beyond drawing sharper lines of responsibility, officials said, the plan is designed to drag the nation's counterterrorism strategy

back from military dominance, better balancing the military whack with diplomacy and the hearts and minds campaigns that are now seen as critical to long-term victory. [President] Bush was briefed on the plan on June 26. A White House official said the plan reflects [President] Bush's feeling that the terrorism fight is all-encompassing, including military attacks but also the war of ideas and the softer side, the long-term battle. Within half a dozen broad objectives, the document designates lead and subordinate agencies to carry out more than 500 discrete counterterrorism tasks, among them vanquishing al-Qaeda, protecting the homeland, wooing allies, training experts in other languages and cultures, and understanding and influencing the Islamic psyche.

National Incident Management System Premise. NIMS is based on the premise that the utilization of a common incident management framework will give emergency management/response personnel a flexible yet standardized system for emergency management and incident response activities.

National Incident Management System. NIMS is not an operational incident management or resource allocation plan. NIMS represents a core set of doctrine, concepts, principles, terminology, and organizational processes that enables effective, efficient, and collaborative incident management.

National Incident Management System. NIMS provides a core set of common concepts, principles, terminology and technologies in the following areas:

1. **Incident Command System (ICS).** Much of NIMS is built upon the ICS, which was developed by the Federal, State and local wildland fire agencies during the 1970s. ICS is normally structured to facilitate activities in five major functional areas: command, operations, planning, logistics and finance/ administration. In some circumstances, intelligence and investigations may be added as a sixth functional area.

2. **Multi-agency coordination systems.** Examples of multi-agency coordination systems include a county emergency operations center, a State intelligence fusion center, the DHS National Operations Center, the DHS/Federal Emergency Management Agency (FEMA) National Response Coordination Center, the Department of Justice/Federal Bureau of Investigation (FBI) Strategic Information and Operations Center and the National Counterterrorism Center.

3. **Unified command.** Unified command provides the basis from which multiple agencies can work together effectively with a common objective of effectively managing an incident. Unified command ensures that regardless of the number of agencies or jurisdictions involved, all decisions will be based on mutually specified objectives.

4. **Training.** Leaders and staff require initial training on incident management and incident response principles, as well as ongoing training to provide updates on current concepts and procedures.

5. **Identification and management of resources.** Classifying types of resources is essential to ensure that multiple agencies can effectively communicate and provide resources during a crisis.

6. **Situational awareness.** Situational awareness is the provision of timely and accurate information during an incident. Situational awareness is the lifeblood of incident management and effective response operations. Without it, decisions will not be informed by information on the ground and actions will be inefficient and ineffective. Situational awareness requires continuous monitoring, verification and integration of key information needed to assess and respond effectively to threats, potential threats, disasters or emergencies.

7. **Qualifications and certification.** Competent staff is a requirement for any leader managing an incident. During a crisis there will not be time to determine staff qualifications, if such

information has not yet been compiled and available for review by leaders. To identify the appropriate staff to support a leader during a crisis, qualifications based on training and expertise of staff should be pre-identified and evidenced by certification, if appropriate.

8. **Collection, tracking and reporting of incident information.** Information today is transmitted instantly via the Internet and the 24/7 news channels. While timely information is valuable, it also can be overwhelming. For an effective response, we must leverage expertise and experience to identify what information is needed to support decision-makers and be able to rapidly summarize and prioritize this information. Information must be gathered accurately at the scene and effectively communicated to those who need it. To be successful, clear lines of information flow and a common operating picture are essential.

9. **Crisis action planning.** Deliberative planning during non-incident periods should quickly transition to crisis action planning when an incident occurs. Crisis action planning is the process for rapidly adapting existing deliberative plans and procedures during an incident based on the actual circumstances of an event. Crisis action planning should also include the provision of decision tools for senior leaders to guide their decision-making.

10. **Exercises.** Consistent with the National Exercise Program, all stakeholders should regularly exercise their incident management and response capabilities and procedures to ensure that they are fully capable of executing their incident response responsibilities.

National Incident Management System. The NIMS identifies multiple elements of unified command in support of incident response. These elements include: (1) developing a single set of objectives; (2) using a collective, strategic approach; (3) improving information flow and coordination; (4) creating common understanding of joint priorities and restrictions; (5) ensuring that no agency's legal authorities are compromised or neglected; and (6) optimizing the combined efforts of all agencies under a single plan.

National Incident Management System. A system mandated by HSPD-5 that provides a consistent nationwide approach for Federal, State, local, and tribal governments; the private- sector, and nongovernmental organizations to work effectively and efficiently together to prepare for, respond to, and recover from domestic incidents, regardless of cause, size, or complexity. To provide for interoperability and compatibility among Federal, State, local, and tribal capabilities, the NIMS includes a core set of concepts, principles, and terminology.

HSPD-5 identifies these as the ICS; multiagency coordination systems; training; identification and management of resources (including systems for classifying types of resources); qualification and certification; and the collection, tracking, and reporting of incident information and incident resources. National Response

National Incident Management System. Called for in Homeland Security Presidential Directive 5: This system will provide a consistent nationwide approach for Federal, State, and local governments to work effectively and efficiently together to prepare for, respond to, and recover from domestic incidents, regardless of cause, size, or complexity.

To provide for interoperability and compatibility among Federal, State, and local capabilities, the NIMS will include a core set of concepts, principles, terminology, and technologies covering the incident command system; multi-agency coordination systems; unified command; training; identification and management of resources (including systems for classifying types of resources); qualifications and certification; and the collection, tracking, and reporting of incident information and incident resources.

National Infrastructure Advisory Council (NIAC). The NIAC provides the President, through the Secretary of Homeland Security, with advice on the security of physical and cyber systems across all CI/KR [critical infrastructure, key resources] sectors. The Council is comprised of up to 30 members appointed by the President. Members are selected from the private sector, academia, and State and local governments. The Council was established (and amended) under Executive Orders 13231, 13286, and 13385.

National Infrastructure Coordinating Center (NICC). Part of the NOC, the NICC monitors the nation's critical infrastructure and key resources on an ongoing basis. During an incident, the NICC provides a coordinating forum to share information across infrastructure and key resources sectors through appropriate information-sharing entities such as the Information Sharing and Analysis Centers and the Sector Coordinating Councils.

National Infrastructure Inventory. The inventory addresses the physical, cyber, and human elements of each asset, system, network, or function under consideration. The compilation process relies on the substantial body of previous assessments that have been completed for natural disasters, industrial accidents, and other incidents. The inventory includes basic information on the relationships, dependencies, and interdependencies between various assets, systems, networks, and functions; on service providers, such as schools and businesses, that may be of relevance to more than one sector; and on the foreign assets, systems, networks, and functions on which U.S. CI/KR may rely. The inventory also includes a cyber data framework that is used to characterize each sector's unique cyber assets, systems, networks, or functions.

National Infrastructure Protection Plan (NIPP) Senior Leadership Council. NIPP Senior Leadership Council: The NIPP Leadership Council will bring together the leadership of the federal agencies engaged in critical infrastructure protection, critical infrastructure owners and operators and Homeland Security Advisors to lead, integrate, and coordinate implementation and enhancement of the NIPP through the following activities: forging consensus on critical infrastructure protection actions, evaluating and promoting implementation of risk management- based infrastructure protection programs, information sharing, advancing collaboration within and across sectors, and evaluating and reporting on progress. The NIPP Senior Leadership Council is supported by the Cross-Government Coordinating Council and Cross-Sector Coordinating Council.

National Infrastructure Protection Plan Purpose. The purpose of the NIPP is to build a safer, more secure, and more resilient America by enhancing protection of the Nation's CI/KR to prevent, deter, neutralize, or mitigate the effects of deliberate efforts by terrorists to destroy, incapacitate, or exploit them; and to strengthen national preparedness, timely response, and rapid recovery in the event of an attack, natural disaster, or other emergency.

National Infrastructure Protection Plan. The National Infrastructure Protection Plan (NIPP) and supporting Sector-Specific Plans (SSPs) provide a coordinated approach to critical infrastructure and key resources (CI/KR) protection roles and responsibilities for federal, state, local, tribal, and private sector security partners. The NIPP sets national priorities, goals, and requirements for effective distribution of funding and resources which will help ensure that our government, economy, and public services continue in the event of a terrorist attack or other disaster.

The plan is based on the following: 1. Strong public-private partnerships which will foster relationships and facilitate coordination within and across CI/KR sectors. 2. Robust multi-directional information sharing which will enhance the ability to assess risks, make prudent security investments, and take protective action. 3. Risk management framework establishing processes for combining

consequence, vulnerability, and threat information to produce a comprehensive, systematic, and rational assessment of national or sector risk.

National Infrastructure Protection Program. The National Infrastructure Protection Plan (NIPP) provides the unifying structure for the integration of critical infrastructure and key resources (CI/KR) protection into a single national program. The NIPP provides an overall framework for programs and activities that are currently underway in the various sectors, as well as new and developing CI/KR protection efforts. This collaborative effort between the private sector; State, Territorial, local, and tribal governments; nongovernmental organizations; and the Federal Government will result in the prioritization of protection initiatives and investments across sectors. It also will ensure that resources are applied where they offer the most benefit for mitigating risk by lowering vulnerabilities, deterring threats, and minimizing the consequences of terrorist attacks and other incidents.

National Integration Center (NIC). Homeland Security Presidential Directive-5 (HSPD-5) required the Secretary of Homeland Security to establish a mechanism for ensuring the ongoing management and maintenance of NIMS including regular consultation with other Federal departments and agencies, State, tribal, and local stakeholders, and with the private sector and NGOs. The NIC provides strategic direction, oversight, and coordination of NIMS and supports both routine maintenance and the continuous refinement of NIMS and its components.

The NIC oversees and coordinates all aspects of NIMS, including the development of compliance criteria and implementation activities at Federal, State, tribal, and local levels. It provides guidance and support to jurisdictions and emergency management/response personnel and their affiliated organizations as they adopt or, consistent with their status, are encouraged to adopt the system. The NIC also oversees and coordinates the publication of NIMS and its related products. This oversight includes the review and certification of training courses and exercise information.

National Nuclear Security Administration (NNSA). Established by Congress in 2000, NNSA is a semi-autonomous agency within the U.S. Department of Energy responsible for enhancing national security through the military application of nuclear science. NNSA maintains and enhances the safety, security, reliability and performance of the U.S. nuclear weapons stockpile without nuclear testing; works to reduce global danger from weapons of mass destruction; provides the U.S. Navy with safe and effective nuclear propulsion; and responds to nuclear and radiological emergencies in the United States and abroad.

National Oil and Hazardous Substances Pollution Contingency Plan (NCP). Commonly referred to as the National Contingency Plan, or NCP. The first National Contingency Plan was developed and published in 1968 in response to a massive oil spill from the oil tanker Torrey Canyon off the coast of England the year before. To avoid the problems faced by response officials involved in this incident, U.S. officials developed a coordinated approach to cope with potential spills in U.S. waters. The 1968 plan provided the first comprehensive system of accident reporting, spill containment, and cleanup, and established a response headquarters, a national reaction team, and regional reaction teams. Congress has broadened the scope of the National Contingency Plan over the years.

As required by the Clean Water Act of 1972, the NCP was revised the following year to include a framework for responding to hazardous substance spills as well as oil discharges. Following the passage of Superfund legislation in 1980, the NCP was broadened to cover releases at hazardous waste sites requiring emergency removal actions. Over the years, additional revisions have been

made to the NCP to keep pace with the enactment of legislation. The latest revisions to the NCP were finalized in 1994 to reflect the oil spill provisions of the Oil Pollution Act of 1990.

National Oil and Hazardous Substances Pollution Contingency Plan, or **National Contingency Plan.** A national plan published in 40 CFR 300 to provide the organizational structure and procedures for federal preparation for and response to discharges of oil and releases of hazardous substances.

National Operations Center (NOC). The DHS National Operations Center (NOC) is responsible for facilitating homeland security coordination across the Federal mission areas of prevention, protection, response and recovery. The NOC serves as the national fusion center, collecting and synthesizing all-source information to determine if there is a terrorist nexus. The NOC also shares all-threats and all-hazards information across the spectrum of homeland security partners. Federal departments and agencies should report information regarding actual or potential incidents requiring a coordinated Federal response to the NOC.

National Operations Center. National Operations Center is the principal operations center for the Department [DHS] and shall (1) provide situational awareness and a common operating picture for the entire Federal Government, and for State, local, and tribal governments as appropriate, in the event of a natural disaster, act of terrorism, or other man-made disaster; and (2) ensure that critical terrorism and disaster-related information reaches government decisionmakers.

National Plan for Telecommunications Support in Non-Wartime Emergencies. The National Plan for Telecommunications Support in Non-Wartime Emergencies provides procedures for planning and using National telecommunications assets and resources in support of non-wartime emergencies, including those covered by the Disaster Relief Act of 1974, in Presidentially declared Emergencies and Major Disasters, Extraordinary Situations, and other emergencies.

National Planning Scenarios. The 15 National Planning Scenarios.collectively depict a diverse set of high-consequence threat scenarios regarding both potential terrorist attacks and natural disasters. Collectively, these scenarios are designed to focus contingency planning for homeland security preparedness work at all levels of government and with the private sector. The 15 scenarios form the basis for coordinated Federal planning, training and exercises.

National Planning Scenarios. While preparedness applies across the all-hazards spectrum, the 2002 National Strategy for Homeland Security attaches special emphasis to preparing for catastrophic threats with the greatest risk of mass casualties, massive property loss, and immense social disruption. To illustrate the potential scope, magnitude, and complexity of a range of major events, the Homeland Security Council—in partnership with the Department of Homeland Security (DHS), other Federal departments and agencies, and State, local, tribal, and territorial governments—developed the National Planning Scenarios. The 15 Scenarios include terrorist attacks, major disasters, and other emergencies. Planners are not precluded from developing their own scenarios to supplement the National Planning Scenarios.

National Planning Scenarios..the Federal planning structure calls for three types of plans for each of the 15 National Planning Scenarios: (1) a DHS Strategic Guidance Statement and Strategic Capabilities Plan that together define the broad national priorities and capabilities required to prevent, protect against, respond to and recover from domestic incidents; (2) a National-Level Interagency Concept Plan (CONPLAN) that integrates the operational activities of the Federal interagency into a single strategic scenario plan to achieve the objectives described in the strategic guidance statement and strategic capabilities plan; and (3) Federal Department and Agency

Operations Plans (OPLANs) developed by and for each Federal department or agency depicting specifically how the organization will fulfill the requirements of the pertinent CONPLAN.

National Preparedness Goal Vision. To engage Federal, State, local, and tribal entities, their private and non-governmental partners, and the general public to achieve and sustain risk-based target levels of capability to prevent, protect against, respond to, and recover from major events in order to minimize the impact on lives, property, and the economy.

National Preparedness Goal. A requirement of HSPD-8 to define standards for preparedness assessments and strategies, and a system for assessing the Nation's overall preparedness to respond to major events, especially those involving acts of terrorism. The Goal establishes measurable priorities, targets, and a common approach to developing needed capabilities. The Goal includes seven priorities for national preparedness: two overarching priorities and five priorities to build specific capabilities.

The overarching priorities of the National Preparedness Goal are to: 1. Implement the National Incident Management System and National Response Plan Expand regional collaboration. 2. Implement the Interim National Infrastructure Protection Plan. The priorities for specific capabilities are to: A. Strengthen information sharing and collaboration capabilities; Strengthen interoperable communications capabilities. B. Strengthen chemical, biological, radiation, nuclear, and explosive weapons (CBRNE) detection, response, and decontamination capabilities. C. Strengthen medical surge and mass prophylaxis capabilities.

National Preparedness Guidelines, Lead Agency Implementation Requirements. The National Preparedness Guidelines (Guidelines) are formally established upon issuance and supersede the Interim National Preparedness Goal issued on March 31, 2005. The Guidelines provide an overarching vision, tools, and priorities to shape national preparedness. The Guidelines do not include an implementation plan; implementation will occur over time through a wide range of Federal, State, local, tribal, and territorial preparedness programs and activities. For example, Federal program offices will develop detailed plans that describe how their programs support Guidelines implementation in consultation with their stakeholders. Those details must be reflected in annual program guidance, in the form of measurable objectives and requirements. DHS will monitor those efforts and advise program offices and DHS leadership on progress and opportunities to improve synchronization. Implementation and feedback will inform future refinement of the Guidelines.

National Preparedness Guidelines, Purposes: 1. Organize and synchronize national (including Federal, State, local, tribal, and territorial) efforts to strengthen national preparedness. 2. Guide national investments in national preparedness. 3. Incorporate lessons learned from past disasters into national preparedness priorities. 4. Facilitate a capability-based and risk-based investment planning process; and Establish readiness metrics to measure progress and a system for assessing the Nation's overall preparedness capability to respond to major events, especially those involving acts of terrorism.

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National Preparedness Guidelines, Four Critical Elements: The National Preparedness Guidelines package is comprised of four critical elements: 1. The National Preparedness Vision, which provides a concise statement of the core preparedness goal for the nation. 2. The 15 National Planning Scenarios, which collectively depict a diverse set of high- consequence threat scenarios regarding both potential terrorist attacks and natural disasters. Collectively, these scenarios are designed to focus contingency planning for homeland security preparedness work at all levels of government and with the private sector. The 15 scenarios form the basis for coordinated Federal planning, training and exercises. 3. The Universal Task List, which is a menu of some 1,600 unique tasks that can facilitate efforts to prevent, protect against, respond to and recover from the major events that are represented by the National Planning Scenarios. It presents a common vocabulary and identifies key tasks that support development of essential capabilities among organizations at all levels.

Of course, no entity will perform every task. Instead, this task list was used to assist in creating the Target Capabilities List. It is included in the Guidelines package as a reference for interested jurisdictions. 4. The Target Capabilities List, which defines 37 specific capabilities that communities, the private sector and all levels of government should possess in order to respond effectively to disasters.

National Preparedness Integration Program (NPIP). Through the NPIP, FEMA will integrate and synchronize strategic tools, including the National Incident Management System, National Response Plan, National Infrastructure Plan and the National Preparedness Goal into a national operational capability. The NPIP will ensure development of preparedness processes that foster harmonized day-to-day routine interaction of disciplines, organizations, levels of government and our citizens. NPIP's capability requires partnerships at the headquarters level, among those in the field and on the front line.

National Preparedness Network (PREPnet). The Preparedness Network (PREPnet) is a satellite-based distance learning system used by [FEMA/National Emergency Training Center] to bring interactive training programs into virtually any community nationwide.

National Preparedness System. DHS will coordinate the establishment of a national-level structure and process for the ongoing management and maintenance of the Guidelines. This will be closely coordinated with similar structures and processes for the NIMS, NRP, NIPP, and other elements of the National Preparedness System in order to help ensure national policy and planning for operations and preparedness are mutually supportive. DHS is committed to working with its homeland security partners in updating and maintaining the Guidelines and related documents as part of a unified National Preparedness System, which will help ensure coordinated strategies, plans, procedures, policies, training, and capabilities at all levels of government.

Implementation of the National Preparedness System is well under way. It is building on assessments of risk, development of management policies and strategies, identification of specific missions and supporting tasks in comprehensive plans, and matching of capabilities against

requirements to execute these policies, strategies, and plans. Federal, State, local, tribal, and territorial governments will participate in assessments of readiness on a regular basis. The National Preparedness System will emphasize feedback and periodic reassessment to ensure the current state of preparedness is based on readiness metrics and is used as the basis for policy and programmatic decisions.

National Preparedness System. The President, acting through the [FEMA] Administrator, shall develop a national preparedness system to enable the Nation to meet the national preparedness goal. (b) COMPONENTS.—The national preparedness system shall include the following components: (1) Target capabilities and preparedness priorities. (2) Equipment and training standards. (3) Training and exercises. (4) Comprehensive assessment system. (5) Remedial action management program. (6) Federal response capability inventory. (7) Reporting requirements. (8) Federal preparedness.

National Preparedness. National Preparedness involves a continuous cycle of activity to develop the elements (e.g., plans, procedures, policies, training, and equipment) necessary to maximize the capability to prevent, protect against, respond to, and recover from domestic incidents, especially major events that require coordination among an appropriate combination of Federal, State, local, tribal, private sector, and non-governmental entities, in order to minimize the impact on lives, property, and the economy.

National Processing Services Center (NPSC). The National Processing Services Center (NPSC) is responsible for processing registrations for assistance that have been filed by individuals affected by a disaster. This includes: 1. Gathering and reviewing information in order to consider the eligibility of applicants who have been referred to the Disaster Housing Assistance program. 2. Responding to the questions, concerns, and issues of those who have been referred to the Disaster Housing Assistance program. 3. Maintaining records for individuals who have been referred to the SBA. 4. Maintaining records for applicants who have been referred to the Individual and Households Program along with various other Federal, State, local, and voluntary agencies engaged in providing assistance to those individuals affected by a disaster.

National Response Center (NRC). A national communications center for activities related to oil and hazardous substance response actions. The NRC, located at DHS/USCG Headquarters in Washington, DC, receives and relays notices of oil and hazardous substances releases to the appropriate Federal OSC.

National Response Coordination Center (NRCC). FEMA Headquarters Emergency Operations Center. The NRCC, a component of the NOC, is FEMA's primary operations management center for most, but not all, national incident response and recovery incidents, as well as the focal point for national resource coordination. As a 24/7 operations center, the NRCC monitors potential or developing incidents and supports the efforts of regional and field components. The NRCC has well-tested capabilities within DHS to connect directly by video teleconference to all State EOCs and to FEMA regional emergency response support structures.

The NRCC also has the capacity to surge staffing immediately in anticipation of or in response to a national incident by activating the full range of ESF teams and other personnel as needed to provide resources and policy guidance to a JFO or other local incident management structures, as needed for incident response. The NRCC provides overall incident management coordination, conducts operational planning, deploys national-level entities and collects and disseminates incident information as it builds and maintains a common operating picture.

National Response Framework (NRF) Advance Readiness Activities. There are times when we are able to anticipate impending or emergent events that will require a national response, such as an upcoming hurricane season, a potential pandemic, or a period of heightened terrorist threat. We must capitalize on this critical window of opportunity to increase readiness activities. For example, we can pre-identify needs and fill gaps in our current capabilities or resources that will be required to address the specific nature of the forthcoming incident. We also will pre-position commodities such as water, ice, emergency meals, tarps, and other disaster supplies so they will be readily available for use. Additional advance readiness activities include establishing contracts with the private sector prior to an incident and developing pre-negotiated agreements with Federal departments and agencies to ensure that appropriate Federal resources are available during a crisis.

Purpose: The Catastrophic Incident Annex to the National Response Framework (NRF-CIA) establishes the context and overarching strategy for implementing and coordinating an accelerated, proactive national response to a catastrophic incident. A more detailed and operationally specific National Response Framework Catastrophic Incident Supplement (NRF- CIS) is published independently of the NRF and annexes. Scope. Recognizing that Federal and/or national resources are required to augment overwhelmed State, tribal, and local response efforts, the NRF-CIA establishes protocols to preidentify and rapidly deploy key essential resources (e. g., medical teams, urban search and rescue teams, transportable shelters, medical and equipment caches, etc.) that are expected to be urgently needed/required to save lives and contain incidents. Accordingly, upon designation by the Secretary of Homeland Security of a catastrophic incident, Federal resources, organized into incident-specific packages, deploy in accordance with the NRF-CIS and in coordination with the affected State and incident command structure.

Where State, tribal, or local authorities are unable to establish or maintain an effective incident command structure due to catastrophic conditions, the Federal Government, at the direction of the Secretary of Homeland Security may establish a unified command structure to save lives, protect property, secure critical infrastructure/key resources, contain the event, and protect national security. The Federal Government shall transition to its normal role supporting incident command through State, tribal, or local authorities when their command is reestablished.

National Response Framework (NRF) Doctrine. Incidents that begin with a single response discipline within one jurisdiction may quickly expand to multi-disciplinary, multi-jurisdictional incidents that require additional resources and capabilities. In order to ensure high-level organization and efficiency among multiple actors in these challenging and complex environments, the response community must rely on fundamental principles that guide the full range of response activities.

NIMS forms the backbone of this doctrine and includes, among other things, an Incident Command System as the overall management structure for responding to an incident as well as the concept of Unified Command, which provides for and enables joint decisions and action based on mutually agreed-upon objectives, priorities, and plans among all homeland partners involved in the response effort without affecting individual agency authority, responsibility, or accountability. We will continue to expand and refine the full set of fundamental doctrinal principles underlying our National Response Framework. For example, we will incorporate and further emphasize the concept of readiness to act that is imperative for no- notice incidents as well as incidents that have the potential to expand rapidly in size, scope, or complexity.

Through the framework, we will encourage engaged partnerships in which all organizations establish shared objectives, assess their capabilities, identify gaps, and work collaboratively to fill

those gaps well in advance of an incident. We also will underscore that our national response must be scalable, flexible, and adaptable to respond to the full range of potential incidents that our Nation could confront.

National Response Framework (NRF). The purpose of the National Response Framework is to establish a comprehensive, national, all-hazards approach to domestic incident response. The Framework presents an overview of key response principles, roles and structures that guide the national response. It describes how communities, States, the Federal Government and private- sector and nongovernmental partners apply these principles for a coordinated, effective national response. And, it describes special circumstances where the Federal Government exercises a larger role, including incidents where Federal interests are involved and catastrophic incidents where a State would require significant support. Its real value, however, is in how these elements come together and are implemented by first responders, decision-makers and supporting entities to provide a unified national response.

The Framework is written for senior elected and appointed leaders, such as Federal agency heads, State Governors, tribal leaders, mayors or city managers — those who have a responsibility to provide for effective incident management. At the same time, it informs emergency management practitioners, explaining the operating structures and tools used routinely by first responders and emergency managers at all levels of government. The Framework document is richly augmented with online access to supporting documents, further training and a source for exchanging lessons learned.

National Response Framework Purpose. The purpose of the National Response Framework is to establish a comprehensive, national, all-hazards approach to domestic incident response. The Framework presents an overview of key response principles, roles and structures that guide the national response. It describes how communities, States, the Federal Government and private-sector and nongovernmental partners apply these principles for a coordinated, effective national response. And, it describes special circumstances where the Federal Government exercises a larger role, including incidents where Federal interests are involved and catastrophic incidents where a State would require significant support. Its real value, however, is in how these elements come together and are implemented by first responders, decision-makers and supporting entities to provide a unified national response.

National Response Plan (NRP) Purpose. The purpose of the NRP is to establish a comprehensive, national, all-hazards approach to domestic incident management across a spectrum of activities including prevention, preparedness, response, and recovery. The NRP incorporates best practices and procedures from various incident management disciplines—homeland security, emergency management, law enforcement, firefighting, hazardous materials response, public works, public health, emergency medical services, and responder and recovery worker health and safety—and integrates them into a unified coordinating structure.

National Response Plan (NRP). Homeland Security Presidential Directive (HSPD)-5, Management of Domestic Incidents, requires the creation of a National Response Plan (NRP) to integrate Federal Government prevention, preparedness, response, recovery and mitigation plans into one all-discipline, all-hazard approach to domestic incident management. The NRP, using the National Incident Management System, is intended to provide the core organizational structure and operational mechanisms for Federal support to State and local authorities, implementation of direct Federal incident management authorities and responsibilities under the law, and full coordination of resources among Federal departments and agencies. This plan was developed through an inclusive

interagency, inter-jurisdictional process incorporating the expertise and recommendations of Federal, State, local, tribal, and private sector stakeholders.

National Response System (NRS). Our National Response System routinely and effectively responds to a wide range of oil and hazardous substance releases. It is a multi-layered system of individuals and teams from local, state, and federal agencies, industry, and other organizations that share expertise and resources to ensure that oil spill control and cleanup activities are timely and efficient, and that they minimize threats to human health and the environment. At the heart of the system is the National Contingency Plan (NCP).a regulation developed to ensure that the resources and expertise of the federal government are available immediately for oil or hazardous substance releases that are beyond the capabilities of local and state responders. The NCP provides the framework for the National Response System and establishes how it works.

National Response Team (NRT). The NRT, comprised of the 16 Federal agencies with major environmental and public health responsibilities, is the primary vehicle for coordinating Federal agency activities under the NCP. The NRT carries out national planning and response coordination and is the head of a highly organized Federal oil and hazardous substance emergency response network. EPA serves as the NRT Chair, and DHS/USCG serves as Vice Chair.

National Search and Rescue Committee (NSARC). The interagency Committee that oversees the NSP and serves as a federal coordinating forum for national civil SAR matters.

National Security and Homeland Security Strategy. Our understanding of homeland security continued to evolve after September 11, adapting to new realities and threats. As we waged the War on Terror both at home and abroad, our Nation endured Hurricane Katrina, the most destructive natural disaster in U.S. history. The human suffering and staggering physical destruction caused by Katrina were a reminder that threats come not only from terrorism, but also from nature. Indeed, certain non-terrorist events that reach catastrophic levels can have significant implications for homeland security.

The resulting national consequences and possible cascading effects from these events might present potential or perceived vulnerabilities that could be exploited, possibly eroding citizens' confidence in our Nation's government and ultimately increasing our vulnerability to attack. This Strategy therefore recognizes that effective preparation for catastrophic natural disasters and man-made disasters, while not homeland security per se, can nevertheless increase the security of the Homeland.

National Security and Natural Disasters. Natural disasters are not national security issues. The new strategy [NSHS 2007] places undue emphasis on responding to natural disasters. The federal government does have responsibilities in this area, and use of homeland security instruments like the Coast Guard and the National Guard is appropriate in disaster response efforts. However, hurricanes are not national security threats. Treating them as such threatens to cede greater power and authority to the executive branch. The expanded emphasis on natural disasters in the revised strategy was a knee-jerk reaction to criticism over the response to Katrina rather than a necessary change in strategic focus. The original homeland security strategy stressed that national disaster systems should be structured to respond to all hazards, both natural and manmade. That strategic guidance was sufficient.

National Security Emergency Preparedness Critical Functions. Six critical functions that have been identified for DOE during a continuity of government emergency, as follows: coordinate the provision of fuel resources (i.e. coal, natural gas, crude oil, and petroleum products and their

respective production/distribution systems) in support of emergency assistance/ restoration activities; develop a national recovery plan for fuel production/distribution; coordinate the provision of electric power in support of emergency assistance/restoration activities; coordinate the continued safe operation of nuclear power production facilities in support of emergency assistance/restoration activities; develop a national recovery plan for electric power production/distribution; and restore the manufacture, assembly, transport, and control of nuclear weapons or devices.

National security emergency. Any occurrence, including natural disaster, military attack, technological emergency, or other emergency, that seriously degrades or seriously threatens the national security of the United States.

National security professional development. By the authority vested in me as President by the Constitution and the laws of the United States of America, and in order to enhance the national security, it is hereby ordered as follows: Section 1. Policy. In order to enhance the national security of the United States, including preventing, protecting against, responding to, and recovering from natural and manmade disasters, such as acts of terrorism, it is the policy of the United States to promote the education, training, and experience of current and future professionals in national security positions (security professionals) in executive departments and agencies (agencies).

National Security Strategy of the United States. Our national security strategy is founded upon two pillars. The first pillar is promoting freedom, justice, and human dignity — working to end tyranny, to promote effective democracies, and to extend prosperity through free and fair trade and wise development policies. Free governments are accountable to their people, govern their territory effectively, and pursue economic and political policies that benefit their citizens. Free governments do not oppress their people or attack other free nations. Peace and international stability are most reliably built on a foundation of freedom.

The second pillar of our strategy is confronting the challenges of our time by leading a growing community of democracies. Many of the problems we face — from the threat of pandemic disease, to proliferation of weapons of mass destruction, to terrorism, to human trafficking, to natural disasters — reach across borders. Effective multinational efforts are essential to solve these problems. Yet history has shown that only when we do our part will others do theirs. America must continue to lead.

National Security Strategy of the United States. The U.S. national security strategy will be based on a distinctly American internationalism that reflects the union of our values and our national interests. The aim of this strategy is to help make the world not just safer but better. Our goals on the path to progress are clear: political and economic freedom, peaceful relations with other states, and respect for human dignity.

To achieve these goals, the United States will: champion aspirations for human dignity; strengthen alliances to defeat global terrorism and work to prevent attacks against us and our friends; work with others to defuse regional conflicts; prevent our enemies from threatening us, our allies, and our friends, with weapons of mass destruction; ignite a new era of global economic growth through free markets and free trade; expand the circle of development by opening societies and building the infrastructure of democracy; develop agendas for cooperative action with other main centers of global power; and transform America’s national security institutions to meet the challenges and opportunities of the twenty-first century.

National Security Telecommunications Advisory Committee (NSTAC). The NSTAC provides industry-based advice and expertise to the President on issues and problems related to implementing National Security and Emergency Preparedness (NS/EP) communications policy. The

NSTAC is comprised of up to 30 industry chief executives representing the major communications and network service providers and information technology, finance, and aerospace companies. It was created under Executive Order 12382.

National Shelter System. The National Shelter System (NSS) is a comprehensive database that provides relevant information for all shelters operated and reported through the NSS during response to disasters and emergencies. The information in the NSS is provided by the State, tribal, local, and nongovernmental entities that are operating these shelters.

National Special Security Event (NSSE). When an event is designated a National Special Security Event, the Secret Service assumes its mandated role as the lead federal agency for the design and implementation of the operational security plan and Federal resources are deployed to maintain the level of security needed for the event and the area. The goal of such an operation is to prevent terrorist attacks and criminal acts.

A number of factors are taken into consideration when designating an event as a National Special Security Event including a few outlined below: 1. Anticipated attendance by dignitaries — Events which are attended by officials of the United States Government and/or foreign dignitaries also may create an independent federal interest in ensuring that the event transpires without incident and that sufficient resources are brought to bear in the event of an incident. 2. Size of the event — a large number of attendees and participants generally increases the security requirements. In addition, larger events are more likely to draw the attention of terrorists or other criminals, particularly those interested in employing weapons of mass destruction. 3. Significance of the event — some events have historical, political and/or symbolic significance that may heighten concern about possible terrorist acts or other criminal activity.

National Strategy for Combating Terrorism. As laid out in this strategy, to win the War on Terror, we will: 1) advance effective democracies as the long-term antidote to the ideology of terrorism; 2) prevent attacks by terrorist networks; 3) deny terrorists the support and sanctuary of rogue states; 4) deny weapons of mass destruction to rogue states and terrorist allies who seek to use them; Deny terrorists control of any nation they would use as a base and launching pad for terror; and 5) lay the foundations and build the institutions and structures we need to carry the fight forward against terror and help ensure our ultimate success.

National Strategy for Homeland Security — Goal. The United States, through a concerted national effort that galvanizes the strengths and capabilities of Federal, State, local, and Tribal governments; the private and non-profit sectors; and regions, communities, and individual citizens — along with our partners in the international community — will work to achieve a secure Homeland that sustains our way of life as a free, prosperous, and welcoming America. In order to realize this vision, the United States will use all instruments of national power and influence — diplomatic, information, military, economic, financial, intelligence, and law enforcement — to achieve our goals to prevent and disrupt terrorist attacks; protect the American people, critical infrastructure, and key resources; and respond to and recover from incidents that do occur. We also will continue to create, strengthen, and transform the principles, systems, structures, and institutions we need to secure our Nation over the long term. This is our strategy for homeland security.

National Strategy for Homeland Security — Purpose. The purpose of our Strategy is to guide, organize, and unify our Nation's homeland security efforts. It provides a common framework by which our entire Nation should focus its efforts on the following four goals: 1. Prevent and disrupt terrorist attacks. 2. Protect the American people, our critical infrastructure, and key resources.

3. Respond to and recover from incidents that do occur. 4. Continue to strengthen the foundation to ensure our long-term success. While the first three goals help to organize our national efforts, the last goal entails creating and transforming our homeland security principles, systems, structures, and institutions. This includes applying a comprehensive approach to risk management, building a culture of preparedness, developing a comprehensive Homeland Security Management System, improving incident management, better utilizing science and technology, and leveraging all instruments of national power and influence.

National Strategy for Homeland Security — Shared Responsibility. To best protect the American people, homeland security must be a responsibility shared across our entire Nation. As we further develop a national culture of preparedness, our local, Tribal, State, and Federal governments, faith-based and community organizations, and businesses must be partners in securing the Homeland.

National Strategy for Homeland Security (2002) Critical Mission Areas. The National Strategy for Homeland Security aligns and focuses homeland security functions into six critical mission areas: intelligence and warning, border and transportation security, domestic counterterrorism, protecting critical infrastructure, defending against catastrophic terrorism, and emergency preparedness and response. The first three mission areas focus primarily on preventing terrorist attacks; the next two on reducing our Nation's vulnerabilities; and the final one on minimizing the damage and recovering from attacks that do occur. The Strategy provides a framework to align the resources of the federal budget directly to the task of securing the homeland.

The National Strategy for Homeland Security identifies twelve major initiatives in [Emergency Preparedness and Support]: 1. Integrate separate federal response plans into a single all-discipline incident management plan. 2. Create a national incident management system. 3. Improve tactical counterterrorist capabilities. 4. Enable seamless communication among all responders. 5. Prepare health care providers for catastrophic terrorism. 6. Augment America's pharmaceutical and vaccine stockpiles. 7. Prepare for chemical, biological, radiological, and nuclear decontamination. 8. Plan for military support to civil authorities. 9. Build the Citizen Corps. 10. Implement the First Responder Initiative of the Fiscal Year 2003 Budget. 11. Build a national training and evaluation system. 12. Enhance the victim support system.

National Strategy for Homeland Security (2002). The National Strategy for Homeland Security. creates a comprehensive plan to enhance our protection and reduce our vulnerability to terrorist attacks. The strategic objectives of homeland security in order of priority are to: 1) prevent terrorist attacks within the United States; 2) reduce America's vulnerability to terrorism; and 3) minimize the damage and recover from attacks that do occur.

National Strategy for Information Sharing, Foundational Elements. This Strategy is focused on improving the sharing of homeland security, terrorism, and law enforcement information related to terrorism within and among all levels of governments and the private sector: 1. Information Sharing at the Federal level. 2. Information Sharing with State, local, and Tribal Entities. 3. Information Sharing with the private Sector. 4. Sharing Information with Foreign Partners. 5. Protecting information Privacy and other Legal Rights.

National Strategy for Information Sharing, Guiding Principles. Those responsible for combating terrorism must have access to timely and accurate information regarding those who want to attack us, their plans and activities, and the targets that they intend to attack. That information guides our efforts to: identify rapidly both immediate and long-term threats; identify persons

involved in terrorism-related activities; and implement information-driven and risk-based detection, prevention, deterrence, response, protection, and emergency management efforts.

National Strategy for Information Sharing. Improving information sharing in the post-September 11 world requires an environment that supports the sharing of information across all levels of government, disciplines, and security domains. As with our achievements to date, an improved information sharing environment will not be constructed overnight, but rather will evolve over time and will be the fruit of careful cultivation. An improved information sharing environment also will be constructed upon a foundation of trusted partnerships among all levels of government, the private sector, and our foreign allies—partnerships based on a shared commitment to detect, prevent, disrupt, preempt, and mitigate the effects of terrorism. This Strategy sets forth the Administration's vision of what improvements are needed and how they can be achieved. The Strategy was developed with the understanding that homeland security information, terrorism information, and law enforcement information related to terrorism can come from multiple sources, all levels of government, as well as from private sector organizations and foreign sources. Federal, State, local, and tribal government organizations use such information for multiple purposes.

In addition to traditional law enforcement uses, such information is used to (1) support efforts to prevent terrorist attacks, (2) develop critical infrastructure protection and resilience plans, (3) prioritize emergency management, response, and recovery planning activities, (4) devise training and exercise programs, and (5) determine the allocation of funding and other resources for homeland security-related purposes.

The **Strategy** is founded on the following core principles and understandings: 1. Effective information sharing comes through strong partnerships among Federal, State, local, and tribal authorities, private sector organizations, and our foreign partners and allies. 2. Information acquired for one purpose, or under one set of authorities, might provide unique insights when combined, in accordance with applicable law, with unrelated information from other sources, and therefore we must foster a culture of awareness in which people at all levels of government remain cognizant of the functions and needs of others and use knowledge and information from all sources to support counterterrorism efforts. 3. Information sharing must be woven into all aspects of counterterrorism activity, including preventive and protective actions, actionable responses, criminal and counterterrorism investigative activities, event preparedness, and response to and recovery from catastrophic events. 4. The procedures, processes, and systems that support information sharing must draw upon and integrate existing technical capabilities and must respect established authorities and responsibilities. 5. State and major urban area fusion centers represent a valuable information sharing resource and should be incorporated into the national information sharing framework, which will require that fusion centers achieve a baseline level of capability to gather, process, share, and utilize information and operate in a manner that respects individuals' privacy rights and other legal rights protected by U.S. laws.

National Strategy for Pandemic Influenza. The National Strategy for Pandemic Influenza guides our preparedness and response to an influenza pandemic, with the intent of (1) stopping, slowing or otherwise limiting the spread of a pandemic to the United States; (2) limiting the domestic spread of a pandemic, and mitigating disease, suffering and death; and (3) sustaining infrastructure and mitigating impact to the economy and the functioning of society.

National Strategy for Public Health and Medical Preparedness. This directive establishes a National Strategy for Public Health and Medical Preparedness (Strategy), which builds upon principles set forth in Biodefense for the 21st Century (April 2004) and will transform our national approach to protecting the health of the American people against all disasters. This Strategy draws key principles from the National Strategy for Homeland Security (October 2007), the National Strategy to Combat Weapons of Mass Destruction (December 2002), and Biodefense for the 21st Century (April 2004) that can be generally applied to public health and medical preparedness.

Those key principles are the following: (1) preparedness for all potential catastrophic health events; (2) vertical and horizontal coordination across levels of government, jurisdictions, and disciplines; (3) a regional approach to health preparedness; (4) engagement of the private sector, academia, and other nongovernmental entities in preparedness and response efforts; and (5) the important roles of individuals, families, and communities. Present public health and medical preparedness plans incorporate the concept of surging existing medical and public health capabilities in response to an event that threatens a large number of lives. The assumption that conventional public health and medical systems can function effectively in catastrophic health events has, however, proved to be incorrect in real- world situations. Therefore, it is necessary to transform the national approach to health care in the context of a catastrophic health event in order to enable U.S. public health and medical systems to respond effectively to a broad range of incidents.

The most effective complex service delivery systems result from rigorous end-to-end system design. A critical and formal process by which the functions of public health and medical preparedness and response are designed to integrate all vertical (through all levels of government) and horizontal (across all sectors in communities) components can achieve a much greater capability than we currently have. The United States has tremendous resources in both public and private sectors that could be used to prepare for and respond to a catastrophic health event. To exploit those resources fully, they must be organized in a rationally designed system that is incorporated into pre-event planning, deployed in a coordinated manner in response to an event, and guided by a constant and timely flow of relevant information during an event. This Strategy establishes principles and objectives to improve our ability to respond comprehensively to catastrophic health events. It also identifies critical antecedent components of this capability and directs the development of an implementation plan that will delineate further specific actions and guide the process to fruition.

National Strategy to Combat Weapons of Mass Destruction. The three pillars of the U.S. national strategy to combat WMD are seamless elements of a comprehensive approach. Serving to integrate the pillars are four cross-cutting enabling functions that need to be pursued on a priority basis: intelligence collection and analysis on WMD, delivery systems, and related technologies; research and development to improve our ability to respond to evolving threats; bilateral and multilateral cooperation; and targeted strategies against hostile states and terrorists.

National Strategy to Secure Cyberspace. The National Strategy to Secure Cyberspace is part of our overall effort to protect the Nation. It is an implementing component of the National Strategy for Homeland Security and is complemented by a National Strategy for the Physical Protection of

Critical Infrastructures and Key Assets. The purpose of this document is to engage and empower Americans to secure the portions of cyberspace that they own, operate, control, or with which they interact. Securing cyberspace is a difficult strategic challenge that requires coordinated and focused effort from our entire society, the federal government, state and local governments, the private sector, and the American people.

National Strike Force (NSF). The NSF consists of three strike teams established by DHS/USCG on the Pacific, Atlantic, and Gulf coasts. The strike teams can provide advice and technical assistance for oil and hazardous substances removal, communications support, special equipment, and services.

National Tsunami Hazard Mitigation Program. A coordinated national effort to assess tsunami threat, prepare community response, issue timely and effective warnings, and mitigate damage. Primary goals of NTHMP are to: 1) raise awareness of the affected population; 2) develop integrated tsunami maps and models that can be used to develop improved warning guidance and evacuation maps; 3) improve tsunami warning systems; 4) incorporate tsunami planning into state and federal multi-hazard programs. Because tsunami mitigation is applicable beyond tsunamis and is integral to the nation's overall effort to reduce coastal losses and improve resilience, the mitigation capability takes a multi-hazards physical, commercial and ecological approach that responds to socio-economic and disaster management priorities.

National Urban Search & Rescue Response System. The National US&R Response System is a framework for structuring local emergency services personnel into integrated disaster response task forces. The 28 National US&R Task Forces, complete with the necessary tools, equipment, skills and techniques, can be deployed by FEMA to assist State and local governments in rescuing victims of structural collapse incidents or to assist in other search and rescue missions. Each task force must have all its personnel and equipment at the embarkation point within six hours of activation. The task force can be dispatched and en route to its

National Voluntary Organizations Active in Disasters (NVOAD). NVOAD coordinates planning efforts by many voluntary organizations responding to disaster. Member organizations provide more effective and less duplication in service by getting together before disasters strike. Once disasters occur, NVOAD or an affiliated state VOAD encourages members and other voluntary agencies to convene on site. This cooperative effort has proven to be the most effective way for a wide variety of volunteers and organizations to work together in a crisis. NVOAD serves member organizations through: 1. Communication — disseminating information through electronic mechanisms, its Newsletter, the directory, research and demonstration, case studies, and critique. 2. Cooperation — creating a climate for cooperation at all levels (including grass roots) and providing information. 3. Coordination — coordinating policy among member organizations and serving as a liaison, advocate, and national voice. 4. Education — providing training and increasing awareness and preparedness in each organization. 5. Leadership Development — giving volunteer leaders training and support so as to build effective state VOAD organizations. 6. Mitigation — supporting the efforts of federal, state, and local agencies and governments and supporting appropriate legislation. 7. Convening Mechanisms — putting on seminars, meetings, board meetings, regional conferences, training programs, and local conferences. 8. Outreach — encouraging the formation of and giving guidance to state and regional voluntary organizations active in disaster relief.

National Wildfire Coordinating Group (NWCG). The National Wildfire Coordinating Group (NWCG) is made up of the USDA Forest Service; four Department of the Interior agencies: Bureau of Land Management (BLM), National Park Service (NPS), Bureau of Indian Affairs (BIA), and the Fish and Wildlife Service (FWS);and State forestry agencies through the National Association of State Foresters. The purpose of NWCG is to coordinate programs of the participating wildfire management agencies so as to avoid wasteful duplication and to provide a means of constructively working together. Its goal is to provide more effective execution of each agency's fire management program. The group provides a formalized system to agree upon standards of training, equipment, qualifications, and other operational functions.

Natural disaster. Definitions — for purposes of this title only. The term 'natural disaster' means any hurricane, tornado, storm, flood, high water, wind-driven water, tidal wave, tsunami, earthquake, volcanic eruption, landslide, mudslide, snowstorm, drought, fire, or other catastrophe in any part of the United States which causes, or which may cause, substantial damage or injury to civilian property or persons.

Natural gas. Gaseous hydrocarbons (mainly methane) from underground deposits, the production of which may be associated with the production of crude petroleum. The gas is described as 'wet' or 'dry' according to the proportion of readily condensable hydrocarbons which it contains. This term also applies to the purified product.

Natural hazard. Any hazard produced primarily by forces of nature that result in human or property impact of sufficient severity to be deemed an emergency (see definition of an emergency). Natural hazards include hurricane, tornado, storm, flood, high water, wind- driven water, tidal wave, earthquake, drought, fire, infectious disease epidemic, or others.

Natural Phenomena hazard. An act of nature (e.g., earthquake, wind, hurricane, tornado, flood, precipitation (rain or snow), volcanic eruption, lightning strike, or extreme cold or heat) that poses a threat or danger to workers, the public, or to the environment by potential damage to structures, systems, and components.

Natural resources. Material source of wealth, such as timber, freshwater, or mineral deposit, etc. that occurs in a natural state and has economic value.

NAWAS. National Alert Warning System.

NCH. Natural and Cultural Resources and Historic Properties.

Near miss. Any sudden event which, but for mitigation effects, actions or systems, could have escalated to a major accident.

Necessity. An indispensable thing.

Need. The difference between requirements and supplies.

Needs assessment. A specific form of evaluation, distinct from performance evaluation, that focuses upon needs rather than upon system performance. It is performed with commonly used evaluation methodology: surveys, interviews, meeting reports and others. These may take place both for programmatic as well as response and recovery purposes. Needs assessments are commonly performed during the conceptualization phase of program development or radical revision (identifying the specific needs that a program should address) or during response and recovery, when it is unclear what the incident needs may be. For example, the modified cluster sampling done after Hurricane Andrew to assess Floridians' needs was a complex, formal response needs assessment. Conversely, a suggestion box is a very simple example of a programmatic needs assessment.

Need-to-Know. A determination, by persons having responsibility for classified information or matter, that a proposed recipient's access to such classified information or matter is necessary in the performance of official or contractual duties of employment under the cognizance of the Department of Energy.

Negative triage. In a disaster situation, the least seriously injured are evacuated before the most seriously injured. syn. 'reverse triage'.

Negligence. Failure to do a job or duty; an act or state of neglectfulness.

Negligible risks. Risks that are so small that there is no cause for concern about them, and no reason to take action to reduce them.

Nerve agent. A very toxic chemical that interferes with the transmission of nerve impulses and disrupts vital bodily functions such as breathing.

New FEMA. The Post-Katrina Emergency Management Reform Act reorganizes DHS by reconfiguring FEMA with consolidated emergency management functions, including national preparedness functions. The newly-constituted FEMA will be established as a distinct entity, yet integral to DHS, similar to the U.S. Coast Guard and U.S. Secret Service. As required by the Act, the New FEMA will include the functions existing within FEMA as of June 1, 2006 and those elements of the Preparedness Directorate that were in the Preparedness Directorate as of June 1, 2006 and not specifically excluded by the Act. The New FEMA will be headed by an Administrator, I have been asked to serve in the newly titled position of Administrator. As required by the Post-Katrina Act, the organizational changes required for New FEMA will be effective on March 31, 2007.

New Madrid Seismic Zone (NMSZ) Catastrophic Planning Initiative Mission. The mission of the New Madrid Seismic Zone Catastrophic Planning Project is to create a comprehensive preparedness plan for a catastrophic earthquake in the NMSZ based on the most advanced impact assessment techniques and new response and recovery methodologies. Another mission of the project is to identify any issues that can not be resolved based on current capabilities and propose recommended courses of action for decision makers.

New Madrid Seismic Zone (NMSZ) Catastrophic Response Planning Initiative. The New Madrid Seismic Zone Catastrophic Response Planning Initiative is well underway throughout the eight CUSEC Member States. The initiative will enable local, state, and federal agencies to create and adopt comprehensive plans that address responding to a catastrophic event along the New Madrid Seismic Zone. CUSEC, along with Member States, FEMA, Innovative Emergency Management, and the Mid America Earthquake Center, is helping to coordinate a series of local and state workshops that bring together key players in the planning process. The workshops are scenario-driven and inspire planners and responders to work together to come up with the plans. Arkansas is the first state holding the scenario-driven workshops, and all Member States will have completed their workshops by April 1, 2008. At the end of this multi-year initiative, there will be a series of exercises, at the state and regional levels, that will help validate the work that has been done. In most terms, this is the single, largest disaster planning initiative that has been undertaken in the United States.

Newton. The derived SI unit of force; the force required to give an acceleration of one metre per second to a mass of one kilogram.

NMSZ. New Madrid Seismic Zone.

No Adverse Impact. Concept developed by the Association of State Floodplain Managers to promote in efforts to reduce growing flood losses. No Adverse Impact centers on ensuring that the

actions of one property owner do not adversely impact the rights and interests of other property owners, now and in the future.

No duff. A code indicating that an emergency is real and not an exercise.

Noncongregate Facilities. Facilities that provide private or semiprivate accommodations, but are not considered temporary housing (e.g., cruise ships, tent cities, military installations, school dorm facilities, or modified nursing homes).

Nongovernmental Organization (NGO). An entity with an association that is based on interests of its members, individuals, or institutions and that is not created by a government, but may work cooperatively with government. Such organizations serve a public purpose, not a private benefit. Examples of NGOs include faith-based charity organizations and the American Red Cross.

Non-persistent pesticide. A pesticide that breaks down almost immediately or only lasts for a few weeks or less and turns into non- toxic by-products; may be broken down by light, moisture or microorganisms, or may evaporate.

Non-pre-registered volunteer. Volunteers who have not received prescreening, rostering, or briefing.

Nonreactor Nuclear Facility. Those activities or operations that involve radioactive and/or fissionable materials in such a form and quantity that a nuclear hazard potentially exists to the employees or the general public. Incidental use and generation of radioactive materials in facility operation (e.g., check and calibration sources, use of radioactive sources in research and experimental and analytical laboratory activities, electron microscope, and X-ray machines) would not ordinarily require the facility to be included in this definition. Transportation of radioactive materials, accelerators and reactors and their operations are not included.

The application of any rule to a nonreactor nuclear facility shall be applied using a graded approach. Included are activities or operations that: produce, process, or store radioactive liquid or solid waste, fissionable materials, or tritium; conduct separations operations; conduct irradiated materials inspections, fuel fabrication, decontamination, or recovery operations; conduct fuel enrichment operations; perform environmental remediation or waste management activities involving radioactive materials; or design, manufacture, or assemble items for use with radioactive materials and/or fissionable materials in such a form or quantity that a nuclear hazard potentially exists.

Non-Stafford Federal Support to State and Local Jurisdictions. If a community requires resources beyond those available from the State, local agencies may request certain types of Federal assistance directly from Federal departments and agencies. For example, under the Comprehensive Environmental Response, Compensation, and Liability Act, local and tribal governments can request assistance directly from the Environmental Protection Agency and/or the U.S. Coast Guard.

Non-structural elements. Those parts of a building (e.g. partitions, ceilings, etc.) which do not belong to the load-bearing system.

Northing. A horizontal line on a map which runs from east to west.

Notification report. The initial documented report, to DOE, of an event or condition that meets the reporting criteria defined in the Occurrence Reporting Requirements Documents. The Notification Report should consist of fields 1 through 19 of the Occurrence Report.

Notification. Information distributed to relevant personnel that contains important information regarding an actual or potential hazard impact and the response status of the organization. There are generally four categories of notification: *update, alert, advisory, and activation*.

Nowcast. A description of current weather and a short-period (0–2 hours) forecast.

Nuclear accident. Accidental release of radiation occurring in civil nuclear facilities, exceeding the internationally-established safety levels.

Nuclear Criticality Safety. The prevention or termination of inadvertent nuclear criticality, mitigation of consequences, and protection against injury or damage due to accidental nuclear criticality. Protection from the consequences of a criticality accident, preferably by prevention of the accident. This encompasses procedures, training, and other precautions, in addition to physical protection.

Nuclear Emergency Search Team. A DOE group of experts assigned responsibility to provide assistance in nuclear threat emergencies for the search and identification of any ionizing radiation-producing materials that may have been lost or stolen or may be associated with bomb threats or radiation dispersal threats.

Nuclear facility. A facility (e.g., Savannah River, Oak Ridge, etc.) for the production, utilization, storage or handling of Special Nuclear Material, including irradiated material that is of national security significance.

Nuclear hazard. All hazards existing from the use of, and exposure to radioactive substances.

Nuclear weapon incident. An unexpected event involving a nuclear weapon, facility, or component resulting in any of the following, but not constituting a nuclear weapon(s) accident: 1) An increase in the possibility of explosion or radioactive contamination; 2) Errors committed in the assembly, testing, loading, or transportation of equipment, and/or the malfunctioning of equipment and material that could lead to an unintentional operation of all or part of the weapon arming and/or firing sequence, or which could lead to a substantial change in yield, or increased dud probability; or 3) Any act of God, unfavorable environment, or condition resulting in damage to a weapon, facility, or component.

Nuclear weapon information (NWI). Restricted Data (RD) or Formerly Restricted Data (FRD) concerned with the design, manufacture, or utilization of: (1) atomic weapons, (2) atomic weapon components, or (3) atomic explosive devices. Nuclear Weapon information includes theory, development, storage, characteristics, performance, and effects of such items. (All nuclear weapon information is RD or FRD but not all RD or FRD is nuclear weapon information.)

Nutrition indicators. Calculations that permit to evaluate in quantified terms the nutritional changes that have occurred in a given population. Two kinds of indicators can be distinguished: food and nutrition indicators and indicators of the state of nutrition.

Nutritional deficiency. Absence or insufficiency, in the food or in the organism, of elements indispensable for nutrition.

N-year event. Magnitude of an event, the mean return period of which is N years.

O

Objective. The interim steps to achieving a goal. See Incident Objectives.

Objectives, control. These are broad organizational objectives (goals or desired end states related to the organizations mission) that change little during the response. The control objectives are not limited to any single operational period but will consider the total incident situation (NIMS Appendix A: The Incident Command System). An example would be to provide adequate care to patients presenting as a result of the hazard impact or to provide for the safety and welfare of healthcare facility personnel.

Objectives, incident. statements of guidance and direction necessary for selecting appropriate strategy(s) and the tactical direction of resources. Incident objectives are based on realistic expectations of what can be accomplished when all allocated resources have been effectively deployed. Incident objectives must be achievable and measurable, yet flexible enough to allow strategic and tactical alternatives.

Objectives, learning. A precise statement that describes what the student is to be capable of demonstrating, under the specified conditions, after successfully completing the instructional activity. In competency-based instruction, learning objectives should clearly and concisely describe the relevant competencies a student should be capable of performing after successful completion of the instructional experience.

Objectives, operational period. More specific objectives (compared to control objectives) for the organization to accomplish during a specific operational period (also called operational objectives). An example would be to establish procedure to provide prophylaxis of hospital staff.

Observer briefing. A briefing that should occur prior to the exercise to ensure compliance with safety and security precautions and other rules of conduct. Observers may attend the controller briefing or may be provided separate briefings.

Occupant Emergency Plan. The General Services Administration term for an annex to the EOP that describes the initial evacuation, shelter in place, and other reactive measures during the life-safety stages of an emergency that directly affects the facility. Also referred to by VHA as **Emergency Safety Procedures for Building Occupant,** or may be called the **Occupant Emergency Program or Procedures.**

Occupational Health. A professional discipline that focuses on the promotion and maintenance of physical and mental health in the work environment.

Occupational Safety and Health Agency (OSHA). A federal agency charted with the responsibility to ensure workplace safety.

Occurrence. An event or a condition that adversely affects, or may adversely affect, DOE or contractor personnel, the public, property, the environment, or the DOE mission. Events or conditions meeting the criteria threshold identified in DOE M 232.1-1A are occurrences.

Occurrence Investigation. Investigations conducted according to site specific procedures and when determined by DOE that a Type A or B is required by DOE procedures.

Occurrence Report. A documented evaluation of an event or condition that is prepared in sufficient detail to enable the reader to assess its significance, consequences, or implications and to evaluate the actions being proposed or employed to correct the condition or to avoid recurrence.

Odour threshold. The minimum concentration of a substance in air which is capable of being detected by the human sense of smell. This is normally expressed in parts per million or milligrams per cubic metre.

Off Normal Occurrence. An abnormal or unplanned event or condition that adversely affects, potentially affects, or is indicative of degradation in the safety, security, environmental or health protection performance or operations of a facility.

Offsite response interfaces. The provisions that should be in place for interface and coordination with federal, state, tribal, and local agencies and organizations responsible for offsite emergency response and for protection of the environment and the health and safety of the public. The interrelationships with federal, state, tribal, and local organizations that should be prearranged and documented in formal plans, agreements, understandings, and/or other pre-arrangements for mutual assistance that detail the emergency measures to be provided by non-DOE entities.

Offsite transportation event. Involves movement of materials that are considered to be in commerce, thus requiring compliance with Department of Transportation Hazardous Materials Regulations.

Offsite. The area beyond the boundaries of the site.

Oil. Any kind of oil including petroleum, according to the Clean Water Act (33 U.S.C. 1321).

Oil spill. An incident involving the accidental or intentional release of oil into the marine environment, or the slick produced by such an incident.

Okta. A measure of cloud cover, one okta being one-eighth cover.

On Scene Coordinator. The On-Scene Coordinator (OSC) is the federal official responsible for monitoring or directing responses to all oil spills and hazardous substance releases reported to the federal government. The OSC coordinates all federal efforts with, and provides support and information to, local, state and regional response communities. The OSC is an agent of either EPA or the U.S. Coast Guard, depending on where the incident occurs. EPA OSCs have primary responsibility for spills and releases to inland areas and waters, while U.S. Coast Guard OSCs have responsibility for coastal waters and the Great Lakes. In general, the OSC has the following key responsibilities during and after a response to a hazardous substance release or an oil spill: (1) assessment; (2) monitoring; (3) response assistance; and (4) evaluation.

ONA. Other Needs Assistance.

One-Hundred Year (100-Year) Floodplain. The land area adjoining a river, stream, lake, or ocean which is inundated by the 100-year flood, also referred to as a flood having a 1 percent chance of occurring in any given year. The 100-year flood is the regulatory (base) flood under the NFIP.

One-Percent Annual Chance Flood. A flood of the magnitude that has a one-percent chance of being equaled or exceeded in any given year. Often referred to as the 100-year flood or base flood, the one-percent annual chance flood is the standard most commonly used for floodplain management and regulatory purposes in the United States.

On-scene commander. In airport emergencies, the person designated to take charge of the over-all emergency operation.

On-scene coordinator. The person appointed to take direct charge of operations to combat an oil pollution incident.

Onsite transportation event. Movement of materials not in commerce and subject to DOE onsite procedures and safety requirements.

Onsite. The area within the boundaries of the site.

Operating Status Checklist and Reports (OSCAR). As used in this guidebook OSCAR refers to the Operating Status Checklist and Reports, which are internal VAMC reports. (HCFA uses this acronym for the Online Survey Certification and Retrieval System).

Operating unit. Discrete organizational entities that provide patient care, ancillary services, or administrative and other support. Together these entities are integrated into a health care delivery system whose objective is to meet the overall organizational mission.

Operational Design Basis Accident. Any design basis accident caused by an internal event. Direct causes are usually poor design or procedures, operator errors, equipment failures, or inadequate technical development (unknowns) that lead to the accident. The major accident categories are explosion, fire, nuclear criticality, leaks to the atmosphere, and leaks to the aquatic environment.

Operational emergencies. Unplanned, significant events or conditions that require time-urgent response from outside the immediate/affected site/facility or area of the incident. Incidents that can be controlled by employees or maintenance personnel in the immediate/affected facility or area are not Operational Emergencies. Incidents that do not pose a significant hazard to safety, health, and/or the environment and that do not require a time-urgent response are not Operational Emergencies.

Operational Emergency Base Program. Program established to implement the requirements of applicable federal, state, and local laws/regulations/ordinances for fundamental worker safety programs, and expand upon this Operational Emergency Base Program, if warranted, to implement additional emergency management activities at sites/facilities with significant quantities of hazardous materials (radiological and non-radiological).

Operational Emergency Hazardous Materials Program. The program developed at each DOE site/facility with significant quantities of hazardous materials (radiological and non-radiological) encompassing a quantitative hazards assessment and more detailed emergency planning requirements than the Operational Emergency Base Program.

Operational facilities. All of the facilities required to support response and recovery operations, such as the DFO, points of arrival, points of departure, mobilization areas and staging areas.

Operational period. The period of time scheduled for execution of a given set of operation actions as specified in the IAP. Operational Periods can be various lengths, usually not over 24 hours. The Operational Period coincides with the completion of one planning P cycle (see Chapter 3 planning cycle).

Operational plans. Operational plans identify and direct the agencies/organizations and resources required to execute the tasks and objectives necessary based on the strategic planning. Operational plans often include (but are not limited to) contingency and tactical plans.

Operational procedural violations. Violations of documented procedures including maintenance and administrative procedures, which have the potential to impact the safety, security, environmental or health performance or operation of a facility.

Operational procedure. Description of methods of carrying out disease control operations such as valuation, slaughter, decontamination.

Operational Resilience. Mitigating the vulnerability of government and private sector operations to man-made or natural disasters depends not only on the structural resilience of our assets, systems, and networks but also on operational resilience. First, we will continue to maintain comprehensive and effective continuity programs, including those that integrate continuity of operations and continuity of government programs, to ensure the preservation of our government under the Constitution and the continuing performance of national essential functions — those government roles that are necessary to lead and sustain the Nation during and following a catastrophic emergency.

A national approach to continuity also requires that State, local, and Tribal governments work to ensure that they are able to maintain or rapidly resume effective functioning during and after catastrophic incidents and are able to interact effectively with each other and the Federal Government. Likewise, we strongly encourage the private sector to conduct business continuity planning that recognizes interdependencies and complements governmental efforts — doing so not only helps secure the United States, but also makes good long- term business sense for individual companies. Such integrated and comprehensive planning is essential to protecting and preserving lives and livelihoods and maintaining our robust economy during crises.

Operations. the ICS functions that develop and directly implement tactics to achieve the objectives established by Management.

Operations Coordination Center (OCC). The primary facility of the Multi-Agency Coordination System. It houses staff and equipment necessary to perform MAC functions.

Operations manual. Document containing specific, step-wise instructions on carrying out operational procedures.

Operations section. The Section responsible for all operations directly applicable to the primary mission. Directs the preparation of Branch, Division, and/or Unit operational plans, requests or releases resources, makes expedient changes to the IAP as necessary and reports such to the IC.

OPLAN. Operations Plan.

Oral Examination Board. A group of individuals selected to administer an oral proficiency examination to RCTs and RCT supervisors for the purpose of evaluating their proficiency in routine and emergency conditions.

Oral toxicity. How poisonous a substance is to an animal or person when taken by the mouth.

Organization. The site, plant, facility, function, or location for which the lessons learned program is implemented.

Organizational learning. A systems-based process for assessing proposed changes to the system, and incorporating accepted proposals to effect lasting change in system performance. This is accomplished through alteration to system structure, process, competencies, facilities, equipment, supplies and other parameters. This process is accessible to the whole organization, and relevant to the organization’s core mission and objectives.

OSTP. Office of Science and Technology Policy.

Other Needs Assistance (ONA). Individual assistance program intended to meet the necessary expenses and serious needs of disaster victims. ONA operates within established grant limits that are funded through a 75 % Federal / 25 % State cost share.

Outcome. The result of a specific intervention(s) or project(s) relative to their pre-established goals and objectives.

Outer cordon. A physical area surrounding an incident which has been secured by some means to effectively control the entry or exit of persons and equipment from that area. The area boundary is established at a sufficient distance around the outside of the inner cordon to provide a safety zone around the incident site. Entry to the area between the outer cordon and the inner cordon is strictly controlled and the area usually contains combat and support units. The command post should be established in this area.

Outer perimeter. That area outside of the inner perimeter which is secured for immediate support operational requirements, free from unauthorised or uncontrolled interference.

Outer warning placard. The type of placard to be displayed at entrances to chemicals store premises comprising the warning hazchem and emergency contact telephone numbers.

Output. The product of a process.

Outsourcing. The act of contracting out functions and activities.

Oven dry weight. A technique used to measure the weight of wood or other cellular material which has been dried in an oven at 105 c until it ceases to lose moisture.

Oxidising property. A property of substances which, although not necessarily combustible, may readily liberate oxygen or be the cause of an oxidation process and which, as a result, may start a fire in other materials or promote the combustion of other materials.

P

Pacific tsunami warning centre. An organisation, based in Honolulu, which monitors a number of seismographs and tidal monitoring stations around the pacific, and issues warning messages concerning possible tsunamis, as part of the tsunami warning system.

Pandemic Influenza Vaccination Program Goal. The goal of the pandemic influenza vaccination program is to vaccinate all persons in the United States who choose to be vaccinated.

Pandemic Influenza. Pandemic (from the Greek, meaning of all of the people) Influenza has the potential to pose a far greater threat to global health. It typically is a novel human flu that causes a worldwide outbreak of serious illness and death. Because there is little natural immunity, the disease can easily spread from person to person, one of the key characteristics that defines a pandemic. There have been at least 10 recorded flu pandemics during the past 300 years.4 Three of these occurred during the 20th Century. The 1918–1919 Spanish Flu was the most devastating flu pandemic in recent history. It killed more than 500,000 Americans and as many as 50 million people globally, according to some estimates. It proved especially lethal to young adults. The 1957–1958 Asian Flu was first identified in China and killed approximately 1 million people worldwide, including 68,000 Americans. The 1968–1969 Hong Kong Flu caused about 34,000 deaths in the United States.

Pandemic. An epidemic (a sudden outbreak) that becomes very widespread and affects a whole region, a continent, or the world. The word pandemic comes from the Greek pan-, all + demos, people or population = pandemos = all the people. A pandemic affects all (nearly all) of the people. By contrast, epi- means upon. An epidemic is visited upon the people. And en- means in. An endemic is in the people.

PAO. Public Affairs Officer.

Parallel attack. A method of suppression in which a fireline is constructed approximately parallel to and just far enough from the fire edge to enable firefighters and equipment to work effectively. The line may be shortened by cutting across unburnt fingers. The intervening strip of unburnt fuel is normally burnt out as the control line proceeds, but may be allowed to burn out unassisted where this occurs without undue delay or threat to the line. syn. ‘parallel fire suppression’ and ‘parallel method’.

Paramedic. An ambulance officer with advanced life support skills.

Partnership. The concept of partnership is understood here to encompass ongoing communication and sharing of knowledge, which, in turn, relies on relations of trust and common commitments.

Passenger reception centre. The centre on airport for victims involved in the emergency not taken to hospital, where **triage** and **disaster victim registration** is undertaken and welfare support is provided prior to reuniting with relatives.

Patient. A casualty in receipt of medical care.

Patient extrication. Disentanglement or release of a patient from confinement or difficulty.

Patient treatment post. An area located at the disaster site, but in a safe location, for undertaking **triage,** emergency treatment of casualties prior to transport away from the disaster scene. syn. ‘casualty treatment post’, ‘casualty clearing post’ and ‘casualty clearing area’.

PCII. Protected Critical Infrastructure Information.

PCIIP. Protected Critical Infrastructure Information Program.

PCIS. Partnership for Critical Infrastructure Security. The PCIS membership is comprised of one or more members and their alternates from each of the SCCs [Sector Coordinating Councils].

PDD. Presidential Decision Directive.

PDM. Pre-Disaster Mitigation.

Peak discharge. The maximum discharge occurring during a flood event.

Peak overpressure. The maximum value of explosion overpressure at a given location which is generally experienced at the instant the shock (or blast) wave reaches that location.

Perceived risk. The level of risk that is thought to exist by an individual or group of individuals.

Performance Degradation. Failure or degradation of a facility, process, system or component that reduces the reliability of critical components of the facility whose loss or degradation prevents the system from performing its intended function. Performance degradation does not include: (1) A burned out power indicator light on a piece of radiation monitoring equipment which does not prevent the equipment from detecting elevated radiation levels and alarming as designed; (2) A piece of equipment that is determined to be out of calibration on the conservative side (such as a low level alarm that alarms at a higher value than it should); or (3) the temporary loss of a component where identical redundant components are maintained in operation and the minimum authorization bases is not compromised.

Performance Measure. See measures, performance.

Performance Metrics. See metrics, performance.

Performance-Based Seismic Design (PBSD). The goal of PBSD is to develop practical assessment and design criteria that enable building owners and regulators to select desired performance and/or reliability levels for new construction or for upgrades of existing buildings that differ from the current building code-based life safety level.

Performance-Based Training. A systematic approach to training that is based on tasks and the related knowledge and skills required for job performance. This term is synonymous with Instructional System Design, Systematic Approach to Training, Criterion Referenced Instruction, Training System Design, and Competency-Based Training.

Perimeter Management. The task that fully addresses planning and plan implementation for securing the borders of the incident scene and/or operational site. This includes defining the appropriate borders, erecting fencing or other materials to prevent unauthorized ingress, staffing perimeter control points, implementing credentialing and accountability, and other measures that control access without impeding incident operations.

Permissible Exposure Limit. Exposure level limits for the workplace established by the OHSA Act of 1972. A common practice is to use the more stringent standard between Threshold Limit Values and Permissible Exposure Limits.

Personal protective equipment. The equipment necessary to shield or isolate a person from the chemical, physical and thermal hazards that may be encountered at a dangerous goods incident. Personal protective equipment includes both personal protective clothing and respiratory protection. Adequate personal protective equipment should protect the respiratory system, skin, eyes, face, hands, feet, head, body, and hearing.

Personal support services. The process of assisting the diverse, immediate as well as longer-term personal needs of people affected by a disaster. Such needs may encompass provision of information, practical advice on a range of issues and emotional support.

Personnel accountability. The ability to account for the location and welfare of incident personnel. It is accomplished when supervisors ensure that ICS principles and processes are functional and that personnel are working within established incident management guidelines.

Personnel and Administration Expenses [EMPG] (Sec. 613. Contributions for Personnel and Administrative Expenses (42 U.S.C. 5196b): (a) General authority — To further assist in carrying out the purposes of this title, the Director may make financial contributions to the States (including interstate emergency preparedness authorities established pursuant to section 5196(h) of this title) for necessary and essential State and local emergency preparedness personnel and administrative expenses, on the basis of approved plans (which shall be consistent with the federal emergency response plans for emergency preparedness) for the emergency preparedness of the States. The financial contributions to the States under this section may not exceed one-half of the total cost of such necessary and essential State and local emergency preparedness personnel and administrative expenses.

Petroleum. Any naturally occurring hydrocarbon or mixture of hydrocarbons in a gaseous or liquid state and which may contain hydrogen sulphide, nitrogen, helium, and carbon dioxide.

PFO. Principle Federal Official.

PHSAC. President's Homeland Security Advisory Council.

Physical security. As applied to cyber terrorism this term encompasses those actions taken for the purpose of restricting and limiting unauthorized access, specifically, reducing the probability that a threat will succeed in exploiting critical information management systems' software and hardware. (VHA Emergency Management Guidebook 2005)

Phytotoxic. Poisonous to plants.

Piezometer. An instrument used for measuring fluid pressure (air or water) within soil, rock, or concrete.

PKEMRA. Post-Katrina Emergency Management Reform Act.

Placard. A standard device or sign attached to the outside of a vehicle to identify the hazards associated with the cargo.

Plan. A plan is a proposed or intended method of getting from one set of circumstances to another. A plan provides guidelines and/or directives on moving from the present situation towards the achievement of one or more objectives or goals. The term Plans in emergency management has multiple connotations:

Planning Meeting. A meeting held as needed prior to and throughout the duration of an incident to select specific strategies and tactics for incident control operations and for service and support planning. For larger incidents, the planning meeting is a major element in the development of the Incident Action Plan (IAP).

Planning process. Through the planning process, you can identify the hazards that threaten your community, assess your vulnerability to them, and build consensus on approaches to mitigating them. This process leads to the identification of cost-effective, environmentally sound mitigation measures. In fact, the planning process is so critical to implementation of effective mitigation measures that some of the programs, described previously, that are intended to fund mitigation measures, require a mitigation plan as a condition of such funding. The planning process is as important as the plan itself. Your community can follow a general 10-step process that incorporates the classic planning approach of gathering information, setting goals, reviewing alternatives, and deciding upon which actions to take. The steps are:

1. **Organize to prepare the plan.** Selecting the right person to lead the planning effort is important.

2. **Involve the public.** Emphasize participation of key stakeholders, including at-risk homeowners, business owners, managers of critical facilities, and technical staff.

3. **Coordinate with other agencies and organizations.** They can provide technical assistance and inform the community of relevant activities and programs that can support your efforts.

4. **Assess the hazard.** Identify the particular hazards affecting your community and the risks they pose to your community's critical infrastructure.

5. **Evaluate the problem.** Getting participants to agree on a problem statement is the first step in reaching consensus on solutions to the problem.

6. **Set goals.** Establish goals as positive and achievable statements that people can work towards.

7. **Review possible strategies and measures.** Include a range of hazard mitigation measures for consideration. While some measures may be quickly eliminated, others should be evaluated carefully to determine how they work as well as their costs and benefits.

8. **Draft an action plan.** Keep it brief. Include sections on how the plan was prepared, recommended mitigation actions, and a budget and schedule.

9. **Formally adopt the plan.** Gaining public acceptance is vital to reducing conflicts, building support for the recommendations, and getting the plan formally adopted. Keep the public informed and educated so they will readily accept the plan.

10. **Implement, evaluate, and revise the plan.** Develop procedures to measure progress, assess strengths and weaknesses, and decide on necessary changes.

Planning section. Responsible for the collection, evaluation, and dissemination of operational information related to the incident, and for the preparation and documentation of the IAP. This section also maintains information on the current and forecasted situation and on the status of resources assigned to the incident.

Planning team. An effective EOP planning team displays the following characteristics: 1. A common goal (development of the EOP). 2. A leader who provides direction and guidance. 3. Open communication. 4. Constructive conflict resolution. 5. Mutual trust. 6. Respect for each individual and his or her contributions.

Planning, emergency. Emergency planning is a cycle of planning, training, exercising, and revision that continues throughout the five phases of the emergency management cycle (preparedness, prevention, response, recovery, and mitigation). One purpose of the planning process is the development and maintenance of an up-to-date EOP. Emergency planning is a team effort and

requires collaboration with personnel from other agencies and organizations. Building an effective team takes time and effort as members go through several stages.

Planning, Incident Action. Activities that support the incident management process, including developing the incident action plan and support plans and accomplishing incident information processing. This is in contrast to preparedness planning, which is designed to ready a system for response. Incident response planning is generally referred to as Incident actions planning or action planning.

Planning, incident response. Another term for *Incident Action Planning*.

Planning. Outcome: plans incorporate an accurate threat analysis and risk assessment and ensure that capabilities required to prevent, protect against, respond to, and recover from all- hazards events are available when and where they are needed. Plans are vertically and horizontally integrated with appropriate departments, agencies, and jurisdictions. Where appropriate, emergency plans incorporate a mechanism for requesting State and Federal assistance and include a clearly delineated process for seeking and requesting assistance from appropriate agency(ies).

Plate tectonics. The scientific theory that the Earth's outer shell is composed of several large, thin, relatively strong plates that move relative to one another. Movements on the faults that define plate boundaries produce most earthquakes.

Player. Healthcare system personnel who are participating in the exercise in the roles they would take during an actual emergency.

Plume exposure pathway. Route by which the radioactive material released from a nuclear facility may expose the population-at-risk to radiation; exposure may be external from the passing plume, from contaminated surfaces, or from inhalation of the passing plume.

Plume. 1. The column of non- combustible products emitted from a fire (smoke). 2. A vapour cloud formation having shape and buoyancy. 3. The airborne radioactive material released from a nuclear power plant and carried by the prevailing winds which may effect radiologically those downwind areas over which it passes.

Pluviometer. Instruments used to measure the rate at which rain falls over very short timespans.

Poison. A substance that, when introduced in sufficient quantity into an animal organism by ingestion, inhalation or absorption, destroys or threatens to destroy life or injures health.

Poisonous substances. Substances which are liable to cause death or serious injury to health if swallowed, inhaled or by skin contact or by direct infection through organisms. syn. 'toxic substances'.

Polar front. Quasi-permanent atmospheric front of great extent, in middle latitudes, which separates polar air and tropical air.

Polder. A mostly low-lying area artificially protected from surrounding water and within which the water table can be controlled.

Pollutant. A harmful chemical or waste material discharged into the water, soil, or atmosphere; an agent that makes something dirty or impure.

Pollute. To add an unwanted material which may do harm or damage; contaminate, make unclean or unsafe for use.

Pollution. Degradation of one or more elements or aspects in the environment by noxious industrial, chemical or biological wastes, from debris of man-made products and from mismanagement of natural and environmental resources.

Population at risk. 1. A well-defined population whose lives, property, and livelihoods are threatened by given hazards. Used as a denominator. 2. All those persons who would be directly exposed to floodwaters within the dambreak-affected zone. If they took no action to evacuate.

Port Security Grant Program (PSG). PSG funds owners and operators of ports, terminals, as well as port authorities and state and local agencies that provide a layered approach, U.S. inspected passenger vessels and ferries, as well as port authorities and State and local agencies to improve security for operators and passengers through physical security enhancements. The Program strives to create a sustainable, risk-based effort for the protection of critical infrastructure from any incident that would cause major disruption to commerce and significant loss of life.

Position description. Position description is a written summary of the critical features of an emergency response or recovery job, including the nature of the work performed and the specific duties and responsibilities. It is intended to help assigned personnel understand their specific role and to clarify relationships between positions. The position description is augmented by position qualifications or competencies.

Position Task Books (FEMA). FEMA Task Book is a list of tasks for a defined position /function in the FEMA JFO Organizational structure. Task Books are created in 2 formats: Job Aid (downloaded or handed to employee at check-in); Assessment Guide (supervisor/employee assessment at completion of assignment). The Task Book (in either format) describes your functions in a disaster operation; the Tasks in the Job Aid are identical to those in the Assessment Guide. As mentioned above, every employee should receive the Job Aid when they check-in at the JFO or other Field site. The employee should review the tasks in the Job Aid with their supervisor to ensure all position-specific tasks (or only some of them) will be performed on that assignment.

The Job Aid is intended to be used during his/her assignment, as a desk reference. When the employee completes their assignment, the supervisor and employee will assess the task performance of the employee; this is when the Assessment Guide is used. In the Assessment Guide, there are 3 indicators: Performed Needs Improvement N/A (Not Applicable for this assignment) that allow the supervisor to evaluate task performance against each task. The supervisor will rate the employee's performance of every task in the Position Task Book. The assessment process: documents your performance of required tasks. helps you plan for development and improvement of your work performance.

Position Task Books (Purpose). Position task books have been developed for positions within the FEMA Disaster Workforce. Each task book lists the essential tasks for the specific position. Task books are designed to: Describe the tasks to be performed for a given position; Determine training needs of individual employees; Serve as a tool for promoting task-related.

Posse Comitatus Act. The Posse Comitatus Act does not apply to the National Guard when in state active duty or federal Title 32 service because the Guard is under the command and control of the Governor and the Adjutant General in both statuses. It does apply to the Guard when in Title 10 service, however, because when the Guard is federalized under Title 10 it becomes an indistinguishable part of the federal forces and is under federal as opposed to state control.

Posse Comitatus Act. The **Posse Comitatus Act,** 18 U.S.C. 1385, prohibits the use of the Army or the Air Force for law enforcement purposes, except as otherwise authorized by the Constitution or statute. This prohibition applies to Navy and Marine Corps personnel as a matter of DOD policy. The primary prohibition of the Posse Comitatus Act is against direct involvement by active duty military personnel (to include Reservists on active duty and National Guard personnel in

Federal service) in traditional law enforcement activities (to include interdiction of vehicle, vessel, aircraft, or other similar activity; a search or seizure; an arrest, apprehension, stop and frisk, or similar activity).

Post-Disaster Sustainability Mission Statement. To promote and facilitate sustainable redevelopment at the local level by integrating the principles and practices of sustainable development into the broader goals of the post-disaster recovery process. This is accomplished in partnership with the state and in coordination with OFAs, local agencies, and NGOs.

Post-emergency assistance measures. Financial and other assistance provided to emergency affected persons, communities or organisations to assist their recovery from an emergency.

Post-Katrina Emergency Management Reform Act (PKEMRA) (Title VI of the Department of Homeland Security Appropriations Act, 2007, Pub. L. 109-295, 120 Stat. 1355 (2006)): The PKEMRA clarified and modified the Homeland Security Act with respect to the organizational structure, authorities, and responsibilities of FEMA and the FEMA Administrator. In addition to these modifications, PKEMRA made changes — some appearing in the Homeland Security Act and the Stafford Act — directing FEMA, among other things, to:

1) establish a Disability Coordinator and develop guidelines to accommodate individuals with disabilities;

2) add disability and English proficiency to the list of provisions requiring nondiscrimination in relief and assistance activities;

3) establish the National Emergency Family Registry and Locator System to reunify separated family members and assist in establishing the National Emergency Child Locator Center to locate missing children after a major disaster or emergency;

4) coordinate and support precautionary evacuations and recovery efforts;

5) provide transportation assistance for relocating and returning individuals displaced from their residences in a major disaster;

6) provide rescue, care, shelter, and essential needs assistance to individuals with household pets and service animals as well as to such pets and animals;

7) provide case management assistance to identify and address unmet needs of victims of major disasters;

8) note: federal agencies shall not: deny or impede access to the disaster site to an essential service provider whose access is necessary to restore and repair an essential service; or impede the restoration or repair of essential services, to include telecommunications service, electrical power, natural gas, water and sewer services, or any other essential service, as determined by the President;

9) receive input from a National Advisory Council, including State and private sector members, about the development and revision of the National Response Framework and other related plans or strategies.

Post-traumatic stress disorder. An anxiety disorder, beyond the normal response to stress, caused by exposure to a highly traumatic event that has been excessively demanding.

Potable water. Water which is safe for human consumption.

Potentially hazardous facility. A facility or installation which, in the absence of mitigating land use, technical or management controls, would impose a significant risk on employees, the public or the built or natural environment. If significant risk remains, even after mitigating measures, the facility would be considered hazardous rather than potentially hazardous.

Potentially hazardous food. foods that consist entirely, or in part, of milk, eggs, meat, poultry, fish or shellfish; or that are for other reasons capable of supporting the growth of microorganisms causing food borne illness.

Pour point. The lowest temperature at which a substance, such as oil, will flow under specified conditions; important in terms of clean-up since free-flowing oils rapidly penetrate most substrates, whereas semi-solid oils tend to be deposited on the surface and will only penetrate if material is coarse or the ambient temperature high.

Power. The rate of energy output; the ability to implement any intervention or action to either help or hurt the body or system or faction at question.

Practical factor. The portion of a training or qualification program utilizing on-the-job or practical knowledge skills. Practical factors are the required attributes of this hands-on type of training.

Precipitation intensity. Amount of precipitation collected in unit time interval.

Precursor. Phenomenon indicating a probable occurrence of an earthquake or a volcanic eruption.

Pre-Designated Incident Locations & Facilities. Various types of operational locations and support facilities are established in the vicinity of the incident to accomplish a variety of purposes. Typical pre-designated facilities include command post, bases, camps, staging areas, mass casualty triage areas, and others as required.

Prediction. A statement of the expected time, place and magnitude of a future event (for earthquakes and volcanic eruptions).

Prediction (*of event***).** Statement of the expected time, place, and magnitude of a future event (for earthquakes and volcanic eruptions).

Predictor. Meteorological or hydrological element, or an index compiled from several elements, which is known (often empirically) to be highly correlated with a quantity which is to be forecast and is used to forecast it.

Pre-disaster hazard mitigation. The President may establish a program to provide technical and financial assistance to States and local governments to assist in the implementation of predisaster hazard mitigation measures that are cost-effective and are designed to reduce injuries, loss of life, and damage and destruction of property, including damage to critical services and facilities under the jurisdiction of the States or local governments.

Pre-disaster mitigation (PDM) program. The pre-disaster mitigation (PDM) program provides funds to states, territories, Indian tribal governments, communities, and universities for hazard mitigation planning and the implementation of mitigation projects prior to a disaster event. Funding these plans and projects reduces overall risks to the population and structures, while also reducing reliance on funding from actual disaster declarations. PDM grants are to be awarded on a competitive basis and without reference to state allocations, quotas, or other formula-based allocation of funds. Any of the mitigation projects for a critical facility, as defined above, may include the purchase of a generator or related equipment purchases (i.e., generator hook-ups) as a functional

portion to the larger eligible mitigation project subapplication, as long as the generator or related equipment purchase directly relates to the hazard(s) that threatens the critical facility.

Pre-disaster response. Based on the potential or known threat of a natural disaster, i.e. hurricane, typhoon, volcanic eruption, or other event, preparatory actions taken by federal, state, and local governments to protect life and property and to minimize the effects of the event on response personnel and equipment. These actions facilitate the deployment of resources necessary for immediate response and initial recovery operations, as required.

Pre-event health status. Description of the health situation in a society that existed before a disaster occurs.

Preliminary damage assessment (PDA). A mechanism used to determine the impact and magnitude of damage and the resulting unmet needs of individuals, businesses, the public sector, and the community as a whole. Information collected is used by the State as a basis for the Governor's request for a Presidential declaration, and by FEMA to document the recommendation made to the President in response to the Governor's request. PDAs are made by at least one State and one Federal representative. A local government representative familiar with the extent and location of damage in the community often participates; other State and Federal agencies and voluntary relief organizations also may be asked to participate, as needed.

Preliminary flood warning. A warning issued by the bureau of meteorology when flood-producing rains are occurring or are expected over particular river catchments. The warning is normally of a general nature and is issued to the public. It includes advice on the current meteorological situation and expected developments, together with an assessment of the class of flooding that can be expected in a particular river basin.

Prepared community. A community which has developed effective emergency management arrangements at the local level, resulting in: 1) an alert, informed and active community which supports its voluntary organisations; 2) an active and involved local government; and 3) agreed and coordinated arrangements for prevention, preparedness, response, and recovery.

Preparedness (incidence management). Preparedness or readiness activities conducted in the absence of a specific threat or hazard.

Preparedness (steady-state). A national focus on steady-state readiness is imperative. The Framework [NRF] focuses on preparedness activities that are directly related to an evolving incident or potential incident. The National Preparedness Guidelines and the NIPP focus on steady-state preparedness or readiness activities conducted in the absence of a specific threat or hazard. This response Framework does not try to subsume all of these larger efforts; instead, it integrates these efforts and brings them to bear in managing incidents.

Preparedness goal. The best way to protect against the effects of harmful incidents is to be prepared. Preparedness and mitigation are important elements in reducing the impacts of acts of terror and other disasters. We will ensure all levels of public safety and emergency management are capable of rapid and effective response by establishing a unified, capabilities-based preparedness strategy incorporating all-hazards assessments, training, exercises and assistance for federal, state, tribal and local governments, first responders and communities.

We will establish, implement and evaluate capabilities through a system of national standards, mutual aid systems and credentialing protocols, and supply technologies for rapid and interoperable communications, personal protection and incident management. We will implement and sustain a national citizen preparedness movement that includes private sector involvement. We will expand the

Nation's community risk management capabilities and reduce the Nation's vulnerability to acts of terrorism and other disasters through effective vulnerability assessments and risk management programs.

Preparedness organizations. The groups that provide interagency coordination for domestic incident management activities in a nonemergency context. Preparedness organizations can include all agencies with a role in incident management, for prevention, preparedness, response, or recovery activities. They represent a wide variety of committees, planning groups, and other organizations that meet and coordinate to ensure the proper level of planning, training, equipping, and other preparedness requirements within a jurisdiction or area.

Preparedness phase. The phase of an emergency management program characterized by activities focused on the acquisition and maintenance of resources, along with training, drills, and exercises.

Preparedness planning (procedures and protocols). Procedures and protocols should detail the specific actions that can be taken to implement a plan or system. All emergency management/response personnel and their affiliated organizations should develop procedures and protocols that translate into specific action-oriented checklists for use during incident response operations, including how the organizations will accomplish their assigned tasks. Procedures are documented and implemented with: checklists; resource listings; maps, charts, and other pertinent data; mechanisms for notifying staff; processes for obtaining and using equipment, supplies, and vehicles; methods of obtaining mutual aid agreements and/or assistance agreements; mechanisms for reporting information to Department Operations Centers (DOC) and EOCs; and communications operating instructions, including connectivity among governments, the private sector, and NGOs.

There are four standard levels of procedural documents: 1. Standard Operating Procedure (SOP) or Operations Manual: Complete reference document that provides the purpose, authorities, duration, and details for the preferred method of performing a single function or a number of interrelated functions in a uniform manner. 2. Field Operations Guide or Incident Management Handbook: Durable pocket or desk guide that contains essential information required to perform specific assignments or functions. 3. Mobilization Guide: Reference document used by agencies/organizations outlining agreements, processes, and procedures used by all participating organizations for activating, assembling, and transporting resources. 4. Job Aid: Checklist or other visual aid intended to ensure that specific steps of completing a task or assignment are accomplished. Job aids may also serve as training aids to teach how to complete specific job tasks. Protocols are sets of established guidelines for actions (which may be designated by individuals, teams, functions, or capabilities) under various specified conditions. Establishing protocols provides for the standing orders, authorizations, and delegations necessary to permit the rapid execution of a task, function, or a number of interrelated functions without seeking permission to do so. Based on training and delegation of authority, protocols permit specific personnel to assess the situation presented, take immediate steps to intervene, and escalate their efforts to a specific level before further guidance or authorizations are required.

Preparedness planning. Plans must be realistic, scalable, and applicable to all types of incidents, from daily occurrences to incidents requiring the activation of interstate mutual aid, and to those requiring a coordinated Federal response. Plans, including emergency operations plans, should form the basis of training and be exercised periodically to ensure that all individuals involved in response are able to execute their assigned tasks. It is essential that plans address training and

exercising and allow for the incorporation of after-action reviews, lessons learned and corrective actions with responsibility agreements following any major incidents or exercises. Plans should be updated periodically to reflect changes in the emergency management and incident response environment, as well as any institutional or organizational changes.

Plans describe how personnel, equipment, and other governmental and nongovernmental resources will be used to support emergency management and incident response requirements. They represent the operational core of preparedness and provide mechanisms for setting priorities, integrating multiple jurisdictions/organizations and functions, establishing collaborative relationships, and ensuring that communications and other systems effectively support the full spectrum of emergency management and incident response activities. Plans should also incorporate strategies for maintaining continuity of government and continuity of operations during and after incidents, provide mechanisms to ensure resiliency of critical infrastructure and economic stability of communities, and incorporate the advance planning associated with resource management, and communications and information management.

Plans should integrate all relevant departments, agencies, and organizations (including the private sector and NGOs, where appropriate) to facilitate coordinated emergency management and incident response activities. Where appropriate, these plans should incorporate a clearly defined process for seeking and requesting assistance from necessary department(s), agency(ies), and/or organizations. The Federal Government has defined plans by which Federal response resources will be deployed prior to or during incidents. Jurisdictions should be aware of these plans in order to accommodate Federal resources when necessary and should integrate them into their plans as appropriate. While it is recognized that jurisdictions and/or organizations will develop multiple types of plans, such as response, mitigation, and recovery plans, it is essential that these plans be coordinated and complement one another.

Preparedness plans (*operational*). Operational plans identify and direct the agencies/organizations and resources required to execute the tasks and objectives necessary based on the strategic planning. Operational plans often include (but are not limited to) contingency and tactical plans.

Preparedness plans (*strategic*). Strategic plans define and develop programmatic priorities that address requirements, goals, objectives, milestones, and resources that ensure interoperable and integrated actions among all levels of government, the private sector, and NGOs to manage all-hazard emergency management and incident response activities. Strategic planning involves the adoption of long-range goals and objectives, the setting of priorities, the establishment of budgets and other fiscal decisions, policy development, and the application of measures of performance or effectiveness.

Preparedness priorities. In establishing the guidelines under subsection (a), the Administrator shall establish preparedness priorities that appropriately balance the risk of all hazards, including natural disasters, acts of terrorism, and other man-made disasters, with the resources required to prevent, respond to, recover from, and mitigate against the hazards.

Preparedness. Preparedness involves establishing authorities and responsibilities for emergency actions and garnering the resources to support them: a jurisdiction must assign or recruit staff for emergency management duties and designate or procure facilities, equipment, and other resources for carrying out assigned duties. This investment in emergency management requires upkeep: the staff must receive training and the facilities and equipment must be maintained in

working order. To ensure that the jurisdiction's investment in emergency management personnel and resources can be relied upon when needed, there must be a program of tests, drills, and exercises. Consideration also must be given to reducing or eliminating the vulnerability of the jurisdiction's emergency response organizations and resources to the hazards that threaten the jurisdiction. Accordingly, preparedness measures should not be improvised or handled on an ad hoc basis. A key element of preparedness is the development of plans that link the many aspects of a jurisdiction's commitment to emergency management.

Preparedness Capability (Elements): 1. Planning: Collection and analysis of intelligence and information, and development of policies, plans, procedures, mutual aid agreements, strategies, and other publications that comply with relevant laws, regulations, and guidance necessary to perform assigned missions and tasks. 2. Organization and Leadership: Individual teams, an overall organizational structure, and leadership at each level in the structure that comply with relevant laws, regulations, and guidance necessary to perform assigned missions and tasks. 3. Personnel: Paid and volunteer staff who meet relevant qualification and certification standards necessary to perform assigned missions and tasks. 4. Equipment and Systems: Major items of equipment, supplies, facilities, and systems that comply with relevant standards necessary to perform assigned missions and tasks. 5. Training: Content and methods of delivery that comply with relevant training standards necessary to perform assigned missions and tasks. 6. Exercises, Evaluations, and Corrective Actions: Exercises, self-assessments, peer- assessments, outside reviews, compliance monitoring, and actual major events that provide opportunities to demonstrate, evaluate, and improve the combined capability and interoperability of the other elements to perform assigned missions and tasks to standards necessary to achieve successful outcomes.

Pre-plan. See plan.

PREPnet. The Preparedness Network (PREPnet) is a satellite-based distance learning system used by [FEMA/National Emergency Training Center] to bring interactive training programs into virtually any community nationwide.

Pre-registered volunteer. Volunteers who have received pre-screening, maintain up-to-date personal and credential information, and have a current understanding of the orientation briefing material to the satisfaction of the appropriate volunteer management system personnel, and therefore satisfy the criteria for rostering.

Prescription. A written statement defining the objectives to be attained during prescribed burning. This statement considers the condition of temperature, humidity, wind direction and speed, fuel moisture, and soil moisture under which the fire will be allowed to burn. This is generally described within acceptable ranges of the various indices, and the limit of the geographic area to be covered.

Pressure point. Point where pressure can be applied to control bleeding.

Prevent. Actions to avoid an incident or to intervene to stop an incident from occurring. Prevention involves actions taken to protect lives and property, including: intelligence and deterrence operations; heightened inspections; improved surveillance and security operations; investigations; public health and agricultural surveillance and testing processes; immunizations, isolation, or quarantine; and certain law enforcement operations. Public announcements, evacuation planning, infrastructure improvements and citizen disaster preparation also are important especially when considering an all hazards approach.

Prevention. Prevention involves actions to interdict, disrupt, pre-empt or avert a potential incident. This includes homeland security and law enforcement efforts to prevent terrorist attacks. Prevention includes actions to: 1. Collect, analyze, and apply intelligence and other information. 2. Conduct investigations to determine the full nature and source of the threat. 3. Implement countermeasures such as inspections, surveillance, security and infrastructure protection. 4. Conduct tactical operations to interdict, preempt, or disrupt illegal activity and to apprehend and prosecute the perpetrators. 5. Conduct public health surveillance and testing processes, immunizations, and isolation or quarantine for biological and agricultural threats. 6. Deter, defeat, detect, deny access or entry, and take decisive action to eliminate threats.

Preventive actions. Actions taken to prevent a negative situation from occurring.

Primary agency. The federal department or agency assigned primary responsibility to manage and coordinate a specific ESF. Primary agencies are designated on the basis of their having the most authorities, resources, capabilities, or expertise relative to accomplishment of the specific ESF support. Primary agencies are responsible for overall planning and coordination of the delivery of ESF-related federal assistance to their state counterparts, in conjunction with their support agencies.

Primary barrier. Generally the barrier closest to the material. In the case of gaseous or liquid materials, the tank, cylinder, process piping, or other container is usually the primary barrier. For materials that are prevented from being released by their own structure or physical form, consider that form or structure as the barrier.

Primary environmental monitors. Monitoring equipment required to legally monitor ongoing discharges. In general, this term applies to monitors used closest to the point of discharge to determine if discharges are within specified limits. It also includes any equipment that actuates automatically in response to set level signals from such a monitor. It does not include equipment in general area, remediation, or compliance monitoring programs.

Primary receiving center (PRC). VAMC designated under the VA/DoD Contingency Plan for the direct receipt of military casualties in the event of a war or national emergency.

Primary response capability. Personnel and resources at the site/facility level providing support during an Operational Emergency.

Principal Advisor on Emergency Management. The Administrator [FEMA] is the principal advisor to the President, the Homeland Security Council, and the Secretary [DHS] for all matters relating to emergency management in the United States.

Principal Federal Official (PFO). By law and by Presidential directive, the Secretary of Homeland Security is the principal Federal official responsible for coordination of all domestic incidents requiring multi-agency Federal response. In a catastrophic or unusually complex incident, the Secretary may elect to designate a single individual to serve as his or her primary representative and as the lead Federal official in the field. Only the most complex incidents will likely call for appointment of a PFO. Acting on the Secretary's behalf, the PFO will coordinate the activities of other Federal officials, acting under their own authorities, to ensure consistency of Federal support as well as the overall effectiveness of the Federal incident management. When appointed, such an individual serves on-scene as the Principal Federal Official for the incident. The PFO will interface with Federal, State, tribal and local jurisdictional officials regarding the overall Federal incident management strategy and act as the primary Federal spokesperson for coordinated media and public communications. The PFO will serve as a member of the Unified Coordination Group and provide a primary point of contact and situational awareness locally for the Secretary of Homeland Security.

A PFO is a senior Federal official with proven management experience and strong leadership capabilities. The PFO deploys with a small, highly-trained mobile support staff. Both the PFO and support staff undergo specific training prior to appointment to their respective positions. Once formally designated for an ongoing incident, a PFO relinquishes the conduct of all previous duties to focus exclusively on his or her incident management responsibilities. This Framework stipulates that the same individual will not serve as the Principal Federal Official and the Federal Coordinating Officer.at the same time for the same incident. When both positions are assigned, circumstances will be such that each will have significant, complementary responsibilities to assist with response to a very demanding event.

The Secretary is not restricted to DHS officials when selecting a PFO. The PFO does not direct or replace the incident command structure established at the incident. Nor does the PFO have line authority over a Federal Coordinating Officer, a Senior Federal Law Enforcement Official, a DOD Joint Task Force Commander or any State or local official. Other Federal incident management officials retain their authorities as defined in existing statutes and directives. Rather, the PFO promotes cohesion and, as possible, resolves any Federal interagency conflict that may arise. The PFO identifies and presents to the Secretary of Homeland Security any policy issues arising from the particular circumstances that need resolution at a higher level within the Federal Government.

Principles of Emergency Management: 1. **Comprehensive** — emergency managers consider and take into account all hazards, all phases, all stakeholders and all impacts relevant to disasters. 2. **Progressive** — emergency managers anticipate future disasters and take preventive and preparatory measures to build disaster-resistant and disaster-resilient communities. 3. **Risk-driven** — emergency managers use sound risk management principles (hazard identification, risk analysis, and impact analysis) in assigning priorities and resources. 4. **Integrated** — emergency managers ensure unity of effort among all levels of government and all elements of a community. 5. **Collaborative** — emergency managers create and sustain broad and sincere relationships among individuals and organizations to encourage trust, advocate a team atmosphere, build consensus, and facilitate communication. 6. **Coordinated** — emergency managers synchronize the activities of all relevant stakeholders to achieve a common purpose. 7. **Flexible** — emergency managers use creative and innovative approaches in solving disaster challenges. 8. **8. Professional** — emergency managers value a science and knowledge-based approach based on education, training, experience, ethical practice, public stewardship and continuous improvement.

Priority Descriptor. A designator provided to identify the potential level of significance or applicability of a lesson learned.

Private Nonprofit Facility. (A) In General — The term private nonprofit facility means private nonprofit educational, utility, irrigation, emergency, medical, rehabilitational, and temporary or permanent custodial care facilities (including those for the aged and disabled) and facilities on Indian reservations, as defined by the President. (B) Additional Facilities — In addition to the facilities described in subparagraph (A), the term private nonprofit facility includes any private nonprofit facility that provides essential services of a governmental nature to the general public (including museums, zoos, performing arts facilities, community arts centers, libraries, homeless shelters, senior citizen centers, rehabilitation facilities, shelter workshops, and facilities that provide health and safety services of a governmental nature), as defined by the President.

Private Sector Senior Advisory Committee (PVTSAC). The Secretary of Homeland Security established the PVTSAC as a subcommittee of the HSAC [Homeland Security Advisory Committee] to provide the HSAC with expert advice from leaders in the private Sector.

Private Sector. Organizations and entities that are not part of any governmental structure. It includes for-profit and not-for-profit organizations, formal and informal structures, commerce and industry, and private voluntary organizations (PVO).

Privileging, healthcare. The process where appropriately credentialed personnel (see credentialing) are granted permission to provide specified services within the healthcare organization.

Privileging, incident. The process where appropriately credentialed personnel are accepted into an incident (or by an incident resource such as a hospital) to participate as an assigned resource in the response. This process may include both confirmation of a responder's credentials and a determination that an incident need exists that the responder is qualified to address. Privileging is associated with a separate process, badging, which indicates that a person has been privileged to access a specific incident or to access a specific location.

Probability analysis. The derivation of both the likelihood of incidents occurring and the likelihood of particular outcomes (or effects) should those events occur.

Probability density function. A function describing the relative likelihood that a random variable will assume a particular value in contrast to taking on other values.

Probability of exceedence. The probability or likelihood, expressed in the range of 0–1, of an event with a certain magnitude or size occurring.

Probability. The likelihood of a specific outcome, measured by the ratio of specific outcomes to the total number of possible outcomes. Probability is expressed as a number between 0 and 1, with 0 indicating an impossible outcome and 1 indicating an outcome is certain.

Probability. The likelihood of a specific outcome, measured by the ratio of specific outcomes to the total number of possible outcomes. Probability is expressed as a number between 0 and 1, with 0 indicating an impossible outcome and 1 indicating an outcome is certain.

Probable maximum flood. The flood resulting from the **probable maximum precipitation,** and where applicable, snow melt, coupled with the worst flood-producing catchment conditions that can be realistically expected in the prevailing meteorological conditions.

Probable maximum precipitation. The theoretical greatest depth of precipitation for a given duration that is physically possible over a particular catchment area.

Procedure. A series of specific activities, tasks, steps, decisions, calculations and other processes, that when undertaken in the prescribed sequence produces the described result, product or outcome. Following a procedure should produce repeatable results for the same input conditions. In the context of emergency management, procedures are much more tightly defined and specific to a distinct organization than the process that the procedure or series of procedures accomplishes.

Procedures. Pre-planned detailed directions for dealing with specific occurrences.

Process. A process is a defined activity, related to planning and/or implementation, carried out to achieve the objectives of the program. A process commonly encompasses multiple procedures that are linked or coordinated to accomplish the process objectives (see procedure).

Processes. Systems of operations that incorporate standardized procedures, methodologies, and functions necessary to provide resources effectively and efficiently. These include resource typing, resource ordering and tracking, and coordination.

Professional (*core principle of emergency management***).** Professional: emergency managers value a science and knowledge-based approach based on education, training, experience, ethical practice, public stewardship and continuous improvement.

Proficiency. In emergency management, this term indicates the level of mastery of knowledge, skills and abilities (i.e., competencies) that are demonstrable on the job. Levels of proficiency are used to describe the level of mastery that is the objective of training and education.

Profile. A special type of controller instructions, can be used for actors to define roles. Profiles are normally used for media actors in either a control cell or for interviewing in person or for control cell actors representing political figures. (Profiles are generally only used with experienced controllers.)

Program (emergency management application): An organized collection of projects, activities and/or individual plans in an established framework that directs them toward a common goal. The term program implies that regular, ongoing activities are occurring. This contrasts with the term plan, which may be a set of guidelines that are inactive until activated.

Program and Capability Enhancement Plan. The analytical output of the Program and Capability Review will be captured in the Program and Capability Enhancement Plan. The Enhancement Plan is a comprehensive program management plan that looks at homeland security irrespective of preparedness funding streams. Program and Capability Review: In the Program Review, States are essentially being asked to consider two high-level questions: 1) Is the State program executing the appropriate activities to operate and manage the homeland security program? and 2) Has the State organized itself and established governance structures to effectively manage those activities?

To answer these questions, States will evaluate current homeland security program management capacity, baseline operations, and future program needs. An effective homeland security program requires sound program management structures that help ensure the program is capable of conducting business across departments, agencies, and disciplines at all levels of government. Successful efforts to build capabilities hinge on effective homeland security program management and operations. Understanding program management challenges can help address homeland security needs that support statewide efforts to enhance and sustain capabilities.

Program elements. The 14 functional areas that encompass topics associated with an emergency management program: Hazards survey/assessment; emergency response organization; offsite response interfaces; emergency response organization; offsite response interface; emergency categorization/classification; communications; protective actions (including reentry); medical support; public information; emergency facilities and equipment; program administration; training and drills; consequence assessment; and termination and recovery.

Program evaluation criteria. A set of example evaluation criteria that can be used to evaluate a DOE emergency management program. This list of criteria, organized by functional area and program element, can be used to develop a facility/site-specific set.

Program evaluation. Includes more extensive document review, extensive and in-depth interviews, systematic records examination, and identification of potential findings. The purpose of program evaluations is to verify that a comprehensive, integrated Emergency Management Program has been implemented, is being maintained, and complies with emergency management requirements. It also identifies and formally documents significant issues (findings), and documents and updates the status of the Emergency Management Program. The program evaluation includes a

critical examination of the site emergency management program in comparison with DOE policies and requirements resulting in an evaluation of all aspects of the Emergency Management Program.

Program manager. 1. (Chief Financial Officer) An individual in an organization or activity responsible for the management of a specific function or functions and responsible for budget formulation and execution of the approved budget. The individual is the recipient of an approved funding program from the Office of Chief Financial Officer identifying his or her program dollars available to accomplish the assigned function. 2. (Environment, Safety and Health) The Headquarters individual, or designee, designated by and under the direction of a Secretarial Officer, who is directly involved in the operation of facilities under cognizance, and holds signature authority to provide technical direction through Heads of Field Elements/Operations Office Organizations to contractors for these facilities.

Program office. The Defense Programs Office with approval authority for specific nuclear weapon information.

Program significant cost. Cost that meets the criteria of Group 7.A. Cost Based Occurrences.

Program significant delay. Delay that meets the criteria of Group 8, Facility Status.

Program. Multiple interdependent systems that often require many interfaces to provide the desired product or service.

Progressive (*core principle of emergency management***).** Progressive: emergency managers anticipate future disasters and take preventive and preparatory measures to build disaster-resistant and disaster-resilient communities.

Project impact, four phases. Essentially, Project Impact is a planning based approach that challenges and supports communities to become disaster resistant. FEMA encourages your community to participate in the four phases of the Project Impact Initiative:

1. Building Community Partnerships. This initiative is most effective if it draws upon the experiences, resources, and policies already in place in your community. Identify and recruit Project Impact Partners that reflect all sectors: local government leaders, civic and volunteer organizations, businesses, and individual citizens.

2. Assessing Risks. Identify hazards to determine which areas of your community are affected by disasters, how likely it is that the disaster may occur, and the magnitude of the disaster. Assess the vulnerability of buildings, utilities, and transportation systems serving the community.

3. Prioritizing Mitigation Efforts. Identify mitigation priorities and mitigation measures to address these priorities. Determine resources needed to implement these measures and identify potential sources for technical and financial assistance.

4. Communicating Success. Use the print, radio, and television media to build support for the Project Impact initiative and to bring the message of the benefits of mitigation to all residents and businesses in the community.

Project impact. James Lee Witt, director of the Federal Emergency Management Agency (FEMA), introduced Project Impact in 1997 in an effort to protect families, businesses, and communities by reducing the impact of natural disasters, Through its four-pronged program, Project Impact builds safe communities when individuals, businesses, and community leaders take the following steps: 1. Identify and recruit Project Impact partners in the community such as local government leaders, civic and volunteer groups, businesses, and individual citizens. 2. Determine the community's risk for falling victim to natural disasters. 3. Set priorities and target resources to reduce

impact of future disasters. 4. Keep the entire community informed and focused on Project Impact's ability to reduce damage and costs of future disasters.

Protected Critical Infrastructure Information (PCII) Program. The PCII Program, part of the DHS is designed to encourage private industry to share its sensitive security-related business information with the Federal government. PCII is an information-protection tool that facilitates information sharing between the government and the private sector. DHS and other Federal, State and local analysts use PCII in pursuit of a more secure homeland, focusing primarily on: 1. Analyzing and securing critical infrastructure and protected systems, Identifying vulnerabilities and developing risk assessments, and Enhancing recovery preparedness measures. 2. Information submitted, if it satisfies the requirements of the Critical Infrastructure Information Act of 2002, is protected from public disclosure under the Freedom of Information Act, State and local disclosure laws. 3. Use in civil litigation.

Protection. Actions to mitigate the overall risk to CI/KR assets, systems, networks, or their interconnecting links resulting from exposure, injury, destruction, incapacitation, or exploitation. In the context of the NIPP, protection includes actions to deter the threat, mitigate vulnerabilities, or minimize consequences associated with a terrorist attack or other incident. Protection can include a wide range of activities, such as hardening facilities, building resiliency and redundancy, incorporating hazard resistance into initial facility design, initiating active or passive countermeasures, installing security systems, promoting workforce surety, and implementing cyber security measures, among various others.

Protective action criteria. The predetermined concentrations, doses, or exposures at which protective actions will be initiated. Protective Action Guides and ERPGs are sometimes referred to generically and collectively as protective action criteria.

Protective Action Guide (PAG). The projected dose to reference man, or other defined individual, from an accidental release of radioactive material at which a specific protective action to reduce or avoid that dose is warranted.

Protective action. Physical measures, such as evacuation or sheltering, taken to prevent potential health hazards resulting from a release of hazardous materials to the environment from adversely affecting employees or the offsite population.

Protective clothing. Equipment designed to protect the wearer from heat and/or dangerous goods contacting the skin or eyes. Protective clothing is divided into four types, being: 1) structural fire fighting protective clothing; 2) splash suit; 3) gas-tight suit; and 4) high temperature protective clothing.

Protocols. Ground rules or rules of conduct.

Proxy events. Actual experiences that, while not true emergencies or disasters, have characteristics that provide valid insight into the adequacy of response system components. They may therefore provide some predictive value for system performance in future incidents. For example, the ability to minimize traffic disruption from a motor vehicle crash, water main break or other event at a key metropolitan intersection may be considered a proxy event for a mass evacuation emergency, providing indicators for how traffic controllers may perform to avoid back-ups in that type of incident.

PSIC. Public Safety Interoperable Communications Grant Program.

Psychological services. The specific forms of assistance, ranging from initial support through to longer-term clinical treatment, provided by trained personnel within this framework.

Psychological trauma. An acute emotional state of discomfort due to an extraordinary stressful event or situation which was overwhelming for the person involved.

Public assistance (PA). Under a major disaster declaration, Public Assistance may be approved to fund a variety of projects, including: 1. Debris clearance, when in the public interest, on public or private lands or waters. 2. Emergency protective measures for the preservation of life and property. 3. Repair or replacement of public roads, streets, and bridges. 4. Repair or replacement of public water control facilities (dikes, levees, irrigation works, and drainage facilities). 5. Repair or replacement of public buildings, utilities, and related equipment. 6. Repair or restoration of public recreational facilities and parks.

Public authorities. Government officials, or officially designated authorities at any level of government responsibility, entrusted with either policy, administrative or technical/sectoral functions.

Public awareness. The process of informing the community as to the nature of the hazard and actions needed to save lives and property prior to and in the event of disaster.

Public awareness. The state of the community of having knowledge and being well-informed.

Public Facility. 'Public facility' means the following facilities owned by a State or local government: (A) Any flood control, navigation, irrigation, reclamation, public power, sewage treatment and collection, water supply and distribution, watershed development, or airport facility. (B) Any non-Federal-aid street, road, or highway. (C) Any other public building, structure, or system, including those used for educational, recreational, or cultural purposes. (D) Any park.

Public Health and Medical Preparedness Critical Components. The four most critical components of public health and medical preparedness are biosurveillance, countermeasure distribution, mass casualty care, and community resilience. Although those capabilities do not address all public health and medical preparedness requirements, they currently hold the greatest potential for mitigating illness and death and therefore will receive the highest priority in our public health and medical preparedness efforts. Those capabilities constitute the focus and major objectives of this Strategy.

Public Health and Medical Preparedness Principles. This Strategy draws key principles from the National Strategy for Homeland Security (October 2007), the National Strategy to Combat Weapons of Mass Destruction (December 2002), and Biodefense for the 21st Century (April 2004) that can be generally applied to public health and medical preparedness. Those key principles are the following: 1) preparedness for all potential catastrophic health events; 2) vertical and horizontal coordination across levels of government, jurisdictions, and disciplines; 3) a regional approach to health preparedness; 4) engagement of the private sector, academia, and other nongovernmental entities in preparedness and response efforts; and 5) the important roles of individuals, families, and communities.

Public health and medical preparedness. The term 'public health and medical preparedness' means the existence of plans, procedures, policies, training, and equipment necessary to maximize the ability to prevent, respond to, and recover from major events, including efforts that result in the capability to render an appropriate public health and medical response that will mitigate the effects of illness and injury, limit morbidity and mortality to the maximum extent possible, and sustain societal, economic, and political infrastructure.

Public Health Emergency Preparedness Cooperative Agreement, CDC, HHS. The purpose of the Division of State and Local Readiness' cooperative agreement program is to upgrade and integrate State and local public health jurisdictions' preparedness for and response to terrorism

and other public health emergencies with Federal, State, local, and tribal governments, the private sector, and Non-Governmental Organizations (NGOs). These emergency preparedness and response efforts are intended to support the NRP and NIMS. Activities included in the cooperative agreement are designed to develop emergency-ready public health departments.

Public health emergency. Defined by the Model State Emergency Health Powers Act (MSEHPA): An occurrence or imminent threat of an illness or health condition that is believed to be caused by: (1) bioterrorism; (2) the appearance of a novel or previously controlled or eradicated infectious agent or biological toxin; (3) a natural disaster; (4) a chemical attack or accidental release; or (5) a nuclear attack or accident. It must pose a high probability of a large number of deaths in the affected population, or a large number of serious or long-term disabilities in the affected population, or widespread exposure to an infectious or toxic agent that poses a significant risk of substantial future harm to a large number of people in the affected population.

Public Health Security and Bioterrorism Preparedness and Response Act of 2002 (Bioterrorism Act). Public Law 107-188, 42 U.S.C. 247d and 300hh, June 12, 2002, is designed to improve the ability of the United States to prevent, prepare for, and respond to bioterrorism and other public health emergencies. Key provisions of the act address the development of a national preparedness plan designed to provide effective assistance to State and local governments in the event of bioterrorism or other public health emergencies; operation of the National Disaster Medical System to mobilize and respond to public health emergencies; grant programs for the education and training of public health professionals and improving State, local, and hospital preparedness for and response to bioterrorism and other public health emergencies; streamlining and clarifying communicable disease quarantine provisions; enhancing controls on dangerous biological agents and toxins; and protecting the safety and security of food and drug supplies.

Public Health Service Act. The Public Health Service Act provides a general grant of authority for Federal-State cooperation and authorizes the Secretary of Health and Human Services to develop and take such action as may be necessary to implement a plan under which the personnel. Equipment, medical supplies and other resources of the Service and other agencies under the jurisdiction of the Secretary may be effectively used to control epidemics of any disease or condition and to meet other health emergencies and problems, 42 U.S.C. 243. The Secretary is further empowered to extend temporary assistance to States or localities to meet health emergencies.

During an emergency proclaimed by the President, the President has broad authority to direct the services of the Public Health Service, see 42 U.S.C. 217. Under that section, the President is authorized to utilize the [Public Health] Service to such extent and in such manner as shall in his judgment promote the public interest. Additionally, under 42 U.S.C. 264, the Surgeon General is authorized to make and enforce quarantine regulations necessary to prevent the introduction, transmission, or spread of communicable diseases from foreign countries into the states or possessions, or from one state or possession to another. The diseases for which a person may be subject to quarantine must be specified by the President through an Executive Order.

Public Health. The art and science that addresses the protection & improvement of community health by organized community effort, including preventive medicine and sanitary & social science, or, simply put: what we, as a society, do collectively to assure the conditions in which people can be healthy (Institute of Medicine: The Future of Public Health — 1988).

Public information officer. A member of the Command Staff responsible for interfacing with the public and media or with other agencies with incident-related information requirements.

Public information. Information, facts, or knowledge provided or learned as a result of research or study, which is public, open to the people as a whole.

Public Safety Interoperable Communications Grant Program (PSIC). Assists public safety agencies in the acquisition of, deployment of, or training for the use of interoperable communications systems that can utilize reallocated public safety spectrum in the 700 MHz band for radio communication.

Public sector. The parts of the economy that are not controlled by individuals, voluntary organizations or private companies. It is the organizations and entities that are part of any governmental structure.

Public trust. The community confidence in its government.

Public works and engineering. The Basic Societal Function that includes the process of application of technical knowledge and assistance to develop and maintain the infrastructure of the affected society. It involves what the society provides to sustain its infrastructure including all physical structures needed for a society to function (railroads, roads, buildings, etc.)

Publications management. The publications management subsystem includes materials development, publication control, publication supply, and distribution. The development and distribution of NlMS materials is managed through this subsystem. Consistent documentation is critical to success, because it ensures that all responders are familiar with the documentation used in a particular incident regardless of the location or the responding agencies involved.

Pumper. A firefighting vehicle equipped with a large capacity pump, water tank and hose. Generally intended to be operated when stationary, from reticulated or static water supplies.

Pyroclastic flow. High density flow of solid volcanic fragments suspended in gas which flows down-slope from a volcanic vent (at speeds up to 200 kilometres per hour) which may also develop from partial collapse of a vertical eruption cone, subdivided according to fragment composition and nature of flowage into: ash flow, glowing avalanche, nuee ardente, pumice flow.

Pyrophoric. A substance which spontaneously and immediately ignites on exposure to air or oxygen.

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Quadrennial Homeland Security Review (QHSR). From the 9/11 Act of 2007 (Public Law 110-53, August 3, 2007, Sec. 707 (6USC 347) Quadrennial Homeland Security Review): In fiscal year 2009, and every 4 years thereafter, the Secretary shall conduct a review of the homeland security of the Nation (in this section referred to as a 'quadrennial homeland security review'). ''(2) SCOPE OF REVIEWS.—Each quadrennial homeland security review shall be a comprehensive examination of the homeland security strategy of the Nation, including recommendations regarding the long-term strategy and priorities of the Nation for homeland security and guidance on the programs, assets, capabilities, budget, policies, and authorities of the Department [DHS].

In each quadrennial homeland security review, the Secretary shall: 1) delineate and update, as appropriate, the national homeland security strategy, consistent with appropriate national and Department strategies, strategic plans, and Homeland Security Presidential Directives, including the National Strategy for Homeland Security, the National Response Plan, and the Department Security Strategic Plan; 2) outline and prioritize the full range of the critical homeland security mission areas of the Nation; 3) describe the interagency cooperation, preparedness of Federal response assets, infrastructure, budget plan, and other elements of the homeland security program and policies of the Nation associated with the national homeland security strategy, required to execute successfully the full range of missions called for in the national homeland security strategy described in paragraph (1) and the homeland security mission areas outlined under paragraph (2); 4) identify the budget plan required to provide sufficient resources to successfully execute the full range of missions called for in the national homeland security strategy described in paragraph (1) and the homeland security mission areas outlined under paragraph (2); 5) include an assessment of the organizational alignment of the Department with the national homeland security strategy referred to in paragraph (1) and the homeland security mission areas outlined under paragraph (2); and 6) review and assess the effectiveness of the mechanisms of the Department for executing the process of turning the requirements developed in the quadrennial homeland security review into an acquisition strategy and expenditure plan within the Department.

Qualification and certification. This subsystem provides recommended qualification and certification standards for emergency responder and incident management personnel. It also allows the development of minimum standards for resources expected to have an interstate application. Standards typically include training, currency, experience, and physical and medical fitness.

Qualification standard. The explicit performance requirements for minimum proficiency in technical, academic, and site-specific knowledge and practical skills used in determining satisfactory completion of training programs.

Qualification. 1. A term indicating that an individual has met all the requirements of training plus the requirements for physical and medical fitness, psychological fitness, strength/agility, **experience** or other necessary requirements/standards for a position. Qualification therefore indicates that the individual possesses all the competencies required for the response position. In some job categories, qualification is demonstrated by obtaining a professional license. 2. A term that refers to competencies, certifications, experience, physical abilities and other requirements required for an individual to successfully perform in a specific job position. Also called position qualifications.

Quantified risk assessment. A risk assessment that is based essentially on quantified inputs.

Qualitative techniques. Methods used to identify phenomena that occur and to develop hypotheses about why or how they occurred. In qualitative research, hypotheses can not be proven to statistical significance relative to cause and effect (internal validity). Observations can be made and the formulation of hypotheses is a reasonable outcome. Such observations, particularly when they are supported by observations in other similar events, may have high external validity and thus, may affect responses to future events that have similar characteristics to the event being studied.

Quarantine. Legal restrictions imposed on a place or tract of land by the serving of a notice and limiting access or egress of specified animals, persons or things.

Quasi-experimental studies. Studies that compare the effects of two similar, but not identical interventions.

Quick fill pump. A high volume water pump used for filling tankers.

Quicksand. Saturated sandy deposits which, under the influence of hydrostatic pressures, are buoyant and are able to flow.

Quick-Ship Program. A recovery strategy where, through prior arrangements and contracting, resumption equipment and other resources are rapidly shipped to a recovery location in order to resume business functions.

R

Racon. Radar transponder beacon.

RAD. An acronym for Radiation Absorbed Dose; basic unit of ionizing radiation dose.

Radar. Radio method of determining at a single station the direction and distance of an object.

Radiation absorbed dose. The basic unit of dose of ionizing radiation. A dose of one rad means the absorption of 100 ergs of radiation energy per gram of absorbing material.

Radiation sickness. The complex of symptoms resulting from excessive exposure of most of the body to ionizing radiation. The earliest visible symptoms are nausea, fatigue, vomiting, and diarrhea, which may be followed by loss of hair (epilation), hemorrhage, inflammation of the mouth and throat, and general loss of energy. In severe cases, where the radiation exposure has been relatively large, death may occur within two to four weeks. Those who survive 6 weeks after the receipt of a single large dose of radiation will generally recover.

Radiation survey instrument. A portable battery-powered device used to detect and measure the dose rate at the spot where the instrument is held.

Radiation. Electromagnetic waves or quanta, and atomic or sub-atomic particles, propagated through space or through a material medium. The propagation of energy through space or through matter in the form of waves (e.g., electromagnetic waves) or particles (e.g., alpha, beta, or neutron radiation).

Radioactive. Exhibiting or pertaining to radioactivity.

Radioactive decay. The spontaneous transformation of the nucleus of an atom into another state accompanied by the emission of radiation; for a quantity of such atoms, the expectation value of the number of atoms present decreases exponentially with time.

Radioactive fallout. Radioactive debris (including fission products) from a nuclear detonation, which is airborne or has been deposited on the earth.

Radioactive material. Any material that spontaneously emits particulate or electromagnetic ionizing radiation.

Radioactive substances. Substances or combinations of materials which spontaneously emit radiation with activity exceeding 70 kilobecquerels/kilogram (dangerous goods class 7).

Radioactive wastes. Conventional materials that have been contaminated with radiation.

Radioactivity. The property of certain radionuclides of spontaneously emitting particles or gamma radiation or of emitting x-radiation following orbital electron capture or of undergoing spontaneous fission.

Radioisotope. An isotope which is radioactive. Most natural isotopes lighter than lead-208 are not radioactive.

Radiological Assistance Program Team. Experienced DOE and/or DOE contractor personnel who are adequately trained and equipped to conduct offsite radiological emergency monitoring. Radiological Assistance Teams are at all Operations Offices, all National Laboratories, and most Area Offices and associated contractors.

Radiological Assistance Program. A DOE program designed to make DOE resources available to other DOE facilities, state, tribal, local, private business, and individuals for the explicit purpose of assisting during radiological incidents. A DOE program that provides for radiological assistance to federal, state, tribal and major Nuclear Regulatory Commission licensees in the event of an incident involving radioactive materials.

Radiological buffer area (RBA). An intermediate area established to prevent the spread of radioactive contamination and to protect personnel from radiation exposure. The area surrounds or is contiguous with radiological areas.

Radiological Emergency Preparedness Program (REPP). We will assist State, local, and tribal governments in the development of offsite radiological emergency preparedness plans within the emergency planning zones of Nuclear Regulatory Commission (NRC) licensees of commercial nuclear power facilities. REPP will continue to support the development of offsite radiological emergency preparedness plans for the emergency planning zones of NRC licensees of commercial nuclear power facilities.

Radiological Emergency Response Teams (RERT's). Teams provided by EPA's Office of Radiation and Indoor Air to support and respond to incidents or sites containing radiological hazards. These teams provide expertise in radiation monitoring, radionuclide analyses, radiation health physics, and risk assessment.

Radiological emergency. A radiological incident that poses an actual, potential, or perceived hazard to public health or safety or loss of property.

Radiological facilities. Those facilities that do not meet or exceed the hazard category 3 threshold quantity values published in DOE-STD-1027-92 but still contain some quantity of radioactive material (above those discussed in Appendix B to 40 CFR 302).

Radionuclide. A species of atomic nucleus which undergoes radioactive decay.

Rain gauge. Instrument for measuring the depth of water from precipitation supposedly distributed over a horizontal impervious surface and not subject to evaporation.

Rate of spread. The forward progress per unit time of the head fire or another specified part of the fire perimeter.

Rating curve. Curve showing the relation between water stage and discharge of a stream at a flow gauging station. If digitised, it is a 'rating table'.

Reaction time. The time taken between the report of a fire or incident, and the departure of the crew.

Reactor. Unless it is modified by words such as containment, vessel, or core, it means the entire reactor facility, including the building/structure, equipment, and associated areas devoted to the operation and maintenance of one or more reactor cores. Any apparatus that is designed or used to sustain nuclear chain reactions in a controlled manner, including critical and pulsed assemblies and research, test, and power reactors, is defined as a reactor. All assemblies designed to perform subcritical experiments which could potentially reach criticality are also to be considered reactors.

Critical assemblies are special nuclear devices designed and used to sustain nuclear reactions. Critical assemblies may be subject to frequent core and lattice configuration change and may be used frequently as mockups of reactor configurations. Therefore, requirements for modification do not apply unless the overall assembly room is modified, a new assembly room is proposed, or a new configuration is not covered in previous safety evaluations (i.e., Safety Analysis Reports, Safety Analysis Report Addenda, or Technical Safety Requirements).

Readiness assurance. The actions taken to provide assurance that Headquarters, Field Elements, and facility contractors implement appropriate aspects of DOE emergency management program policies and requirements.

Readiness reporting system (RRS). Department of Homeland Security program to collect and manage continuity capability data and assessments of executive branch departments and agencies and their status to perform their Priority Mission Essential Functions (PMEFs) in support of the National Essential Functions (NEFs). The RRS will be used to conduct assessments and track capabilities at all times under all conditions, to include natural disasters, manmade incidents, terrorism, and war.

Rear. The section of the perimeter opposite to and generally upwind (or downslope), from the head of the fire.

Rebuilding and revitalization. Rebuilding and revitalization efforts are distinguished from shorter-term recovery efforts not only by the length of time involved, but also by the scope and nature of the incident, the complexity of efforts required to regenerate infrastructure, and the effect on the social fabric of the community and region. The majority of reconstruction efforts will occur beyond the Federal Government's purview. However, the Federal Government, in collaboration with all stakeholders, will draw upon and apply the field's most innovative thinking, lessons learned, and best practices to create a comprehensive framework for our Nation that fully appreciates free markets and the vast power of incentives and empowers individuals, businesses, and non-profit groups in the decisions about the future of their communities. In order to develop this new framework, our Nation must continue to assess the challenges in this area and provide recommendations to improve our ability to rebuild and revitalize areas following a catastrophic natural or man-made disaster.

We must determine how Federal, State, local, and Tribal governments, the private and non-profit sectors, and communities can improve collaboration and develop recommendations that further economic renewal and help stabilize and reconstruct communities. In addressing these challenges, Federal, State, local, and Tribal governments, the private and nonprofit sectors, and communities must be focused on citizens — and not on bureaucracy or processes — and be guided by the concepts of compassion, speed, efficiency, common sense, and the devolution of as many decisions as reasonably possible to individual citizens, businesses, and communities.

Reburn. Burning of an area over which a fire has previously passed but left fuel which can be ignited.

Reception area. This refers to a location separate from staging areas, where resources report in for processing and out-processing. Reception Areas provide accountability, security, situational awareness briefings, safety awareness, distribution of IAPs, supplies and equipment, feeding, and bed down.

Reception centre. That centre established for the immediate receipt of evacuees and as such will be the initial source for the delivery of welfare services to those evacuees.

Receptor information. The specific locations and distances at which consequence estimates are needed.

Receptor. A point or location at which consequence estimates are performed for the purpose of determining event severity by estimating impacts on safety or human health. For facilities with hazardous materials programs, human health effects are the primary concern.

Recommended design flood. The flood event which has the recommended annual exceedance probability or proportion of probable maximum precipitation inflow and which produces the highest flood for the dam.

Reconnaissance. Inspection of a fire area for the purpose of obtaining information about current and probable fire behaviour and fire suppression information.

Reconstruction. Actions taken to reestablish a community after a period of rehabilitation subsequent to a disaster. Actions would include construction of permanent housing, full restoration of all services, and complete resumption of the pre- disaster state.

Reconstruction. Reorganization of the affected territory, reconstruction of the built environment, restoration of basic services, and the development of the economy with a view to re-establishing the pre-disaster conditions.

Recovery (short term). Even as the immediate imperatives for response to an incident are being addressed, the need to begin recovery operations emerges. In an almost imperceptible evolution, response efforts will transition to short-term recovery operations, such as the restoration of interrupted utility services, reestablishment of transportation routes, and the provision of food and shelter for those displaced by the disaster — actions that will help individuals, communities, and the Nation return to a general state of normalcy. While short-term recovery efforts are the primary responsibility of States and communities, they also involve significant contributions from all sectors of our society — Federal, State, local, and Tribal governments, the private sector, nonprofit partners, as well as individual citizens.

As the priorities and needs of an incident evolve, people, assets, and resources will be reassigned or demobilized to provide a flexible and scalable response, evolving as needs evolve, changing as the incident priorities change. As immediate life-saving and life-sustaining activities subside, and short-term recovery decisions are made over a period of weeks or even months, we must recognize that these efforts are steps to an effective transition to long-term rebuilding and revitalization efforts.

Recovery information management. Recovery information management develops timely, effective communication channels to gather, process and disseminate information relevant to the recovery of the affect community.

Recovery organization. Organization responsible for coordinating all recovery activities. Responsibilities include, but are not limited to, prioritization of activities; protection of worker and general public health and safety; dissemination of information; coordination of site and offsite activities; collection of data and assessment of long-term effects associated with the release of hazardous materials; formulation and implementation of long-term protective actions for the affected areas; and providing assistance as requested to state and local agencies in formulation of long-term protective actions for affected offsite areas.

Recovery Plan. A plan developed by a State, local, or tribal jurisdiction with assistance from responding Federal agencies to restore the affected area.

Recovery Planning (*successful steps*): **1.** Take advantage of the window of opportunity to develop an overall recovery strategy. The outside funding and technical assistance that becomes available after a disaster can help your community make progress on its long-term goals. 2. **Establish community goals and objectives.** Take the time and effort to unite the community behind agreed-upon goals and objectives. 3. **Consider the planning process as well as the plan itself.** Structure the

planning process so that it is open and participatory, but also quickly leads to agreement on a broad framework for recovery. 4. **Employ multi-objective planning.** Look for opportunities to reap multiple benefits when incorporating hazard mitigation and sustainable redevelopment concepts into your recovery efforts. 5. **Be flexible.** The recovery process evolves rapidly and flexibility is mandatory. Keep your options open and take advantage of unexpected opportunities. 6. **All sources of funding are fair game.** Don't overlook non-disaster related grant programs. If expertise is not locally available, seek experienced grant writing assistance from other sources, such as regional or State agencies and the private sector. 7. **Maximize community stakeholder involvement.** Recruit local corporations, foundations, and nonprofit or civic organizations to participate in the planning process. 8. **Maximize the use of non-traditional partners.** Marshal local nonprofit groups and organizations to supplement Federal and State agency support. 9. **Stay out of the weeds.** The recovery plan should be brief. Prioritize immediate, short-term, and long-term recovery actions; detailed design, architectural, and engineering plans can follow later.

Recovery procedures. Procedures that include dissemination of information to federal, state, tribal, and local organizations regarding the emergency and possible relaxation of public protective actions; planning for decontamination actions; establishment of a recovery organization; development of reporting requirements; and establishment of criteria for resumption of normal operations.

Recovery strategy. The recovery strategy should include provisions for the return of the following services, as applicable: 1. Critical infrastructure (water, gas, electricity, and waste management). 2. Telecommunications and cyber systems. 3. Distribution systems or networks for essential goods (food, clothing, personal supplies, and services). 4. Transportation systems, networks and infrastructure. 5. Built environment (including residential, commercial, and industrial uses). 6. Psychosocial services. 7. Health services. 8. Continuity of governance systems.

Recovery. Recovery involves actions, and the implementation of programs, needed to help individuals and communities return to normal. Recovery programs are designed to assist victims and their families, restore institutions to sustain economic growth and confidence, rebuild destroyed property, and reconstitute government operations and services. Recovery actions often extend long after the incident itself. Recovery programs include mitigation components designed to avoid damage from future incidents. Typical recovery actions may include: 1. Repair and replacement of disaster damaged public facilities (roads, bridges, municipal buildings, schools, hospitals, qualified non-profits). 2. Debris cleanup and removal. 3. Temporary housing and other assistance for disasters victims and their families. 4. Low-interest loans to help individuals and businesses with long-term rebuilding and mitigation measures. 5. Restoration of public services (electric power, water, sewer, telephone). 6. Crisis counseling and mental health. 7. Disaster unemployment. 8. Planning and programs for long-term economic stabilization, community recovery and mitigation.

Recruited volunteer. Volunteers with skills that could address unique or short-supply needs of the disaster response, and are individually requested by the response system (by name or by technical ability) to assist in the effort. They may be affiliated or unaffiliated volunteers.

Recurrence interval. The average time interval at which events equal to or greater than a certain magnitude would recur if existing natural regimes continued without change. Recurrence interval is a function of **exceedance probability.**

Red Crescent. The counterpart of the red cross in islamic countries.

Reentry Planning. A formal plan for reentering a facility/site. The plan shall include contingency planning to ensure the safety of reentry personnel, such as planning for the rescue of reentry teams. All individuals involved in reentry shall receive a hazards/safety briefing prior to emergency response activities consistent with federal, state, and local laws and regulations.

Reentry. A planned activity to accomplish a specific objective(s) set by the Emergency Response Organization (ERO), conducted prior to the termination of emergency response, which involves reentering a facility or affected area that has been evacuated or closed to personnel access during the course of the emergency. Reentry activities are time-urgent actions performed during emergency response such as search and rescue, mitigation, damage control, and accident assessment.

Reforestation. Replant with trees; cover again with forest; To replant (an area) with forest cover.

Refresher Training. Training provided annually to certified operators and supervisors and those workers who are likely to witness a hazardous material release and who are required to notify proper authorities of the release.

Refugee. Persons having a well-founded fear of persecution for reasons of race, religion, nationality, membership of a particular social group or political opinion mostly outside the country of nationality and unable to return or avail himself of the protection of that country. Includes mass exodus of people for reasons of conflict and natural disasters moving outside their country of origin.

Regeneration burn. The controlled burning of bushland to encourage new growth.

Region. The term 'region' means— (A) any geographic area consisting of all or parts of 2 or more contiguous States that have a combined population of at least 1,650,000 or have an area of not less than 20,000 square miles, and that, for purposes of an application for a covered grant, is represented by 1 or more governments or governmental agencies within such geographic area, and that is established by law or by agreement 1 of 2 or more such governments or governmental agencies in a mutual aid agreement; or (B) any other combination of contiguous local government units (including such a combination established by law or agreement of two or more governments or governmental agencies in a mutual aid agreement) that is formally certified by the Secretary as a region for purposes 9 of this Act with the consent of— (I) the State or States in which they are located, including a multi-State entity established by a compact between two or 13 more States; and (II) the incorporated municipalities, counties, and parishes that they encompass.

Regional Operations Center (ROC). The temporary operations facility for the coordination of federal response and recovery activities, located at the FEMA Regional Office (or at the federal Regional Center) and led by the FEMA Regional Director or Deputy Director until the DFO becomes operational. Coordination of operations shifts to the state EOC upon arrival of the ERT-A at that location. From that time forward, the ROC performs a support role for federal staff at the disaster scene.

Regional Response Coordination Center (RRCC). The RRCCs Coordinate initial regional and field activities; Deploy regional teams to assess the impact of the event, gauge immediate State needs and make preliminary arrangements to set up operational field facilities; Coordinate Federal support until a JFO is established; Establish a JIC to provide a central point for coordinating emergency public information activities.

Regional Response Coordination Centers (RRCC). A standing facility operated by DHS/EPR/FEMA that is activated to coordinate regional response efforts, establish Federal priorities,

and implement local Federal program support until a JFO is established in the field and/or the PFO, FCO or FRC can assume their NRP coordination responsibilities.

Regional Response Teams (RRT's). Regional counterparts to the National Response Team, the RRT's comprise regional representatives of the Federal agencies on the NRT and representatives of each State within the region. The RRT's serve as planning and preparedness bodies before a response, and provide coordination and advice to the Federal OSC during response actions.

Regional teams. Crisis management teams that support the national continuity of government teams and Regional Emergency Management Teams. The crisis management teams, which are located at each of the Operations Offices and Power Marketing Administrations, are responsible for maintaining essential operations at their sites and for shutting down all other operations.

Regional. A region is any area that is defined as such by resident stakeholders responsible for disaster preparedness and management. A region can be a municipality, a single state (or province), or a portion of a state and may be multi-jurisdictional or cross national borders. Regions generally have certain accepted cultural characteristics and geographic boundaries and tend to coincide with the service areas of the infrastructures that serve them.

Register. A listing of all hazardous substances which are used or produced in the workplace and the available material safety data sheets.

Registration. The process of accurately recording onto disaster registration cards details of all persons affected by disaster whether they are evacuated or remain in the disaster area.

Regulatory Floodway. As defined under the NFIP, the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height.

Rehabilitation (rehab). Response terminology for rest, rehydration, feeding and other activities so that responders may resume safe and effective operations.

Rehabilitation. 1. The operations and decisions taken after a disaster with a view to restoring a stricken community to its former living conditions, whilst encouraging and facilitating the necessary adjustments to the changes caused by the disaster. 2. Process of adjustment to circumstances prevailing in the aftermath of an exotic animal disease outbreak.

Relative humidity. The amount of water vapour in a given volume of air, expressed as a percentage of the maximum amount of water vapour the air can hold at that temperature.

Relatives reception centre. The centre on an airport for those persons waiting to meet victims, where identification is undertaken and care

Release designation. A shorthand notation for a set of source term specifications that might be used to calculate consequences at various receptors.

Release. 1. Any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or otherwise disposing of substances into the environment. This includes abandoning/discarding any type of receptacle containing substances in an unenclosed containment structure but does not include permitted containment structures. 2. For operational emergencies, the primary concern is airborne release, as this pathway typically represents the most time-urgent situation and requires a rapid, coordinated emergency response on the part of the facility, collocated facilities, and surrounding jurisdictions to protect workers, the public, and the environment.

Reliability. The extent to which a data gathering method will give the same results when the process is repeated. Reliability includes the amount of error (random or systematic [bias]) that is inherent in the method used for data collection.

Relief. The provision of assistance during or immediately after a disaster to meet the life preservation and basic subsistence needs of those people affected. It can be of an immediate, short-term, or protracted duration.

Remedial action. Any action required to rectify a deficiency to an adequate safety standard.

Remedial Action Management Program (RAMP). A program that will identify and remedy operational and programmatic issues encountered in disaster response and recovery operations and exercises. it will also capture lessons learned and smart practices that will become part of a Web-based national library accessible to all levels of government. The RAMP replaces the Disaster Corrective Action Program and involves restructured procedures and new issue- management authorities.

Remote area. An area where, because of distance, time or circumstance, the medical resources required to adequately manage the event are delayed to the potential detriment of the casualties.

Remote sensing. The observation and/or study of an area, object or phenomenon from an aerial distance, frequently using data collected by satellite.

Rendezvous point. A pre-arranged reference point, i. e. Road junction, cross-road or other specified place, to which personnel/vehicles responding to an emergency situation initially proceed to receive directions to staging areas and/or the accident/incident site.

Reorganize. To organize differently.

REP. Radiological Emergency Preparedness.

Repetitive Flood Claims (RFC) Grant Program. The Repetitive Flood Claims (RFC) grant program provides funding to reduce or eliminate the long-term risk of flood damage to structures insured under the National Flood Insurance Program (NFIP) that have had one or more claim payments for flood damages. RFC funds may only mitigate structures that are located within a State or community that can not meet the requirements of the Flood Mitigation Assistance (FMA) program for either cost share or capacity to manage the activities. The long-term goal of the RFC program is to reduce or eliminate flood claims under the NFIP through mitigation activities that are in the best interest of the National Flood Insurance Fund (NFIF).

Repetitive loss. Under the National Flood Insurance Program, the payment of at least $1,000 twice or more since 1978 for flood damages to the same property. Thus, such a property would be a repetitive loss property; a community with one or more such properties is a repetitive loss community. Repetitive loss projects are mandatory for such communities when participating in CRS.

Reportable occurrence. Events or conditions to be reported in accordance with the criteria defined in DOE 232.1. Emergencies, Unusual Occurrences, and Off-Normal Occurrences are Reportable Occurrences.

Reportable quantity. For any Comprehensive Environmental Response, Compensation and Liability Act hazardous substance, including radionuclides and Superfund Amendments and Reauthorization Act Title 3 extremely hazardous substances, the quantities established in 40 CFR Part 302 and Part 355 respectively, releases of which require notification unless federally permitted.

Requalification. The process of reviewing, updating, and improving the level of knowledge for the renewal of a position qualification. It should highlight and review the initial qualification program and include subject matter not reinforced by frequent use; changes in facility conditions, procedures,

or operating experience; and lessons-learned from accidents or poor practices pertaining to safe radiological controls.

Request for disaster assistance. Official approach made by the authorities of a disaster-stricken country to other governments, international organisations or voluntary agencies requesting aid in fact of the calamity.

Requirement. An imperative; depend on for fulfillment; a necessity.

Rescue coordination centre. A unit responsible for promoting efficient organisation of search and rescue services and for coordinating the conduct of search and rescue operations within a search and rescue region. Previously known as ‘maritime rescue coordination centre’.

Rescue. The safe removal of persons or animals from actual or threatened danger of physical harm.

Research. Studious inquiry or examination; to investigate thoroughly; investigation or experimentation aimed at the discovery and interpretation of facts, revisions of accepted theories or laws in the light of new facts, or the practical application of such new or revised theories or laws.

Reservoir. An artificial lake, pond or basin for storage, regulation and control of water, silt, debris or other liquid or liquid-borne material.

Reservoir capacity the total or gross storage capacity of the reservoir at full supply level.

Resettlement. Actions necessary for the permanent settlement of persons dislocated or otherwise affected by a disaster to an area different from their last place of habitation.

Residual risk the remaining level of risk after risk treatment measures have been taken.

Resilience. Many attempts have been made to define ‘resilience’. The variety of academic definitions and concepts can be confusing. For operational purposes it is more useful to work with broad definitions and commonly understood characteristics. Using this approach, system or community resilience can be understood as: capacity to absorb stress or destructive forces through resistance or adaptation; capacity to manage, or maintain certain basic functions and structures, during disastrous events; capacity to recover or ‘bounce back’ after an event. ‘Resilience’ is generally seen as a broader concept than ‘capacity’ because it goes beyond the specific behaviour, strategies and measures for risk reduction and management that are normally understood as capacities. However, it is difficult to separate the concepts clearly. In everyday usage, ‘capacity’ and ‘coping capacity’ often mean the same as ‘resilience’.

A focus on resilience means putting greater emphasis on what communities can do for themselves and how to strengthen their capacities, rather than concentrating on their vulnerability to disaster or their needs in an emergency. The terms ‘resilience’ and ‘vulnerability’ are opposite sides of the same coin, but both are relative terms. One has to ask what individuals, communities and systems are vulnerable or resilient to, and to what extent.

Resilience. The capacity to recover successfully from loss and damage. The central features of resilience appear to be access to resources (particularly finance), access to information and services, the capacity to manage one’s own affairs and the capacity to deal with the stress and emotions generated by the disaster.

Resiliency, healthcare system. The ability to maintain operational continuity, or the ability to maintain mission critical business operations and regular healthcare services despite the effects of a hazard impact.

Resiliency. The ability of an individual human or an organization to quickly recover from change or misfortune. It is commonly thought of as a buoyancy and an ability to bounce back.

Resource analysis. The systematic identification and analysis of available resources and authorities for managing these potential resources in an emergency.

Resource Management Concepts and Principles in DHS. The core concepts and principles of resource management as taught by DHS (and as defined in the NIMS Document) incorporate the following components: Resource management involves coordination and overseeing the application of tools, processes, and systems that provide incident managers with timely and appropriate resources during an incident. Resources include personnel, teams, facilities, equipment, and supplies. Resource management involves the four primary tasks noted below: 1. The establishment of systems for describing, inventorying, requesting, and tracking resources. 2. The activation of these systems prior to and during an incident. 3. The dispatching of resources prior to and during an incident. 4. The deactivating or recalling of resources during or after an incident.

The underlying concepts that shall be included in NIMS resources management training include the following: 1. Resource management provides a uniform method of identifying, acquiring, allocating, and tracking resources. 2. Resource management uses effective mutual-aid and donor assistance and is enable by the standardized classification of kinds and types of resources required to support the incident management organization. 3. Resource management uses a credentialing system tied to uniform training and certification standards to ensure the requested personnel resources are successfully integrated into ongoing incident operations. 4. Resource management coordination is the responsibility of the EOCs and/or multi-agency coordination entities, as well as specific elements of the ICS structure (e.g., the Resources Unit). 5. Resource management should encompass resources contributed by the private-sector and non-governmental organizations. 6. Training dealing with NIMS resource management shall describe to participants the components of resource management and establish relationships between all elements of resource management with the multi-agency coordination system under NIMS.

Resource management objectives. Resource management objectives established shall include the following: (1) personnel, equipment, training, facilities, funding, expert knowledge, materials, technology, information, intelligence, and the time frames within which they will be needed (2) quantity, response time, capability, limitations, cost, and liability connected with using the involved resources (3) resources and any needed partnership arrangements essential to the program.

Resource management tasks. Resource management shall include the following tasks: 1. Establishing processes for describing, inventorying, requesting, and tracking resources. 2. Activating these processes prior to and during an incident. 3. Dispatching resources prior to and during an incident. 4. Deactivating or recalling resources during or after incidents. 5. Contingency planning for shortfalls of resources.

Resource management. Efficient emergency management and incident response requires a system for identifying available resources at all jurisdictional levels to enable timely and unimpeded access to resources needed to prepare for, respond to, or recover from an incident. Resource management under NIMS includes mutual aid agreements and assistance agreements; the use of special Federal, State, tribal, and local teams; and resource mobilization protocols.

The five key principles of resource management that underpin effective resource management are as follows: 1. Advance Planning. Entities work together in advance of an incident to develop plans for managing and employing resources in a variety of possible emergency circumstances. 2.

Resource Identification and Ordering. Entities use standardized processes and methodologies to order, identify, mobilize, dispatch, and track the resources required to support incident management activities. 3. Categorizing Resources. Resources are categorized by size, capacity, capability, skill, and other characteristics. 4. Use of Agreements. Mutual aid/assistance agreements and pre-incident agreements among all parties providing or requesting resources are necessary to enable effective and efficient resource management during incident operations. 5. Effective Management of Resources. Resource managers use validated practices to perform the following key resource management tasks systematically and efficiently: a) acquisition Procedures. Used to obtain resources to support operational requirements; b) Management Information Systems, used to collect, update, and process data; track resources; and display their readiness status; c) Ordering, Mobilization, Dispatching, and Demobilization Protocols. Used to request resources, prioritize requests, activate and dispatch resources to incidents, and return resources to normal status. To the extent practical and feasible, an entity should type resources according to established definitions, such as utilizing the Department of Homeland Security/FEMA's National Mutual Aid and Resource Management Initiative Resource Type Definitions. Resources for program administration as well as emergency operations should be specifically identified.

These resources include, but are not limited to, the following: 1. The locations, quantities, accessibility, operability, and maintenance of equipment (heavy duty, protective, transportation, monitoring, decontamination, response, personal protective equipment). 2. Supplies (medical, personal hygiene, consumable, administrative, ice). 3. Sources of energy (electrical, fuel). 4. Emergency power production (generators). 5. Communications systems. 6. Food and water. 7. Technical information. 8. Clothing. 9. Shelter. 10. Specialized personnel (medical, religious, volunteer organizations, emergency management staff, utility workers, morticians, and private contractors). 11. Specialized volunteer groups [Red Cross, amateur radio, religious relief organizations, charitable agencies, VOAD (Volunteer Organization Active in Disaster), COAD (Community Organization Active in Disaster), CERT (Community Emergency Response Team)]. 12. External federal, state, provincial, tribal, territorial, and local agencies A resource should be available in a timely manner and should have the capability to do its intended function. Restriction on the use of the resource should be taken into account, and application of the resource should not incur more liability than would failure to use the resource. Finally, the cost of the resource should not outweigh the benefit.

Resource management. A system for identifying available resources at all jurisdictional levels to enable timely and unimpeded access to resources needed to prepare for, respond to, or recover from an incident. Resource management under the NIMS includes mutual-aid agreements; the use of special Federal, State, local, and tribal teams; and resource mobilization protocols.

Resource tracking. A standardized, integrated process conducted prior to, during, and after an incident by all emergency management/response personnel and their associated organizations.

Resource typing (measures). Measures are standards. The measures used will depend on the kind of resource being typed. The mission envisioned determines the specific measure selected. The measure must be useful in describing a resource's capability to support the mission. Measures should identify capability and/or capacity. As an example, one measure for a disaster medical assistance team is the number of patients it can care for per day. An appropriate measure for a hose might be the number of gallons of water per hour that can flow through it.

Resource Typing (National Categories): 1. Transportation. 2. Communications. 3. Public Works and Engineering. 4. Firefighting. 5. Information and Planning Law Enforcement and Security Mass Care. 6. Resource Management Health and Medical Search and Rescue Hazardous Materials Response Food and Water Energy. 7. Public Information Animals and Agricultural Issues Volunteers and Donations.

Resource typing standards. Categorization and description of response resources that are commonly exchanged in disasters through mutual aid agreements. The FEMA/NIMS Integration Center Resource typing definitions provide emergency responders with the information and terminology they need to request and receive the appropriate resources during an emergency or disaster.

Resource typing. Resource typing is categorizing, by capability, the resources requested, deployed, and used in incidents. Measurable standards identifying the capabilities and performance levels of resources serve as the basis for categories. Resource users at all levels utilize these standards to identify and inventory resources. Resource kinds may be divided into subcategories to define more precisely the resource capabilities needed to meet specific requirements. Resource typing is a continuous process designed to be as simple as possible to facilitate frequent use and accuracy in obtaining needed resources. To allow resources to be deployed and used on a national basis, the NIC (with input from Federal, State, tribal, local, private sector, NGOs, and national professional organizations) is responsible for facilitating the development and issuance of national standards for the typing of resources and ensuring that these typed resources reflect operational capabilities.

In ICS, type refers to a designated resource's capability. Type 1 is generally considered to be more capable than Types 2, 3, or 4, respectively, because of size; power; capacity; or, in the case of incident management teams, experience and qualifications. Resource typing also involves categorizing the resource by its kind (e.g., what the resource is, snow plow, strike team, etc.). Therefore, resource typing involves designations of kind and type.

Resource unit. Functional unit within the Planning Section responsible for recording the status of resources committed to the incident. This unit also evaluates resources currently committed to the incident, the effects additional responding resources will have on the incident, and anticipated resource needs.

Resources, assigned. Resources checked in and assigned to work tasks on an incident.

Resources, available. Resources assigned to an incident, checked in, and available for a mission assignment, normally located in a Staging Area.

Resources. Personnel and major items of equipment, supplies, and facilities available or potentially available for assignment to incident operations and for which status is maintained. Resources are described by kind and type and may be used in operational support or supervisory capacities at an incident or at an EOC.

Respirable fraction (RF). The fraction of airborne radionuclides as particles that can be transported through air and inhaled into the human respiratory system, as defined in DOE- HDBK-3010-94. The RF is commonly assumed to include particles 10 mm Aerodynamic Equivalent Diameter (AED) and less. The RF represents the fraction of the airborne material that contributes to the effect or consequence of concern.

Respiration. Breathing; inhalation.

Responder Hotwash Critique. These critiques occur immediately after the exercise and are facilitated by the controller and evaluator team at each location. The purpose of these critiques is to provide a forum for constructive feedback on the exercise by the responders.

Responder briefing. A briefing held prior to an exercise that includes rules of conduct; scope of the exercise; safety and security precautions; approved simulations; methods for identifying various exercise participants; and any special administrative, logistical, or communications arrangements in effect during the exercise.

Responder, first. Refers to individuals who in the early stages of an incident are responsible for the protection and preservation of life, property, evidence, and the environment, including emergency response providers as defined in Section 2 of the Homeland Security Act of 2002 (6 U.S.C. 101). It includes emergency management, public health, clinical care, public works, and other skilled support personnel (e.g., equipment operators) who provide immediate support services during prevention, response, and recovery operations.

Responder, second. Personnel intended to arrive later during incident response, to augment or relieve first responders, or to provide additional, specialized expertise that is less common in first response.

Responders. Individuals often referred to as players, who typically comprise the majority of people involved in the exercise. It is their responsibility to take whatever actions are necessary to mitigate the simulated emergency and thus demonstrate the ability to ensure the safety of facility personnel, the public, and the environment in accordance with established emergency plans. DOE G 151.1-1, Vol. 7]

Response termination. In general, response activities are terminated when the situation has been stabilized. At this point, potential threats to workers, the public, the environment, and national security have been characterized, conditions no longer meet established emergency categorization criteria, and it appears unlikely that conditions will deteriorate. In coordination with response organizations, the emergency is then declared terminated and activities focus on recovery.

Response, roles and responsibilities of key actors. Disaster response has traditionally been handled by State, local, and Tribal governments, with the Federal Government and private and non-profit sectors playing supporting and ad hoc roles, respectively. A lack of clarity regarding roles and responsibilities across these levels can lead to gaps and seams in our national response and delay our ability to provide life-saving support when needed. Accordingly, we must better articulate how roles, responsibilities, and lines of authority for all response stakeholders are fulfilled across all levels of government and among the private and nonprofit sectors so that each understands how it supports the broader national response.

We will continue to base our Federal planning and response efforts on the premise that the vast majority of incidents will be handled at the lowest jurisdictional level possible, with the Federal Government anticipating needs and assisting State, local, and Tribal authorities upon request, when their capabilities are insufficient, or in special circumstances where Federal interests are directly implicated. Public-private partnerships also are essential, and we will work together to better define the roles that the private and non-profit sectors can play, particularly in their local communities, to achieve a more successful response.

Response. 1. The phase of Comprehensive Emergency Management that addresses the immediate and short-term effects of the disaster or emergency. It includes activities immediately before (for an impending threat), during, and after a hazard impact to address the immediate and

short-term effects of the disaster or emergency. 2. In disaster/emergency management applications, activities designed to address the immediate and short-term effects of the disaster/emergency. 3. Activities that address the short-term, direct effects of an incident. Response includes immediate actions to save lives, protect property, and meet basic human needs. Response also includes the execution of emergency operations plans and of mitigation activities designed to limit the loss of life, personal injury, property damage, and other unfavorable outcomes. As indicated by the situation, response activities include applying intelligence and other information to lessen the effects or consequences of an incident; increased security operations; continuing investigations into nature and source of the threat; ongoing public health and agricultural surveillance and testing processes; immunizations, isolation, or quarantine; and specific law enforcement operations aimed at preempting, interdicting, or disrupting illegal activity, and apprehending actual perpetrators and bringing them to justice.

Responsibility. Obligation or duty to perform in a specific manner or achieve a defined result. While responsibility may be extended to another entity (along with delegated authority), the ultimate responsibility lies with the entity of highest authority within that authority domain.

Restore. Bringing a function or a structure back to its original state.

Restricted area. A declared area in which defined rigorous conditions apply to the movement into, out of, and within, of specified animals, persons or things.

Restricted Data (RD). All data concerning: (1) design, manufacture, or utilization of atomic weapons, (2) production of special nuclear material, or (3) use of special nuclear material in the production of energy. Restricted Data does not include data declassified or removed from the Restricted Data category pursuant to Section 142(d) of the Atomic Energy Act of 1954, as amended.

Resumption of Normal Operations. Affected facilities and areas should be returned to normal operations or use only when all criteria established by the recovery organization have been met and all approvals granted by cognizant organizations and agencies.

Resuscitation. Reviving one who is seriously injured or apparently dead.

Retraining. A process of reviewing, developing, and improving the knowledge base for required training. Retraining does not encompass a formal position qualification, but has similar elements and methods.

Retrofit. Strengthening an existing structure to improve its resistance to the effects of earthquakes.

Retrofitting. Reinforcement of structures to become more resistant and resilient to the forces of natural hazards. Retrofitting involves consideration of changes in the mass, stiffness, damping, load path and ductility of materials, as well as radical changes such as the introduction of energy absorbing dampers and base isolation systems. Examples of retrofitting includes the consideration of wind loading to strengthen and minimize the wind force, or in earthquake prone areas, the strengthening of structures.

Reviewing official. An individual who may make a determination that a document or material contains, does not contain, or no longer contains, Unclassified Controlled Nuclear Information.

Richter scale. A logarithmic scale for measuring the magnitude of an earthquake through the measurement of seismic waves recorded by seismographs at a point 60 miles from the epicenter. This measurement is very different from the severity of an earthquake's effects, measured on the Modified Mercalli Scale (defined above). Magnitude is related to wave amplitude and is recorded on a

logarithmic scale. Each single-unit jump in magnitude reflects a 32-fold increase in seismic energy generated by the event.

Richter scale. Devised by C.F. Richter in 1935, an index of the seismic energy released by an earthquake (as contrasted to intensity that describes its effects at a particular place), expressed in terms of the motion that would be measured by a specific type of seismograph located 100 km from the epicentre of an earthquake. Nowadays several magnitude scales are in use. They are based on amplitudes of different types of seismic waves, on signal duration or on the seismic moment.

Risk acceptance. An informed decision to accept the likelihood and the consequences of a particular risk.

Risk analysis. Risk analysis involves identifying, measuring or estimating and evaluating risk. There has been considerable debate between engineers and social scientists about whether risk can profitably and successfully be quantified, indeed, whether it is necessary to quantify it al all. Engineers (e.g. **Lind** 1987) regard risk analysis as a formal means of quantitatively evaluating the possible misfunctioning of a system by assigning probabilities to a set of predicted outcomes. Social scientists (e.g. **Slovic** 1987) argue that risk need not be quantified to be analyzed and that it is often sufficient to conceptualize a risk in order to know the magnitude of a problem. In general types of risk analysis, comparisons are often more meaningful than absolute numbers or probabilities, especially when the values are quite small, as people tend not to understand likelihoods expressed as small fractions. **(Alexander,** no date, 2) Formal risk analysis is based upon the creation of an ensemble of scenarios which express what might happen as a chain of occurrences.

Risk analysis. A detailed examination performed to understand the nature of unwanted, negative consequences to human life, health, property, or the environment; an analytical process to provide information regarding undesirable events; the process of quantification of the probabilities and expected consequences for identified risks. (Gratt 1987, 244) See Hazard Vulnerability Analysis.

Risk assessment. The entity shall identify hazards, monitor those hazards, the likelihood of their occurrence, and the vulnerability of people, property, the environment, and the entity itself to those hazards. A comprehensive risk assessment identifies the range of possible hazards, threats, or perils that have or might impact the entity, surrounding area, or critical infrastructure supporting the entity.

The potential impact of each hazard, threat, or peril is determined by the severity of each and the vulnerability of people, property, operations, the environment, and the entity to each threat, hazard, or peril. The risk assessment should categorize threats, hazards, or perils by both their relative frequency and severity, keeping in mind that there might be many possible combinations of frequency and severity for each. The entity should attempt to mitigate, prepare for, plan to respond to, and recover from those threats, hazards, or perils that are able to significantly impact people, property, operations, the environment, or the entity itself. A number of methodologies and techniques for risk assessment exist that range from simple to complex.

These techniques and associated amplifying information include, but are not limited to, the following: (1) What-if': The purpose of the what-if analysis is to identify specific hazards or hazardous situations that could result in undesirable consequences. This technique has limited structure but relies on knowledgeable individuals who are familiar with the areas/operations/processes. The value of the end result is dependent on the team and the exhaustive nature of the questions they ask regarding the hazards. (2) Checklist: A specific list of items is used to identify hazards and hazardous situations by comparing the current or projected situations with

accepted standards. The value of the end result is dependent on the quality of the checklist and the experience/credentials of the checklist user. (3) What- if/checklist: This technique is a combination of the what-if and checklist techniques, and uses the strength of both techniques to complete the risk assessment. The what-if questions are developed and the checklist(s) used to encourage the creativity of the what-if process, as well as fill in any gaps in the process of developing questions. The value of the end result is dependent on the team and exhaustive nature of the questions they ask regarding the hazards. (4) Hazard and operability study (HAZOP):

This technique requires an interdisciplinary team that is very knowledgeable of the areas/operations/processes to be assessed. This approach is thorough, time- consuming, and costly. The value of the end result depends on the qualifications/experience of the team, the quality of the reference material available, the ability of the team to function as a team, and strong, positive leadership. (5) Failure mode and effects analysis (FMEA): Each element in a system is examined individually and collectively to determine the effect when one or more elements fail. This is a bottom-up approach; that is, the elements are examined and the effect of failure on the overall system is predicted. A small interdisciplinary team is required. This technique is best suited for assessing potential equipment failures. The value of the end result is dependent on the credentials of the team and scope of the system to be examined. (6) Fault-tree analysis (FTA): This is a top-down approach where an undesirable event is identified and the range of potential causes that could lead to the undesirable event is identified. The value of the end result is dependent on the competence in using the FTA process, on the credentials of the team, and on the depth of the team's analysis.

According to Kates and Kasperson (1983), risk assessment comprises three distinct steps: 1. An identification of hazards likely to result in disasters, i.e. what hazardous events may occur? 2. An estimation of the risks of such events, i.e. what is the probability of each event? 3. An evaluation of the social consequences of the derived risk, i.e. what is the loss created by each event?

Risk aversion. The value people place directly on reducing their own and others' risk of death and injury.

Risk avoidance. An informed decision not to become involved in a risk situation.

Risk characterization. Risk characterization is a synthesis and summary of information about a potentially hazardous situation that addresses the needs and interests of decision makers and of interested and affected parties. Risk characterization is a prelude to decision making and depends on an interactive, analytical-deliberate process.

Risk communication. An interactive process of exchange of information and opinion among individuals, groups and institutions. We construe risk communication to be successful to the extent that it raises the level of understanding of relevant issues or actions for those involved and satisfies them that they are adequately informed within the limits of available knowledge. The NRC (1989, 149) concludes that four objectives are key to improving risk communications: (1) goal setting, (2) openness, (3) balance, and (4) competence. As a means of achieving these objectives, it is important, at the start of any given project, to determine: 1) what the public know, believe, and do not believe about the subj ect risk and ways to control it; 2) what quantitative and qualitative information participants need to know to make critical decisions; 3) and how they think about and conceptualize the risk.

Risk control. That part of risk management which involves the provision of policies, standards and procedures to eliminate, avoid or minimise adverse risks facing an enterprise.

Risk criteria. Standards by which the results of risk assessments can be assessed. They relate quantitative risk estimates to qualitative value judgements about the significance of the risks. They are inexact and should be seen as guidelines rather than rules.

Risk engineering. The application of engineering principles and methods to risk management.

Risk estimation. The process used to produce a measure of the level of risks being analysed. Risk estimation consists of the following steps: frequency analysis, consequence analysis and their integration.

Risk evaluation. 1. The process in which judgements are made on the tolerability of the risk on the basis of **risk analysis** and taking into account factors such as socioeconomic and environmental aspects. 2. The process used to prioritise risks.

Risk factor. A factor that modifies the risk.

Risk financing. The methods applied to fund risk treatment and the financial consequences of risk. Note: in some industries risk financing only relates to funding the financial consequences of risk.

Risk identification. The process of determining what can happen, why and how.

Risk management. A management science that employs the findings of the Hazards Vulnerability Analysis process to make strategic and tactical decisions on how risks will be treated — whether deferred, reduced (through mitigation and preparedness activities), transferred, or avoided.Risk management provides the option of accepting certain levels of risk, at least temporarily, that are considered too low for resource allocation. Conversely, it provides the decision option to commit major resources that eliminate or avoid risks that are of such high probability and/or high consequence that they threaten the very existence of an organization. Risk management, which may be considered a subsection of overall emergency management, focuses upon mitigation preparedness activities that prevent and or reduce hazard impacts, and is considered by many to be its own discipline.

Risk mapping. The presentation of the result of risk assessment on a map, showing the levels of expected losses which can be anticipated in specific areas, during a particular time period, as a result of particular disaster hazards.

Risk marker. The presence of an attribute of the hazard that is associated with an increased probability that an event may occur and can be used as an indicator of an increased or increasing risk that the specific hazard will occur.

Risk perception. Slovic (cited in Slaymaker 1995, 3) defines risk perception as ‘the ‘common sense’ understanding of hazards, exposure and risk, arrived at by a community through intuitive reasoning.usually expressed.as ‘safe’ or ‘unsafe’.’ He goes on the mention that ‘policy decisions are almost always driven by perceived risk among the population affected and among decision makers [and that] these perceptions are commonly at variance with ‘technical’ risk assessments.’

Risk phrase. A phrase describing the hazard of a substance as provided in the national occupational health and safety commission’s approved criteria for classifying hazardous substances.

Risk Reduction. Long-term measures to reduce the scale and/or the duration eventual adverse effects of unavoidable or unpreventable disaster hazards on a society which is at risk, by reducing the vulnerability of its people, structures, services, and economic activities to the impact of known disaster hazards. Typical risk reduction measures include improved building standards, flood plain zoning and land-use planning, crop diversification, and planting windbreaks. The measures are frequently subdivided into structural and non-structural, active and passive measures. N.B. A

number of sources have used disaster mitigation in this context, while others have used disaster prevention. Risk Typologies: 1. Subjective risk: the mental state of an individual who experiences uncertainty or doubt or worry as to the outcome of a given event. 2. Objective risk: the variation that occurs when actual losses differ from expected losses. 3. Real risk; the combination of probability and negative consequence that exists in the real world. 4. Observed risk: the measurement of that combination obtained by constructing a model of the real world. 5. Perceived risk: the rough estimate of real risk made by an untrained member of the general public.

Risk retention. Intentionally or unintentionally retaining the responsibility for loss, or financial burden of loss within the organisation.

Risk transfer. Shifting the responsibility or burden for loss to another party through legislation, contract, insurance or other means. Risk transfer can also refer to shifting a physical risk or part thereof elsewhere.

Risk treatment options. Measures which modify the characteristics of hazards, communities, or environments.

Risk treatment. Selection and implementation of appropriate options for dealing with risk.

Risk. There are as many definitions of 'vulnerability' and 'risk' as there are agencies in federal, state, and local governments combined. Currently, there is no universally accepted definition of the most basic measures of criticality — vulnerability and risk. For example, the intelligence community typically defines 'risk' as $R = T + V$ (Threat plus Vulnerability). The FBI says 'risk' is $R = I \times T \times V$ (probability of an incident times threat times vulnerability). A number of other methodologies use arbitrary metrics to gauge risk. The most popular method of gauging criticality of an asset such as a port, telecommunications center, water treatment plant, or transportation terminal is to assign numbers to each asset and then add them together. In ranked ordering systems such as the U.S. Coast Guard's port security and risk assessment tool, risk is computed by summing assigned numbers to various properties such as damage, casualties, vulnerability, and threat. These numbers are provided by subject matter experts who, in turn, rely on their individual judgment when rating 'vulnerability' and 'risk'.

The port asset with the highest total is declared the most critical. The validity of this approach relies on subject matter experts, which does not address the problem of inconsistency across experts. This leads to uneven ranking, because every expert has a different idea of how to assign numbers. It also leads to meaningless totals, because of the different interpretations of what the numbers mean. The intelligence community's risk equation is difficult to apply because it is not clear how one compares a low-threat, high-vulnerability asset with a high-threat, low-vulnerability asset. If we add threat and vulnerability together and get the same total, what is the difference? Clearly, a high-threat condition deserves closer scrutiny than a low-threat condition, regardless of the vulnerability, and yet $R = T + V$ produces indistinguishable totals.

We need a standard, scientifically exact method of assessing vulnerability and risk. Only then will we be able to define vulnerability and risk. A standard definition means that states and localities will be able to compare apples to oranges, and that the result of vulnerability analysis will mean something — across the 50 states. Suppose for example, 'vulnerability' is defined as the probability that an attack will succeed and 'risk' is defined as the expected value of the damage caused by a successful attack Vulnerability is a probability (a number from zero to 100 % and risk is a cost (a

number that represents the impact of an attack on an asset or entire sector). Mathematically, risk is $V \times D$, where V = vulnerability and D is typically in units of dollars, casualties, or some other loss.

Risk/Exposure. The potential threat to human health or the environment that results from the release or handling of wastes or sensitive materials.

Risk-Based. The Guidelines [NPG] establish a risk-based approach to preparedness. Risk is a function of three variables: threat, vulnerability, and consequence. Both threat and vulnerability are influenced by the probabilities of events that are highly uncertain. In order to compensate for that uncertainty, the Guidelines provide a set of National planning Scenarios that represent a range of threats that warrant national attention. The National Planning Scenarios establish common assumptions to guide planning nationwide regarding potential vulnerabilities and consequences (or impacts) of major incidents. Analysis of the range of potential impacts is essential for defining capabilities in terms of both capacity (i.e., how many are needed) and proficiency (i.e., how well must they be able to perform). These capabilities must be reflected in emergency operations plans (for the near-term) and in preparedness strategies (for the long- term). Federal, State, local, tribal, and territorial officials supplement this approach with risk assessments that provide additional data on their specific threats, vulnerabilities, and consequences. As a result, officials can tailor their approach according to differences in risk across the Nation.

Risk-Based Allocation (DHS). The risk model used for UASI, SHSP, and LETPP considers the potential risk of terrorism to people, critical infrastructure, and the economy to estimate the relative risk of terrorism faced by a given area. Risk is defined as the product of three principal variables: threat — the likelihood of an attack occurring, vulnerability — the relative exposure to attack, and consequence — the expected impact of an attack.

Risk-Driven (*core principle of emergency management***).** Risk-driven: emergency managers use sound risk management principles (hazard identification, risk analysis, and impact analysis) in assigning priorities and resources.

Road accident rescue. The freeing and extrication of trapped people from motor vehicles.

Road block. Road check point or barricade to maintain compliance with movement control restrictions.

Robert T. Stafford Disaster Relief and Emergency Assistance Act. Pub. L. No. 93-288, 88 Stat. 143 (1974), codified in 42 U.S.C. §§ 5121-5206 (2005), was also amended in the Department of Homeland Security Appropriations Act of 2007, Pub. L. No. 109-295, 120 Stat. 1355 (2006), particularly Title VI, the Post-Katrina Emergency Management Reform Act of 2006 (discussed below). The Stafford Act describes the programs and processes by which the Federal Government provides disaster and emergency assistance to State and local governments, tribal nations, eligible private nonprofit organizations, and individuals affected by a declared major disaster or emergency. The Stafford Act covers all hazards, including natural disasters and terrorist events.

Rockfall. Free-falling or precipitous movement of a newly detached segment of bedrock of any size from a cliff or other very steep slope.

Rockslide. A downward, usually sudden and rapid movement of newly detached segments of bedrock over an inclined surface or over preexisting features.

Roentgen (R). A unit of exposure to ionizing gamma radiation in air.

Roentgen. An old unit of exposure to *x* or gamma radiation, based upon the capacity of the radiation to produce ionisation in air, superseded by **gray** and **sievert.**

Rolling boil. Vigorously boiling hot water, a term used to denote water at 1,000 °C for the purpose of sterilisation.

Romer scale. A device for accurately measuring the position of a point within a grid square for grid reference.

Ross-forel scale. A numerical index describing the effects of an earthquake (in common use before the adoption of the modified mercalli scale in about 1931).

Rostered volunteer. A volunteer who has completed the registration process, having credentials verified, and has been entered into the volunteer management system database for potential assignment.

RRCC. Regional Response Coordination Center.

Run-card System. A system for providing information on chemical and radiological materials located in the buildings for HAZMAT response.

Runoff. That part of precipitation which flows towards a river on the ground surface (surface runoff) or within the soil (subsurface runoff or Interflow).

Run-up height. The elevation of the water level above the immediate tide level when a tsunami runs up onto the coastal land.

Run-up wave. The maximum vertical height attained by a wave running up a dam face. Measured from the stillwater level.

Rupture zone. The area of the Earth through which fault movement occurred during an earthquake. For large quakes, the section of the fault that ruptured may be several hundred miles in length. Ruptures may or may not extend to the ground surface.

S

Safe holding area. An area, isolated from fire and smoke, in which mobility-impaired persons may be temporarily held whilst awaiting evacuation.

Safe oxygen level. A minimum oxygen content in air of 19.5 % by volume under normal atmospheric pressure (equivalent to a partial pressure of oxygen of 19.8 kilopascals (148 millimetres of mercury)), and a maximum oxygen content in air of 23.5 % by volume under normal atmospheric pressure. At pressure significantly higher or lower than the normal atmospheric pressure, expert guidance should be sought.

Safe school initiative. Established in collaboration by the U.S. Secret Service and the U.S. Department of Education's Safe and Drug Free Schools Program, the Safe School Initiative (SSI) focuses on prevention and provides useful information about the thinking and behavior of students who commit acts of targeted violence in our nation's schools. One of the key recommendations of the SSI was that schools form multidisciplinary threat assessment teams to assist with identifying, assessing and managing students who may pose a threat of targeted violence. An interactive CD-ROM, titled A Safe School and Threat Assessment Experience: Scenarios Exploring the Findings of the Safe School Initiative, complements the published documents of the Safe School Initiative.

Safe working load. The maximum working load which should be applied to a rope consistent with the factor of safety recommended for the conditions under which the rope is to be used.

SAFECOM. SAFECOM, a communications program of the Department of Homeland Security's Office for Interoperability and Compatibility (OIC), with its Federal partners, provides research, development, testing and evaluation, guidance, tools, and templates on communications-related issues to local, tribal, state, and Federal emergency response agencies. OIC is managed by the Science and Technology Directorate.

As an emergency responder driven program, SAFECOM is working with existing Federal communications initiatives and key emergency response stakeholders to address the need to develop better technologies and processes for the multi-jurisdictional and cross-disciplinary coordination of existing systems and future networks. SAFECOM harnesses diverse Federal resources in service of the emergency response community.

Safeguards. An integrated system of physical protection, material accounting, and material control measures designed to deter, prevent, detect, and respond to unauthorized possession, use, or sabotage of nuclear materials.

Safety. Safety, in the traditional sense, refers to monitoring and reducing the work-place risk of personnel casualties (injuries and deaths) to some acceptable level.

Safety analysis report (SAR). That report which documents the adequacy of safety analysis for a nuclear facility to ensure that the facility can be constructed, operated, maintained, shut down, and decommissioned safely and in compliance with applicable laws and regulations.

Safety analysis. A documented process: (1) to provide systematic identification of hazards within a given DOE operation; (2) to describe and analyze the adequacy of the measures taken to

eliminate, control, or mitigate identified hazards; and (3) to analyze and evaluate potential accidents and their associated risks.

Safety basis. The combination of information relating to the control of hazards at a nuclear facility (including design, engineering analyses, and administrative controls) upon which DOE depends for its conclusion that activities at the facility can be conducted safely.

Safety class structures, systems, or components (safety class SSCs). Nuclear facility structures, systems, or components including primary environmental monitors and portions of process systems, whose failure could adversely affect the environment or safety and health of the public identified by safety analyses.

Safety Evaluation. An evaluation that documents the scope of the evaluation and the logic for determining whether or not an Unreviewed Safety Question exists.

Safety evaluation flood. The largest flood for which the safety of a dam or appurtenant structure is to be evaluated.

Safety management system. The comprehensive integrated system for managing safety at a major hazard facility and which sets out: 1) the safety objectives; 2) the systems and procedures by which these are to be achieved; 3) the performance standards which are to be met; and 4) the means by which adherence to these standards is to be maintained.

Safety officer (SO). A member of the Command Staff responsible for monitoring and assessing safety hazards or unsafe situations and for developing measures for ensuring personnel safety. Section: The organizational level having responsibility for a major functional area of incident management, e.g., Operations, Planning, Logistics, Finance/Administration, and Intelligence (if established). The section is organizationally situated between the branch and the Incident Command.

Safety phrase. A phrase describing the safe handling, storage or use of personal protective equipment for a substance.

Safety report. A written presentation of the technical, management and operational information covering the hazards and risks of a major hazard facility and their control, and which provides justification for the measures taken to ensure the safe operation of the facility.

Salmonellosis. Infection of the gastrointestinal tract caused by germs of the salmonella group. It presents as a variety of diseases, the infection appearing as an acute gastroenteritis, enteric fever, or a focal disease with or without septicaemia. It includes typhoid fever.

Sanitary land-fill. Controlled deposition of waste on land.

Sanitation. 1. Of food pertains to the wholesomeness and cleanliness of food. 2. The application of measures and techniques aimed at ensuring and improving environmental health in a community, including the collection, evacuation and disposal of rain and used liquid and solid wastes, with or without prior treatment.

Sanitising. Reducing numbers of pathogenic micro-organisms on surfaces or in substances to levels accepted as safe by regulatory authorities.

SAR On-Scene Coordinator (SAR OSC). The SAR OSC coordinates the SAR mission on-scene using the resources made available by SMC and should safely carry out the SAR Action

SAR. Search and Rescue.

Scalability. The ability of incident managers to adapt to incidents by either expanding or reducing the resources necessary to adequately manage the incident, including the ability to incorporate multiple jurisdictions and multiple responder disciplines.

Scale. Intensity of an event over a given geographical area.

Scarp (fault). A cliff or steep slope formed by displacement of the ground surface.

Scenario Narrative. The scenario narrative is a storybook summary of the background, initial conditions, initiating events, and expected responder actions. It contains descriptions of the simulated emergency situation, including the overall sequence of events, details, supporting data, and timing of activities.

Scenario-Based Planning. Planning approach that uses a Hazard Vulnerability Assessment to assess impact on the organization based upon various threats that the organization could encounter. These threats (such as a hurricane, terrorist attack and so on) became the basis of the scenario. (VHA Emergency Management Guidebook 2005)

Scope. A real or abstract border or limitation of actions, processes or a geographical area; extent to which it is possible to range.

Scrub fire. A fire burning in land of low economic value from a forestry point of view.

Sea surge. A rise in sea level that results in the inundation of areas along coastlines. These phenomena are caused by the movement of ocean and sea currents, winds and major storms.

Search and rescue (SAR). The process of locating and recovering disaster victims and the application of first aid and basic medical assistance as may be required.

Search and rescue incident. The specific situation that causes the search and rescue system to be activated.

Search and rescue operation. In whole or in part the action taken during the currency of a search and rescue incident.

Search and rescue. The process of finding and freeing (disengaging) persons (or animals) affected by a disaster. The Basic Societal Function that provides search and rescue.

Search and rescue region. Area of defined dimensions within which search and rescue services are provided.

Secondary containment. Structures usually dikes, or berms, surrounding tanks or other storage containers and designed to catch spilled material from the storage containers.

Secondary hazard. A hazard that occurs as a result of another hazard or disaster, i. e. Fires or landslides following earthquakes, epidemics following famines, food shortages following drought or floods.

Secondary Support Center. A VAMC that has been designated under the VA/DoD Contingency Plan to provide support to a VAMC Primary Receiving Center. This support could include the provision of staff and other resources, the acceptance of patient transfers from the PRC, and/or the assumption of other workload from the PRC. Under the plan the primary function of the SSC is to increase capacity within the PRC to be able to accept active duty military casualties in wartime.

Secretarial officer. Head of a Departmental Element who has responsibility for a specific program or facility (IES). These include the Assistant Secretaries for Defense Programs, Energy Efficiency and Renewable Energy, Environmental Management, and Fossil Energy; and the Directors of the Offices of Civilian Radioactive Waste Management, Energy Research, and Nuclear Energy; and a Cognizant Secretarial Officer is a DOE official at the Assistant Secretary level who is responsible for the assignment of work, the institutional overview of any type of facility, or both, and the management oversight of a laboratory.

Secretary of Homeland Security. The Secretary of Homeland Security is the principal Federal official for domestic incident management. Pursuant to the Homeland Security Act of 2002 the Secretary is responsible for coordinating Federal operations within the United States to prepare for, respond to, and recover from terrorist attacks, major disasters, and other emergencies. The Secretary shall coordinate the Federal Government's resources utilized in response to or recovery from terrorist attacks, major disasters or other emergencies if and when any one of the following four conditions applies: (1) a Federal department or agency acting under its own authority has requested the assistance of the Secretary; (2) the resources of State and local authorities are overwhelmed and Federal assistance has been requested by the appropriate State and local authorities; (3) more than one Federal department or agency has become substantially involved in responding to the incident; or (4) the Secretary has been directed to assume responsibility for managing the domestic incident by the President.

Secretary's Playbooks (NRF). CONPLANs form the basis for the [DHS] Secretary's Playbooks, detailed checklists for executives that the Secretary of Homeland Security uses to ensure a coordinated response to domestic incidents. The Secretary's Playbooks are designed for the Secretary of Homeland Security, as the principal Federal official for domestic incident management, to monitor the response to the threats described in the 15 National Planning Scenarios, ensure coordination among Federal departments and agencies, detect potential shortfalls in response efforts or interagency coordination and surface anticipated policy issues to Federal department and agency executive leadership and the President for resolution.

Section. That organization level having functional responsibility for primary segments of an incident such as: Operations, Planning, Logistics and Finance. The Section level is organizationally between Branch and Incident Commander.

Sector a specific area of a fire which is under the control of a sector commander who is supervising a number of crews.

Sector Coordinating Council. The private sector counterpart to the GCCs, these councils are self-organized, self-run, and self-governed organizations that are representative of a spectrum of key stakeholders within a sector. SCCs serve as the government's principal point of entry into each sector for developing and coordinating a wide range of CI/KR protection activities and issues.

Sector-Specific Agency. Federal departments and agencies identified in HSPD-7 as responsible for CI/KR protection activities in specified CI/KR sectors.

Sector-Specific Plan. Augmenting plans that complement and extend the NIPP Base Plan and detail the application of the NIPP framework specific to each CI/KR sector. SSPs are developed by the SSAs I close collaboration with other security partners.

Secure Communications Center. An organization charged with the responsibility for receipt, transmission, and delivery of both classified and unclassified messages. It normally includes a distribution center, message center, cryptocenter, transmitting facilities, and receiving facilities, all of which are located in the security area.

Security. Security in the traditional sense refers to monitoring and reducing the risk of human induced events that adversely affect people or property (intrusion of unauthorized personnel, theft, sabotage, assault, etc.), to some acceptable level.

Seen area. The ground, or vegetation, that is directly visible from an established or proposed lookout point, or aerial detection flight route.

Segment. A demarcation used in hazards assessment where the system, section, building, etc., is not affected by the failure of other systems, sections, buildings, etc. (e.g., hazardous material in one segment cannot interact with hazardous material in another).

Segregation. The isolation within a storage area of dangerous goods from any other any goods with which they are not compatible, including other dangerous goods, combustible liquids, and other goods and class 1 explosives, class 6.2 infectious substances and class 7 radioactive substances.

Seiche. Oscillation (having a period from a few minutes to several hours) of the surface of a lake or other small body of water caused by minor earthquakes, winds, or variations in the atmospheric pressure.

Seismic activity rate. The mean number per unit time of earthquakes with specific characteristics (e. g. *Magnitude 6*) originating on a selected fault or in a selected area.

Seismic belt. An elongated earthquake zone; usually located along the boundaries of tectonic plates.

Seismic hazard. The potential for damaging effects caused by earthquakes. The level of hazard depends on the magnitude of likely quakes, the distance from the fault that could cause quakes, and the type of ground materials at a site.

Seismic isolation. Systems used to limit the transfer of strong ground motion to a structure.

Seismic risk. The chance of injury, damage, or loss resulting from seismic hazards. There is no risk, even in a region of high seismic hazard, if there are no people or property that could be injured or damaged by a quake.

Seismic zone. A region within which there is an obvious grouping of earthquake epicentres.

Seismic. The adjective derived from the noun seism, which is derived from the Greek meaning earthquake. In the context of disaster, seismic means related to vibrations of the earth and its crust. Such vibrations are produced either by movement of the tectonic plates of the earth, volcanic eruptions, or from artifical causes as result from explosions. (Secondary event includes tsunamis.)

Seismicity. The distribution of earthquakes in space and time.

Seismograph. An instrument for recording as a function of time the motions of the Earth's surface that are caused by seismic waves.

Seismology. The study of earthquakes. Seismic sources and wave propagation through the earth.

Seismometer. The sensor part of the seismograph usually a suspended pendulum.

Seismoscope. A simple seismograph recording on a plate without time marks.

SEL. Standard Equipment List.

Self-contained breathing apparatus. Breathing apparatus, including positive pressure full face piece, air tank, connecting hose and other fittings.

Senior Federal Law Enforcement Official (SFLEO). The SFLEO is an official appointed by the Attorney General during an incident requiring a coordinated Federal response to coordinate all law enforcement, public safety and security operations with intelligence or investigative law enforcement operations directly related to the incident. The SFLEO is a member of the Unified Coordination Group and, as such, is responsible to ensure that allocation of law enforcement requirements and resource allocations are coordinated as appropriate with all other members of the Group. In the event of a terrorist incident, the SFLEO will normally be a senior FBI official, who has coordinating authority over all law enforcement activities related to the incident, both those falling

within the Attorney General's explicit authority as recognized in HSPD-5 and those otherwise directly related to the incident itself.

Senior management critique. This management level critique covers the overall exercise performance, significant observations, findings, and preliminary corrective and improvement actions.

Sensible security. Sensible security is the level of protection achieved through design, construction, and operation that mitigates adverse impact to systems, facilities, and assets in proportion to their value to society and their likelihood of being affected by natural and/or man-made events.

Sensitivity analysis. Examines how the results of a calculation or model vary as individual assumptions are changed.

Sensitivity mapping. An aspect of oil spill emergency planning involving survey of coastal areas to identify resources that might be adversely affected by spilt oil.

Sentinel animals. Animals used for the express purpose of detecting the presence of a specific exotic animal disease agent.

SEOC. State Emergency Operations Center.

SEP. Special Events Planning.

Separation. The isolation of dangerous goods from protected works, on premises facilities, boundaries, other dangerous goods storage areas or filling and decanting points.

Service. The performance of work, such as design, construction, fabrication, inspection, nondestructive examination/testing, environmental qualification, equipment qualification, repair, installation, or the like.

Set-up wind. The rise in still water level caused by wind stress on the surface of the body of water.

Severe Condition (RED). A Severe Condition reflects a severe risk of terrorist attacks. Under most circumstances, the Protective Measures for a Severe Condition are not intended to be sustained for substantial periods of time. In addition to the Protective Measures in the previous Threat Conditions, Federal departments and agencies also should consider the following general measures in addition to the agency-specific Protective Measures that they will develop and implement: increasing or redirecting personnel to address critical emergency needs; signing emergency response personnel and pre-positioning and mobilizing specially trained teams or resources; monitoring, redirecting, or constraining transportation systems; and closing public and government facilities.

Severe weather threat index (SWEAT index). Convective index used to predict thunderstorms and tornadoes.

Severe Weather. Any atmospheric condition potentially destructive or hazardous form human beings. It is often associated with extreme convective weather (tropical cyclones, tornadoes, severe thunderstorms, squalls, etc.) and with storms of freezing precipitation or blizzard conditions.

SFHA. Special Flood Hazard Area.

SFLEO. Senior Federal Law Enforcement Official.

Shelter and Clothing. The Basic Societal Function that encompasses the provision of protection against harmful environmental elements.

Shelter. Anything that serves as a shield or protection from danger, bad weather, etc; A place of refuge provided. Sheltering is an action that consists of providing asylum or provisional lodgings to an individual or group.

Sheltering. Taking shelter is critical in times of disaster. Sheltering is appropriate when conditions require that you seek protection in your home, place of employment, or other location where you are when disaster strikes. Sheltering outside the hazard area would include staying with friends and relatives, seeking commercial lodging, or staying in a mass care facility operated by disaster relief groups in conjunction with local authorities.

To effectively shelter, you must first consider the hazard and then choose a place in your home or other building that is safe for that hazard. For example, for a tornado, a room should be selected that is in a basement or an interior room on the lowest level away from corners, windows, doors and outside walls. Because the safest locations to seek shelter vary by hazard, sheltering is discussed in the various hazard sections. These discussions include recommendations for sealing the shelter if the hazards warrant this type of protection.

Shelter-in-place. Depending on the nature and timing of a catastrophe, emergency managers may warn people of whether it is safer to evacuate or to shelter in place. In an evacuation, people leave their homes and businesses and travel to a safe location away from danger. In some instances, it is safer for people to quickly seek shelter indoors—in homes, schools, businesses, or public buildings—than to try to travel. Shelter-in-place would be used when there is little time to react to an incident and it would be more dangerous to be outside trying to evacuate than to stay indoors for a short period of time.

Additional protective actions that the emergency managers may recommend would include turning off air conditioners and ventilation systems and closing all windows and doors. Sheltering-in-place might be used, for example, in the event of a chemical accident. FEMA recommends people have food, water, and medical supplies and be prepared to stay indoors for at least three days.

Sheriff. The Office of the Sheriff plays a distinctive role in the nation's criminal justice and homeland security system and reflects a uniquely American tradition of a law enforcement leader who is elected. Over 99 % of the nation's sheriffs are elected and generally serve as the highest law enforcement officer in their respective counties.

Shielding. Any material between a radiation source and potentially exposed people.

Short term recovery. Short-term recovery is immediate and overlaps with response. It includes actions such as providing essential public health and safety services, restoring interrupted utility and other essential services, reestablishing transportation routes and providing food and shelter for those displaced by the disaster. Although called short term, some of these activities may last for weeks.

SI number. Substance identification number.

SI. International system of units.

Sievert (Sv). The radiation dose unit of the international system of units. One sievert equals 100 rem.

Signal words. Word(s) prominently displayed on labels of hazardous substances to indicate the relative severity of hazard.

Significant Modification. Any change to the facility or its operations that involves an unreviewed safety question.

Significant performance degradation. Failure or degradation that compromises the facility minimum authorization bases for the operational condition at the time of the occurrence or allows an unmonitored release that is not immediately mitigated. Entering an approved Limiting Condition of Operation (LCO) Action Statement does not compromise the minimum authorization basis. A

violation of the LCO Action Statement does constitute a significant performance degradation. [DOE O 232.1A and DOE M 232.1-1A, Occurrence Reporting and Processing of Operations Information]

Signs. The features of the casualty's condition that can be seen; felt; heard; or smelt.

Simplex. A radio signal transmitted on a single frequency.

Simulation Cell (SIMCELL). This is the physical location for controllers (or other qualified personnel) generating injects and receiving player communications/responses.

Simulation exercise. Decision making exercise and disaster drills within threatened communities in order to represent disaster situations to promote more effective coordination of response from relevant authorities and the population.

Simulators. Simulators create (through a Simulator Cell) an artificial reality through the delivery of pre-scripted and spontaneous messages to exercise players. In this role they portray the role of the entire external environment and as such should be familiar with the agencies/entities/individuals they are representing in the context of the exercise.

Site area emergency. A Site Area Emergency shall be declared when events are predicted, in progress, or have occurred that result in one or more of the following situations: 1. An actual or potential major failure of functions necessary for the protection of workers or the public. The radiation dose from any release of radioactive material or concentration in air from any release of other hazardous material is expected to exceed the applicable Protective Action Guide or Emergency Response Planning Guideline beyond the facility boundary or exclusion zone boundary. The Protective Action Guide or Emergency Response Planning Guideline is not expected to be exceeded at or beyond the site boundary. 2. An actual or potential threat to the integrity of a nuclear weapon, component, or test device that may adversely impact the health and safety of workers in the immediate area, but not the public. 3. Actual or potential major degradation in the level of safety or security of a facility or process that could, with further degradation, produce a General Emergency.

Site Boundary. The demarcation line between DOE-owned/controlled property and property under the control of the private or other public owners.

Site Description. A description of the climate, geography, hydrology, seismology and land use on and near the site.

Site Exercise. An emergency response exercise be designed to test and demonstrate the site's integrated emergency response capability.

Site. 1. A geographic entity comprising leased or owned land, buildings, and other structures required to perform program activities. 2. The area over which DOE has responsibility for issuing protective actions.

Situation analysis. A deliberate process where the current incident situation, the factors that are relevant to the incident, the courses open and their consequences are reviewed and alternative strategies are assessed and an incident action plan is recommended.

Situation assessment. An assessment produced during emergency response and recovery that combines incident geography/topography, weather, hazard, hazard impact, and resource data to provide a balanced knowledge base for decision-making. Adequate situation assessment and dissemination of a comprehensive situation assessment (through situation reports and other means) creates the common operating picture.

Situation report. A brief report that is published and updated periodically during an emergency which outlines the details of the emergency, the needs generated, and the responses undertaken as they become known.

Situational awareness. 1. A person's state of knowledge or mental model of the situation around the individual and/or his/her operating unit, including an understanding of the evolving state of the environment. 2. The perception of the elements in the environment within a volume of time and space, the comprehension of their meaning and the projection of their status in the near future. *3.* Situation awareness was originally an aviation term used to describe awareness of tactical situations during aerial warfare. It has now been adopted throughout aviation, and increasingly in other dynamic, complex, situations requiring human control.

Skill. May be perceptual, manual, cognitive or social. Tasks. Usually require a combination of these, indicating the application of cognitive and psychomotor functions together with appropriate knowledge. A 'skill' is: (a) cumulative; that is, it is built up through gradual experience; and (b) sequential; that is, each part is dependent on the previous part and influences the next.

Skimmer. Any mechanical device that physically removes oil from the surface of water.

Slash. Unusual concentrations of fuel resulting from such natural events as wind, fire, snow breakage, or from such human activities as logging, cutting or road construction.

Sleeper. A fire that starts up again after appearing to have been extinguished.

Smaug. A method for prioritising hazards by assessing the relative importance of each hazard in terms of seriousness, manageability, acceptability, urgency and growth.

Smoke. Carbon or soot particles or tarry droplets less than 0.1 micrometre in size, and suspended in air, which result from the incomplete combustion of carbonaceous materials such as coal or oil. Smoke usually contains gas and vapour in addition to solid particles.

SNP. Special Needs Planning.

Societal risk. The risk of a number of fatalities occurring. The societal risk concept is based on the premise that society is more concerned with incidents which kill a larger number of people than incidents which kill fewer numbers. syn. 'group risk'.

Soft story. A building story that has significantly less stiffness than the story above. Some buildings with parking at ground level (and thus fewer walls or columns) or an otherwise open ground story have this condition. The term is sometimes also applied to a story that has less strength than the one above, a condition that is more precisely termed a 'weak story'.

Soil amplification. Growth in the amplitude of earthquakes when seismic waves pass from rock into less rigid material such as soil.

Soil conditions. The conditions of earth (moisture content, disaggregation, density, etc.) That may mitigate or intensify disaster agents, such as drought, flooding, or seismic movement.

Soil moisture. Content of water in the portion of the soil which is above the water table including water vapour present in the soil pores. In some cases refers strictly to moisture within the root zone of plants

SOLAS (international convention for safety of life at sea). A convention that, amongst other things, establishes requirements for merchant vessels to be equipped with radios fitted with an automatic alarm device and to carry emergency and survival equipment. Solas also establishes requirements for merchant vessels to respond to a distress signal from any craft or person.

SONS. Spill of National Significance.

Sorbent. A natural organic, mineralbase or synthetic organic material used to recover spilt oil by absorption or adsorption.

Source term. A source term represents the amount of material released to the environment or the rate at which it is released.

Span of control. The number of individuals a supervisor is responsible for, usually expressed as the ratio of supervisors to individuals. (Under the NIMS, an appropriate span of control is between 1:3 and 1:7.)

Spear. Selected pollution equipment availability register. Now known as **marine oil spill equipment system.**

Special flood hazard area. Land in the floodplain within a community subject to one percent or greater chance of flooding in any given year.

Special needs population. Pertaining to a population whose members may have additional needs before, during, and after an incident in one or more of the following functional areas: maintaining independence, communication, transportation, supervision, and medical care. Individuals in need of additional response assistance may include those who have disabilities; who live in institutionalized settings; who are elderly; who are children; who are from diverse cultures, who have limited English proficiency, or who are non-English speaking; or who are transportation disadvantaged.

Special nuclear material (SNM). Plutonium, uranium-233, uranium enriched in isotope 233 or 235; any material artificially enriched by any of these elements; or any other material that the NRC, pursuant to the provisions of Section 51 of the Atomic Energy Act, determines to be special nuclear material, not including source material.

Special plan. A plan, complete in itself, for the emergency management of special or high-risk hazards.

Special population. A targeted group in a disaster-impacted community or area with needs that require specific attention by the crisis counseling program. Special populations include children, adolescents, older adults, elderly persons, members of ethnic and cultural groups, migrant workers, disaster relief workers, persons who are severely mentally ill, persons with disabilities, and homeless persons. Other special populations may be unique to the area being served by the crisis counseling program.

Specific activity. The amount of radioactivity of a material per unit mass.

Spill of National Significance. The NCP defines a Spill of National Significance (SONS) as: a spill that, due to its severity, size, location, actual or potential impact on the public health and welfare or the environment, or the necessary response effort, is so complex that it requires extraordinary coordination of federal, state, local, and responsible party resources to contain and clean up the discharge.

Spillway. A weir, conduit, tunnel, channel or other structure designed to permit discharges from the reservoir when water levels rise above the crest controlling flow down or into the spillway structure. The spillway is principally to discharge flood flows safely past a dam but may be used to release water for other purposes. The spillway may be ungated or uncontrolled (a ‘free-overflow spillway’) in which case discharge occurs when the reservoir rises above the crest. If a gate or gates are used to control the uppermost level of the reservoir the spillway is referred to as a ‘gated’ or ‘controlled’ spillway.

Spillway crest. The uppermost portion of the overflow cross section.

Spontaneous evacuation. Residents or citizens in the threatened areas observe an emergency event or receive unofficial word of an actual or perceived threat and without receiving instructions to

do so, elect to evacuate the area. Their movement, means, and direction of travel is unorganized and unsupervised.

Spontaneous volunteer. Volunteers presenting to help at the disaster scene that were neither recruited nor affiliated with an organization. Also referred to as unsolicited volunteers.

Spontaneously combustible. Liable to burst into flame and burn, under the conditions encountered, without the external application of heat.

Spot elevation. An approximate height measurement of a feature marked on a map.

Spot fire. Isolated fire started ahead of the main fire by sparks, embers or other ignited material, sometimes to a distance of several kilometres.

Squall. Atmospheric phenomenon characterised by an abrupt and large increase of wind speed with a duration of the order of minutes which diminishes rather suddenly. It is often accompanied by showers or thunderstorms.

Stabilisation. Use of medical measures used to restore basic physiologic equilibrium to a patient to insure survival and facilitate future definitive care.

Stability class. Meteorologists distinguish three states of the atmospheric surface layer: unstable, neutral, and stable. These categories refer to how a parcel of air would react when displaced adiabatically in the vertical direction. Pasquill stability types: A: Extremely unstable B: Moderately unstable C: Slightly unstable D: Neutral E: Slightly stable F: Moderately stable.

Stabilization. To stabilize means to achieve a stable state. To bring a situation, a function or a structure to stay functionally or statically between defined lines or limits.

Stafford Act 1. The Robert T. Stafford Disaster Relief and Emergency Assistance Act, Public Law 93-288, as amended. 2. The Stafford Act provides an orderly and continuing means of assistance by the Federal Government to State and local governments in carrying out their responsibilities to alleviate the suffering and damage which result from disaster. The President, in response to a State Governor's request, may declare an emergency or major disaster in order to provide Federal assistance under the Act. The President, in Executive Order 12148, delegated all functions, except those in Sections 301, 401, and 409, to the Director, of FEMA. The Act provides for the appointment of a Federal Coordinating Officer who will operate in the designated area with a State Coordinating Officer for the purpose of coordinating state and local disaster assistance efforts with those of the Federal Government.

Stafford Act Congressional Intent. It is the intent of the Congress, by this Act, to provide an orderly and continuing means of assistance by the Federal Government to State and local governments in carrying out their responsibilities to alleviate the suffering and damage which result from such disasters by: 1) revising and broadening the scope of existing disaster relief programs; 2) encouraging the development of comprehensive disaster preparedness and assistance plans, programs, capabilities, and organizations by the States and by local governments; 3) achieving greater coordination and responsiveness of disaster preparedness and relief programs; 4) encouraging individuals, States, and local governments to protect themselves by obtaining insurance coverage to supplement or replace governmental assistance; 5) encouraging hazard mitigation measures to reduce losses from disasters, including development of land use and construction regulations; and 6) providing Federal assistance programs for both public and private losses sustained in disasters.

Stafford Act. Federal support to State and local jurisdictions takes many forms. The most widely known authority under which assistance is provided for major incidents is the Stafford Act. When it is clear that State or tribal capabilities will be exceeded or may be exhausted, the Governor

can request Federal assistance under the Stafford Act. The Stafford Act authorizes the President to provide financial and other forms of assistance to State and local governments, certain private nonprofit organizations and individuals to support response, recovery and mitigation efforts following Presidentially-declared major disasters and emergencies. Most incidents are not of sufficient magnitude to merit a Presidential emergency or major disaster declaration. However, when State and local resources are insufficient, a Governor may ask the President to declare a Federal disaster or emergency.

Before making a declaration request, the Governor normally must activate the State's emergency plan and ensure that all appropriate State and local actions have been taken, including: 1. Surveying the affected areas to determine the extent of private and public damage. 2. Conducting joint Preliminary Damage Assessments with DHS/FEMA officials to estimate the types and extent of Federal disaster assistance required. 3. Only the Governor can initiate a request for a Presidential emergency or major disaster declaration. This request is made through the DHS/FEMA Regional Administrator and is based on a finding that Federal assistance is needed because the situation exceeds State and local response capabilities due to its severity and magnitude. The request includes: 1. Information on the extent and nature of State resources that have been or will be used to address the consequences of the disaster. 2. A certification by the Governor that State and local governments will assume all applicable non-Federal costs required by the Stafford Act. 3. An estimate of the types and amounts of supplementary Federal assistance required. Designation of the State Coordinating Officer. The Governor addresses the request to the President and forwards it to the DHS/FEMA Regional Administrator, who makes a recommendation to the DHS/FEMA Administrator. The DHS/FEMA Administrator then recommends a course of action to the President. The Governor, appropriate members of Congress and Federal agencies are immediately notified of a Presidential declaration. Federal support to States under the Stafford Act is coordinated by DHS.

Stage hydrograph. A graph which shows how the water level at a particular location changes with time during a flood. It must be referenced to a particular height datum.

Stages of activation. Investigation, alert, operational, stand-down. Investigation exists when a report assessed as being a low probability of an exotic animal disease is being investigated by animal health authorities. Alert exists when the cvo notifies key members of the animal health authority and the coordinator of the state emergency plan that an animal disease emergency may be imminent, or exists in another state. Operational exists when the cvo notifies the coordinator of the state emergency plan that an animal disease emergency exists in the state. Stand-down exists when the cvo notifies the coordinator of the state emergency plan that an animal disease emergency no longer exists.

Staging area. Established for the temporary location of available resources. A Staging Area can be any location in which personnel, supplies, and equipment can be temporarily housed or parked while awaiting operational assignment.

Stakeholder. key people, groups of people, or institutions that may significantly influence the success of the process, plan, program or project.

Stakeholders. Any person, group, or organization affected by and having a vested interest in the incident and/or the response operation.

Stamping out. Eradication procedures based on quarantine and slaughter of all infected animals and animals exposed to infection.

Standard. A generic, all-encompassing term used to describe documents that provide a specified set of mandatory or discretionary rules, requirements or conditions concerned with performance, design, operation, or measurements of quality to accomplish a specific task. Standards may include federal laws, regulations, state laws, federal agency directives, national and international technical standards, codes of conduct, or even organizational internal use only documents. A standard may also include a specified set of discretionary rules or conditions concerned with the classification of components; delineation of procedures; definition of terms; specifications of materials, performance, design, or operations; or measurements of quality in describing materials, products, systems, services or practices.

Standard (standing) operating procedure. A procedure prepared for operation of a facility or performance of a task on a routine basis.

Standard emergency warning signal. A sound designed to alert the community to the need to listen to an announcement concerning an actual or imminent emergency.

Standard equipment list (SEL). A list issued annually to promote interoperability and standardization across the response community at the local, state, and federal levels by offering a standard reference and a common set of terminology. It is provided to the responder community by the Inter-Agency Board for Equipment Standardization and Interoperability (IAB). The SEL contains a list of generic equipment recommended by the IAB to organizations in preparing for and responding to all-hazards.

Standard for the uniform scheduling of drugs and poisons. A listing of substances requiring specific labelling and precautions in use. The standard for the uniform scheduling of drugs and poisons is published by the national health and medical research council and is the basis for state and territory poisons legislation.

Standard operating guidelines. A set of instructions having the force of a directive, covering those features of operations which lend themselves to a definite or standardized procedure without loss of effectiveness.

Standard operating procedure (SOP). Complete reference document or an operations manual that provides the purpose, authorities, duration, and details for the preferred method of performing a single function or a number of interrelated functions in a uniform manner.

Standard, performance. A statement which establishes the criteria for how well a task or learning objective must be performed. The standard should specify how well, completely, or accurately a process must be performed or product produced. The term standard is most commonly used in summative evaluations in place of the term metric. In formative system evaluation, other terms more applicable to systems process and evaluation science may be used (metrics competencies, objectives, metrics). Standards may have specific applications: a system or process standard is generally defined by design requirements (inputs) or by required outputs; the task standard reflects task performance requirements (process and output) on the job; the learning objective standard reflects the demonstrated knowledge, skills and abilities (outputs) that must be achieved from the learning.

Standardization. A principle of the NIMS that provides a set of standardized organizational structures—such as the Incident Command System (ICS), multi-agency coordination systems, and public information systems—as well as requirements for processes, procedures, and systems designed to improve interoperability among jurisdictions and disciplines in various area, including: training; resource management; personnel qualification and certification; equipment certification;

communications and information management; technology support; and continuous system improvement.

Standardized terminology. Commonly accepted language that is consistent with policies, plans, or procedures in the NIMS and NRP to facilitate multi-agency, multi-disciplinary or multi-jurisdictional communications during an incident.

Stand-by. The period normally following an alert when deployment of resources is imminent. Personnel are placed on stand-by being ready to respond immediately.

Stand-down. That phase where an agency's response is no longer required, and services are wound back. Site teams are returned to base, and additional staff called in are released from duty.

Standpipe. A portable item of equipment used to connect a discharge hose to an underground **hydrant** outlet.

State and Local Anti-Terrorism Training (SLATT). The SLATT program's primary objective is the delivery of specialized terrorism/extremism orientation, interdiction, investigation, and prevention training to law enforcement executives, command personnel, intelligence officers, investigators, analytical personnel, training directors, and prosecutors. Each course is specifically designed to meet the needs of the target audience, from the street level officer to the executive.

State and Urban Area Homeland Security Strategies. State and Urban Area Homeland Security Strategies provide a context for performing the strategic exercise of asking. How are we organized? and How are we managing our homeland security programs? This evaluation will enable us as a Nation to think about how we build our preparedness programs and capabilities within and across State boundaries. States and Urban Areas were recently required to update their strategies to bring them into alignment with the seven National Priorities included in the Goal. The updated strategies address the four homeland security mission areas: prevent, protect, respond, and recover.

State Coordinating Officer (SCO). The SCO plays a critical role in managing the State response and recovery operations following Stafford Act declarations. The Governor of the affected State appoints the SCO, and lines of authority flow from the Governor to the SCO, following the State's policies and laws. For certain anticipated events in which a Stafford Act declaration is expected, such as an approaching hurricane, the Secretary of Homeland Security or the FEMA Administrator may pre-designate one or more Federal officials to coordinate with the SCO to determine resources and actions that will likely be required, and begin pre-deployment of assets.

The specific roles and responsibilities of the SCO include: 1. Serve as the primary representative of the Governor for the affected State or locality with the RRCC or within the JFO once it is established. 2. Work with the Federal Coordinating Officer to formulate State requirements, including those that are beyond State capability, and set priorities for employment of Federal resources provided to the State. 3. Ensure coordination of resources provided to the State via mutual aid and assistance compacts. 4. Provide a linkage to local government. 5. Serve in the Unified Coordination Group in the JFO.

State coordinating officer (SCO). The representative of the governor who coordinates state, commonwealth, or territorial response and recovery activities with those of the federal Government.

State emergency management agency director. All States have laws mandating establishment of a State emergency management agency and the emergency operations plan coordinated by that agency. The Director of the State emergency management agency ensures that the State is prepared to deal with large-scale emergencies and is responsible for coordinating the

State response in any major emergency or disaster. This includes supporting local governments as needed or requested, and coordinating assistance with the Federal Government.

State emergency response commission (SERC). Commissions designated by the Governor of each state, for coordinating local planning efforts and insuring that facilities and the local community comply with Title III, Emergency Planning and Community Right-to-Know Act (EPCRA) requirements. SERCs have broad-based representation from state agencies, the public and private sector and they designate emergency planning districts and appoint Local Emergency Planning Committees (LEPCs).

State Homeland Security Advisor. The State Homeland Security Advisor serves as counsel to the Governor on homeland security issues and serves as a liaison between the Governor's office, the State homeland security structure, DHS and other organizations both inside and outside of the State. The advisor often chairs a committee comprised of representatives of relevant State agencies, including public safety, the National Guard, emergency management, public health and others charged with developing preparedness and response strategies.

State Homeland Security Program. State Homeland Security Grant Program supports the implementation of the State Homeland Security Strategy to address the identified planning, equipment, training, and exercise needs for acts of terrorism. In addition, SHSP supports the implementation of the National Preparedness Goal, the National Incident Management System, and the National Response Plan.

State preparedness report. The Secretary [DHS] shall require that any State applying to the Secretary for a covered grant must submit State Preparedness Report specified in section 652(c) of the Department of Homeland Security Appropriations Act, 2007 (Public Law 109-295).

State template initiative. The Template was built by state and local officials — those responsible for preventing, responding to, and recovering from the spectrum of terrorist threats and Homeland Security challenges that face the Nation in the 21st Century. The Template provides a common foundation for identifying and addressing key state and local vulnerability and capability shortfalls. This Template will be a useful tool in our effort to build and sustain the operational means by which we will make the Nation safer, stronger, and better.

The initiative provides states a foundation for preparing comprehensive and compatible state, local and tribal Homeland Security plans. The Template is consistent with and supports implementation of the National Strategy for Homeland Security. It was designed from the bottom up, recognizes that one size does not fit all, and enables the emergency responders and state and local officials who bear the responsibility of preventing terrorist attacks and protecting the Nation and its citizens.

State. When capitalized, refers to any State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, and any possession of the United States. See Section 2 (14), Homeland Security Act of 2002, Pub. L. 107-296, 116 Stat. 2135 (2002).

Steady-State Preparedness. A national focus on steady-state readiness is imperative. The Framework [NRF] focuses on preparedness activities that are directly related to an evolving incident or potential incident. The National Preparedness Guidelines and the NIPP focus on steady-state preparedness or readiness activities conducted in the absence of a specific threat or hazard. This response Framework does not try to subsume all of these larger efforts; instead, it integrates these efforts and brings them to bear in managing incidents.

Stel. Short term exposure limit.

Stochastic effect. An effect known to occur sometimes as a consequence of exposure to **radiation,** but which may or may not be expressed in a particular exposed person, the likelihood of the effect occurring being a function of the dose received.

Stockpiling. The process of prior identification, availability and storage of supplies likely to be needed for disaster response.

Storm surge. A sudden rise of sea as a result of high winds and low atmospheric pressure; sometimes called a storm tide, storm wave, or tidal wave. Generally affects only coastal areas, but may intrude some distance inland.

Storm tide. The combination of a storm surge, tidal peaks, a shallow coastal gradient, and on-shore winds. A storm tide effect may be increased by funnelling due to coastal terrain.

Storm warning. 1. Meteorological message intended to warn those concerned of the occurrence or expected occurrence of a wind of beaufort force 10 or 11 over a specific area. 2. Any forecast of severe weather conditions.

Storm. 1. An atmospheric disturbance involving perturbations of the prevailing pressure and wind fields, on scales ranging from tornadoes (1 kilometre across) to extratropical cyclones (2,000–3,000 kilometres across). 2. Wind with a speed between 48 and 55 knots (beaufort scale wind force 10).

Strategic goal. A broad target that defines how the Agency will carry out its mission over a five to seven year period of time.

Strategic goals. Strategic goals are broad, general statements of intent.

Strategic objective. A specific step necessary to achieve a strategic goal.

Strategic objectives of homeland security. The strategic objectives of homeland security in order of priority are to: 1) prevent terrorist attacks within the United States; 2) reduce America's vulnerability to terrorism; and 3) minimize the damage and recover from attacks that do occur.

Strategic Partnership Program Agroterrorism (SPPA) Initiative. The Department of Homeland Security (DHS), U.S. Department of Agriculture (USDA), Food and Drug Administration (FDA), and the Federal Bureau of Investigation (FBI) will collaborate with private industry and the States in a joint initiative, the Strategic Partnership Program Agroterrorism (SPPA) Initiative. The SPPA Initiative will be a true partnership program, where an industry member or trade association or State may volunteer to participate. To volunteer, the industry or State member must submit a completed response form.

Program Objectives: the federal government members in partnership with industry and State volunteers, plan to: 1) validate or identify sector-wide vulnerabilities by conducting critical infrastructure/key resources (CI/KR) assessments in order to identify gaps, inform Centers of Excellence and Sector Specific Agencies (SSA) of identified research needs and catalog lessons-learned; 2) identify indicators and warnings that could signify planning for an attack; 3) develop mitigation strategies to reduce the threat/prevent an attack. Strategies may include actions that either industry or government may take to reduce vulnerabilities; 4) validate assessments conducted by the United States Government (USG) for food and agriculture sectors; 5) gather information to enhance existing tools that both USG and industry employ; 6) provide the USG and the industry with comprehensive reports including warnings and indicators, key vulnerabilities, and potential mitigation strategies; 7) provide sub-sector reports for the USG that combines assessment results to determine national critical infrastructure vulnerability points to support the National Infrastructure

Protection Plan (NIPP) and national preparedness goals; 8) establish and/or strengthen relationships between Federal, State, and local law enforcement and the food and agriculture industry along with the critical food/agriculture sites visited.

Strategic plan. Is a plan that addresses long-term issues such as impact of weather forecasts, time-phased resource requirements, and problems such as permanent housing for displaced disaster victims, environmental pollution, and infrastructure restoration.

Strategic planning. A framework for carrying out strategic thinking, direction, and action leading to the achievement of consistent and planned results. Seven specific elements comprise this framework: organization mission, strategic analysis; strategy, long-term objectives, integrated programs, financial projections [and] executive summary. A distinctive aspect of this process is its emphasis on team planning. It is this process that builds organizationwide belief and commitment to the strategic plan because the participants have ownership.

Strategic Vision for the War on Terror. From the beginning, the War on Terror has been both a battle of arms and a battle of ideas — a fight against the terrorists and their murderous ideology. In the short run, the fight involves the application of all instruments of national power and influence to kill or capture the terrorists; deny them safehaven and control of any nation; prevent them from gaining access to WMD; render potential terrorist targets less attractive by strengthening security; and cut off their sources of funding and other resources they need to operate and survive. In the long run, winning the War on Terror means winning the battle of ideas. Ideas can transform the embittered and disillusioned either into murderers willing to kill innocents, or into free peoples living harmoniously in a diverse society. The battle of ideas helps to define the strategic intent of our National Strategy for Combating Terrorism. The United States will continue to lead an expansive international effort in pursuit of a two-pronged vision: 1. The defeat of violent extremism as a threat to our way of life as a free and open society. 2. The creation of a global environment inhospitable to violent extremists and all who support them.

Strategic. Strategic elements of incident management are characterized by continuous long-term, high-level planning by organizations headed by elected or other senior officials. These elements involve the adoption of long-range goals and objectives, the setting of priorities; the establishment of budgets and other fiscal decisions, policy development, and the application of measures of performance or effectiveness.

Strategy for Catastrophic Incident Planning. Achieving a robust and sustainable national capability to rapidly and successfully meet the immense challenges posed by an incident of catastrophic magnitude will require a unified strategy supported by aggressive leadership, joint collaboration, innovative thinking, significant funding, and national resolve. To that end, this Strategy for Catastrophic Incident Planning (SCIP) establishes a comprehensive and ambitious set of unified goals and objectives, and will provide a baseline against which to identify, validate, align and prioritize necessary capability-building initiatives. There is agreement throughout the emergency management community that the existing plans, policies, procedures, and resources are not fully adequate or appropriate to address the destruction caused by a catastrophic hurricane, an earthquake, or a terrorist attack using a weapon of mass destruction.

Strategy for Homeland Defense and Civil Support. Directed by the Strategic Planning Guidance (March 2004), the Strategy for Homeland Defense and Civil Support integrates the objectives and guidance expressed in the National Security Strategy, the National Strategy for

Homeland Security, and the National Defense Strategy to guide Department of Defense operations to protect the US homeland.

Strategy. 1. The general direction selected to accomplish incident objectives set by the IC. 2. The approach to how a goal and objectives are to be achieved. 3. Strike Team. A set number of resources of the same kind and type that have an established minimum number of personnel.

Strike teams. A set number of resources of the same type that have an established minimum number of personnel. Strike teams always have a leader (usually in a separate vehicle), and have a common communications system. Strike teams are usually made up of five resources of the same type such as: vehicles, crews, earth moving machinery, etc.

Strike-slip fault. A generally vertical fault along which the two sides move horizontally past each other. The most famous example is California's San Andreas Fault.

Strong gale. Wind with a speed between 41 and 47 knots (beaufort scale wind force 9).

Strong ground motion. The shaking of the ground near an earthquake. Source made up of large amplitude seismic waves of various types.

Structural flood mitigation. Structural system for reduction of the effects of floods using physical solutions, including reservoirs, levees, dredging, diversions, and flood- proofing.

Structure. A set of interconnecting parts of any complex thing; a framework; the equipment and personnel, and the way in which these resources are organized.

Subduction zone. A boundary along which one plate of the Earth's outer shell descends (subducts) at an angle beneath another. A subduction zone is usually marked by a deep trench on the sea floor. An example is the Cascadia Subduction Zone offshore of Washington, Oregon, and northern California. Most tsunamis are generated by subduction-zone earthquakes.

Subject Matter Expert (SME). An individual qualified, and experienced in performing a particular task. A Subject Matter Expert may also be an individual who, by education, training, and/or experience is a recognized expert on a particular subject, topic, or system.

Sub-plan. An annex to an existing plan, with additional statements of control/coordination arrangements and roles/responsibilities.

Subsidence. Collapse of a considerable area of land surface, due to the removal of liquid or solid underlying or removal of soluble material by means of water.

Subsidiary risk. A risk in addition to the class to which dangerous goods are assigned and which is determined by a requirement to have a subsidiary risk label under the adg code.

Substantial safety hazard. A loss of safety function to the extent that there is a major reduction in the degree of protection provided to public or worker health and safety.

Supercell thunderstorm. A particularly large, convective thunderstorm cell with a diameter of 50–100 kilometres. Such a storm has a greater chance of producing hail, tornadoes, strong wind or copious rainfall.

Superfund. The trust fund established initially under the Comprehensive Environmental Response, Compensation, and Liability Act and extended under the Superfund Amendments and Reauthorization Act to provide money that can be used during cleanups associated with inactive hazardous waste disposal sites.

Supplementary plans. Plans which augment the specific responses described in the emergency plan, with information about patient dependency, the types of hazards prevalent in a particular area or specific responses necessary in relation to particular hazards or emergencies.

Supplier. An organization furnishing items or services. An all-inclusive term used in place of any of the following: vendor, seller, contractor, subcontractor, fabricator, distributor, consultant, or subtier suppliers.

Support agency. A federal department or agency designated to assist a specific primary agency with available resources, capabilities, or expertise in support of ESF response operations, under the coordination of the primary agency.

Support Annexes (NRF). Support Annexes describe essential supporting aspects of the Federal response that are common to all incidents, such as financial management, volunteer and donations management and private sector coordination.

Support volunteers. Volunteers without identified, verified technical skills, but may be valuable for performing unskilled support and other activities where professional skills are not indicated.

Supporting technologies. Any technology that may be used to support the NIMS is included in this subsystem. These technologies include orthophoto mapping, remote automatic weather stations, infrared technology, and communications, among various others.

Surface fuel. The loose surface litter on the forest floor, normally consisting of fallen leaves or needles, twigs, bark, cones and small branches that have not yet decayed sufficiently to lose their identity. Also grasses, shrubs and tree reproduction less than one metre in height, heavier branchwood, down logs, stumps, seedlings and forbs (simple plant structures) interspersed with or partially replacing the litter.

Surge capacity force. SEC. 624. SURGE CAPACITY FORCE. (a) ESTABLISHMENT — (1) IN GENERAL.—Not later than 6 months after the date of enactment of this Act, the Administrator shall prepare and submit to the appropriate committees of Congress a plan to establish and implement a Surge Capacity Force for deployment of individuals to respond to natural disasters, acts of terrorism, and other man-made disasters, including catastrophic incidents. (2) AUTHORITY. **(a)** IN GENERAL.—Except as provided in subparagraph (B), the plan shall provide for individuals in the Surge Capacity Force to be trained and deployed under the authorities set forth in the Robert T. Stafford Disaster Relief and Emergency Assistance Act. (b) EMPLOYEES DESIGNATED TO SERVE—The plan shall include procedures under which the Secretary shall designate employees of the Department who are not employees of the Agency and shall, in conjunction with the heads of other Executive agencies, designate employees of those other Executive agencies, as appropriate, to serve on the Surge Capacity Force. (c) CAPABILITIES.—The plan shall ensure that the Surge Capacity Force— (1) includes a sufficient number of individuals credentialed in accordance with section 510 of the Homeland Security Act of 2002, as amended by this Act, that are capable of deploying rapidly and efficiently after activation to prepare for, respond to, and recover from natural disasters, acts of terrorism, and other man-made disasters, including catastrophic incidents; and (2) includes a sufficient number of full-time, highly trained individuals credentialed in accordance with section 510 of the Homeland Security Act of 2002, as amended by this Act, to lead and manage the Surge Capacity Force.

Surge, medical. Describes the ability to provide adequate medical evaluation and care in events that severely challenge or exceed the normal medical infrastructure of an affected community (through numbers and/or types of patients).

Surveillance, public health. The ongoing, systematic collection, analysis, and interpretation of data about a specific health event, or to determine if a health event is occurring.

Surveillance. A systematic program of inspection and examination of animals or things to determine the presence of absence of an exotic animal disease.

Surveillance. Continuous observation, measurement, and evaluation of the progress of a process or phenomenon with the view to taking corrective measures.

Survey. A program of investigation designed to establish the presence, extent of, or absence of disease.

Susceptibility. The degree of ease by which a person is affected by a given phenomenon; synonymous with vulnerability. Individuals and populations have different susceptibilities to different types of events. Susceptibility is used in this document to denote the degree of ease by which a person or a population is affected by a given phenomenon; susceptibility and vulnerability are used interchangeably.

Suspect animal. An animal which is likely to have been exposed to an exotic animal disease such that its quarantine and intensive surveillance, but not pre-emptive slaughter, are warranted, or; an animal not known to have been exposed to a disease agent but showing clinical signs requiring differential diagnosis.

Suspect materials or things. Materials or things suspected of being contaminated by an exotic animal disease agent.

Suspect person. A person who is likely to have been contaminated by an exotic animal disease agent.

Suspect premises. Premises containing suspect animals which will be subject to quarantine and intensive surveillance.

Sustainability Initiative (FEMA). The goal of the sustainability initiative is to reduce the potential for disaster losses and to help communities realize opportunities to implement sustainable redevelopment during the recovery process. FEMA's sustainability initiative began formally in November 1998 when the Associate Director for Mitigation encouraged Regional Directors to set up a sustainable redevelopment function in DFOs (see Appendix I). The Associate Director proposed the establishment of a sustainability desk as part of the mitigation function in DFOs and/or Disaster Recovery Centers (DRCs). Two pilot efforts were undertaken in Ohio and West Virginia flood declarations.

Sustainability. Essentially, sustainability means that decisions made today should not reduce the options of future generations, but pass on to them a natural, economic, and social environment that provides a high quality of life.

Sustainable communities. Sustainable communities make more efficient use of their land. They emphasize open space planning where appropriate by promoting greenways, parks, and landscaping. The effective use of open space can prevent development from encroaching upon floodplains, active fault zones, and other hazard areas. Sustainable communities also take advantage of underutilized urban areas and encourage infill and brownfield development. Energy and resource conservation are high priorities. Emphasis is placed on public transit and creating mixed-use

environments that are less dependent on automobiles. An essential characteristic of a sustainable community is its resilience to natural disasters.

Sustainable communities. A term used by hazard managers (for example, floodplain managers) and development experts that encompasses a strategy of considering resource limitations and minimizing hazard risk when developing human living areas.

Sustainable development. In its broader sense, sustainability is defined as development that meets the needs of the present without compromising the ability of future generations to meet their own needs. In the context of emergency management, this meaning remains and it is linked to creating places that are less vulnerable to natural and technological hazards and that are resilient to those events. Sustainable hazard management has five components: environmental quality; quality of life; disaster resilience; economic vitality; and inter- and intra-generational equity. Reducing the risk from hazards, reducing losses from disasters and working toward sustainable communities go hand-in-hand.

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Sustainable planner. The Sustainability Planner acts as a catalyst for sustainability and promotes a sustainable redevelopment component into the overall reconstruction effort. The Sustainability Planner evaluates opportunities for implementing sustainable redevelopment, presents these findings, and helps to build consensus on the appropriate level of effort to be pursued by FEMA, other Federal agencies (OFAs), state and local agencies, and nongovernmental organizations (NGOs). The goal of the sustainability initiative is to reduce the potential for disaster losses and to help communities realize opportunities to implement sustainable redevelopment during the recovery process. Although the goals and responsibilities of the Sustainability Planner are in many ways similar to FEMA's overall hazard mitigation goal, it is necessary to draw some distinctions. The Sustainability Planner focuses on developing comprehensive, long-term planning solutions and identifying opportunities to incorporate sustainable and livable community objectives. The mitigation specialist focuses on specific structural or nonstructural mitigation measures, such as buy-out or elevation of structures, National Flood Insurance Program (NFIP) compliance, building code enforcement, flood protection measures, and seismic and wind retrofit. The Sustainability Planner is more involved with comprehensive plans, zoning and subdivision regulations, and watershed and basin planning initiatives. The Sustainability Planner and the mitigation specialist are partners in building more disaster-resistant and sustainable communities, and their respective areas of emphasis complement each other.

Sustainable redevelopment. The term sustainable redevelopment refers to applying the concepts and practices of sustainable development to the disaster recovery process. The postdisaster environment presents a unique opportunity to implement sustainability initiatives and to increase the quality of the built environment. If reconstruction is a major element of the recovery process, affected communities are presented with an opportunity to address such issues as the compatibility of

development with the environment and natural hazards, the use of renewable resources, and improved community planning and physical design.

Synchronous meteorological satellite/geostationary operational environmental satellites. Satellites orbiting over the equator at the same rate as earth's rotation and providing images of visible and infra-red portions of the spectrum for the same area every 30 minutes. The satellites can collect and distribute environmental data from remote unattended data collection platforms on land, in water, or in the atmosphere and rapidly transmit these data to ground receiving stations.

Synergism. Cooperative action of substances whose total effect is greater than the sum of their separate effects.

Synoptic chart. Geographical map on which meteorological data, analysed or forecast for a specific time, are presented to describe the atmospheric conditions at the synoptic scale.

System concept of operations. Concept of Operations or CON OPS is a description of how the system components, presented in the System Description, operate in a coordinated manner through successive stages of a response and recovery.

System description. A presentation of an overall system architecture and it components, including how they are organized, how they relate to each other, and what they do. System Description: A presentation of an overall system architecture and it components, including how they are organized, how they relate to each other, and what they do. The system description complements the Concept of Operations, which explains how the system and its components function through the successive stages of emergency response and recovery.

System. Two or more processes which may operate independently or are interdependent and may yield a complete product or service.

Systemic. A description of poisons that include toxic metals, such as lead and mercury, and carbon compounds, such as methyl alcohol and carbon disulphide, which affect different organs of the body.

Systems approach. A management strategy that recognizes that disparate components must be viewed as inter-related components of a single system, and so employs specific methods to achieve and maintain the overarching system. These methods include the use of standardized structure and processes and foundational knowledge and concepts in the conduct of all related activities. This approach may also be referred to as systems-based methods.

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Table top exercise. An umbrella term for some types of indoor discussion exercise. They may feature a model of the area on which a prepared scenario is played out, or simply using a projected map, not in real time. The model or map is used to illustrate the deployment of resources, but, no resources are actually deployed. Additionally, responses may be prepared in syndicate, in plenary, or under the guidance of a facilitator who maintains the pace and asks probing questions. A cost effective, and highly efficient, exercise method that should be conducted as a prelude to a field exercise as part of a graduated series.

Tabletop exercise (TTX). An activity that involves key personnel discussing simulated scenarios in an informal setting. This type of exercise can be used to assess plans, policies, and procedures or to assess the systems needed to guide the prevention of, response to, and recovery from a defined incident. TTXs typically are aimed at facilitating understanding of concepts, identifying strengths and shortfalls, and achieving changes in attitude. Participants are encouraged to discuss issues in depth and develop decisions through slow-paced problem solving, rather than the rapid, spontaneous decision making that occurs under actual or simulated emergency conditions.

Tactical element. Tactical elements of ICS are specific organizational elements that execute the tactics (see tactics) set by a management element.

Tactical exercise without troops (TEWT). TEWTS are used to relate theory and/or emergency management arrangements to a simulated operational situation on the ground. This allows controllers, operations officers, etc. To be practised and tested in problem solving and decision making techniques as well as applying operational procedures without actually deploying their resources to a field situation.

Tactics. These are the tasking of personnel and resources to implement the incident strategies. Incident control tactics are accomplished in accordance with appropriate agency procedures and safety directives. Tactics are normally determined at division/sector level with a corresponding allocation of resources and personnel.

Tagging. Method used to identify casualties as requiring immediate care (priority I), delayed care (priority II) minor care (priority III), or as deceased.

Tanker. A mobile firefighting vehicle equipped with a water tank, pump, and the necessary equipment for spraying water and/or foam on wildfires. Can be designated as follows: 1. Heavy tanker — a firefighting unit often on a 4 x 4 chassis with a large water tank (over 2000 litres), a pump, a number of lengths of hose and a range of equipment to assist with wildfire suppression. 2. Light patrol unit — a vehicle equipped with a small tank and pump designed for rapid initial attack and the patrol of fires. 3. Light tanker — a firefighting unit often on a 4 x 4 tray body vehicle with a small water tank (400–650 litres), a pump and short length of hose. 4. Slip on tanker — a tank, a live hose reel or tray, an auxiliary pump, and an engine combined into a single one-piece assembly that can be slipped onto a truck bed or trailer.

Target Capabilities List (TCL). The Target Capabilities List describes the capabilities related to the four homeland security mission areas: Prevent, Protect, Respond, and Recover. It defines and provides the basis for assessing preparedness. It also establishes national guidance for preparing the Nation for major all-hazards events, such as those defined by the National Planning Scenarios. The current version of the TCL contains 37 core capabilities. A Consensus of the Community approach was used to develop the Target Capabilities List. Stakeholders from Federal, State, local, territorial, and tribal governments, the private sector, and nongovernmental organizations came together in four national workshops and capability working groups to define the capabilities. The Guidelines will serve as a framework to guide operational readiness planning, priority-setting, and program implementation at all levels of government. The Guidelines provide a call to action by all Americans as they consider their personal and shared responsibility to be part of A Nation Prepared. The Target Capabilities List provides guidance on building and maintaining capabilities that support the Guidelines.

Task. A clearly defined and measurable activity accomplished by organizations or some subset thereof (sections, functions, teams, individuals and others). It is the lowest behavioral level in a job or unit that is performed for its own sake.

Task force. A combination of resources assembled for a specific purpose. Task forces always have a leader (usually in a separate vehicle) and have a common communications system. Task forces are established to meet tactical needs and may be demobilised as single resources.

Team (*emergency management*). A nonspecific term for a group of personnel who work as a unit (with some incorporated leadership structure) to accomplish assigned tasks within incident management. The term may also be used as a shortened meaning for strike team (see strike team)

Technical assistance. Support provided to State, local, and tribal jurisdictions when they have the resources but lack the complete knowledge and skills needed to perform a required activity (such as mobile-home park design and hazardous material assessments).

Technical operations cadre. The group of individuals at DOE Headquarters that gathers information during an emergency, formulates courses of action for the entire department, and presents recommendations to senior DOE management and the Executive Team, for approval.

Technological disaster. Disaster arising from other than natural causes (including biological, chemical, nuclear, transport and terrorist-instigated disaster).

Technological event. The result of realization of human-made hazards. They do not occur in nature. Such events may be predictable or non-predictable, be accidental, intentional or caused by negligence. The hazards associated with such events may be known prior to the occurrence of the event or may become known only after the event has occurred.

Technological hazard. A hazard created primarily by manmade technology or unplanned and non-malicious actions, which result in human or property impact of sufficient severity to be deemed an emergency. Technological hazards include industrial, nuclear or transportation accidents, unintentional natural gas and other explosions, conflagration, building collapse from primary structural failure (insufficient supports during construction or renovation, corrosion or other predictable materials deterioration, overload of structural elements, etc.), power failure, financial and resource shortage, oil and other hazardous materials spills and other injury-threatening environmental contamination. Note interface between technological, natural and intentional origins: a structural collapse secondary to an earthquake is a natural hazard emergency; one secondary to a deliberate

methane explosion is an intentional hazard emergency; one secondary to construction error is a technological hazard emergency.

Telecommunications. Any transmission, emission, or reception of signs, signals, writing, images, and sounds or intelligence of any nature by wire, radio, optical, or other electromagnetic systems.

Telemetry. The use of data communications devices from the sensors in situ, to a receiving station.

Teleseism. An earthquake recorded by a seismograph at a great distance from the source, i. e. over 1000 kilometres.

Temperature danger zone. The temperature range between 5 °C and 60 °C (40 F° – 140 °F) within which most bacteria experience their best growth and reproduction.

Temporary accommodation. Accommodation provided over an extended period of days, weeks or months, for individuals or families affected by an emergency. It is different from emergency shelter.

Temporary Emergency Exposure Level (TEEL). Chemical exposure guidelines to use for emergency planning (if no ERPG is available).

Tephra. Volcanic ash which is disaggregated and blown by the force of eruption, usually vertically, into the atmosphere.

Teratogen. An agent capable of causing abnormalities in a developing foetus, that is, causing birth defects.

Teratogenic. Able to produce abnormalities in a developing foetus, that is, causing birth defects.

Termination. The conclusion of an Operational Emergency. It includes a determination of when it is appropriate to cease emergency response activities and the associated notifications. The termination process begins when personnel in charge of the response effort determine that conditions are sufficiently stabilized to begin comparing them to pre-established decisional criteria. The termination decision and subsequent notification that an event no longer constitutes an Operational Emergency marks the beginning of recovery.

Terrorism. 1. Under the Homeland Security Act of 2002, terrorism is defined as activity that involves an act dangerous to human life or potentially destructive of critical infrastructure or key resources and is a violation of the criminal laws of the United States or of any State or other subdivision of the United States in which it occurs and is intended to intimidate or coerce the civilian population or influence a government or affect the conduct of a government by mass destruction, assassination, or kidnapping. 2. The unlawful use of force or violence against persons or property to intimidate or coerce a government, the civilian population, or any segment thereof, in furtherance of political or social objectives (FBI). Domestic terrorism involves groups or individuals who are based and operate entirely within the United States and U.S. territories without foreign direction and whose acts are directed at elements of the U.S. government or population.

Terrorist attack. Any armed assault, or act of unlawful, premeditated violence, committed against persons or property to intimidate, coerce, other otherwise influence a government, the civilian population, or an segment thereof, in furtherance of political or social objectives, takes place at a DOE or contractor facility.

Terrorism preparedness. The term ‘terrorism preparedness’ means any activity designed to improve the ability to prevent, prepare for, respond to, mitigate against, or recover from threatened or actual terrorist attacks.

Terrorism risk assessment. With respect to analyzing and assessing the risk of acts of terrorism, the Administrator shall consider—(1) the variables of threat, vulnerability, and consequences related to population (including transient commuting and tourist populations), areas of high population density, critical infrastructure, coastline, and international borders; and (2) the most current risk assessment available from the Chief Intelligence Officer of the Department of the threats of terrorism against the United States.

TES. Territory emergency service.

The Infrastructure Security Partnership (TISP). The Infrastructure Security Partnership (TISP) was established following the tragic events of September 11, 2001, as a national forum for public and private-sector organizations to collaborate on issues regarding the resilience of the nation’s critical infrastructure against the adverse impacts of natural and man-made disasters. TISP members—who represent the design, construction, operation, and maintenance communities; local, state, and federal agencies; academe; and other organizations concerned about disaster preparedness, response, and recovery—work together to identify and develop cost- effective solutions by leveraging their collective resources, experience, technical expertise, research and development capabilities, and knowledge of public policy regarding natural and man-made disasters. Since its establishment, membership has grown to more than 100 organizations representing more than 1.5 million individuals and firms.

Thermal radiation. Electromagnetic radiation emitted from an explosion in the form of light and heat.

Threat Assessment Inquiry. The primary purpose of a threat assessment is to prevent targeted violence. The threat assessment process is centered upon on analysis of the facts and evidence of behavior in a given situation. The appraisal of risk in a threat assessment focuses on actions, communications, and specific circumstances that might suggest that an individual intends to mount an attack and is engaged in planning or preparing for that event. In a situation that becomes the focus of a threat assessment inquiry or investigation, appropriate authorities gather information, evaluate facts, and make a determination as to whether a given student poses a threat of violence to a target. If an inquiry indicates that there is a risk of violence in a specific situation, authorities conducting the threat assessment collaborate with others to develop and implement a plan to manage or reduce the threat posed by the student in that situation. Six principles form the foundation of the threat assessment process. These principles are: 1. Targeted violence is the end result of an understandable, and oftentimes discernible, process of thinking and behavior. 2. Targeted violence stems from an interaction among the individual, the situation, the setting, and the target. 3. An investigative, skeptical, inquisitive mindset is critical to successful threat assessment. 4. Effective threat assessment is based upon facts, rather than on characteristics or ‘traits’. 5. An ‘integrated systems approach’ should guide threat assessment inquiries and investigations. 6. The central question in a threat assessment inquiry or investigation is whether a student poses a threat, not whether the student has made a threat.

Threat. 1. An indication of possible violence, harm, or danger. 2. The possibility of a hazard occurrence; something that has the potential to cause harm.

Threshold for Early Lethality (TEL). The threshold that applies to the general population and is intended to approximate the level of dose or exposure at which the sensitive groups within any large population would begin to show an increase in mortality. The definitions below are intended only for use in the facility Hazards Assessment process. For purposes of conducting facility Hazards Assessments, the TEL should be interpreted as follows: 1. For radiological releases: A projected dose (TEDE) of about 100 rem to reference man, where the projected TEDE is the sum of the EDE from exposure to external sources and the CEDE from inhalation during the early phase. 2. The use of 100 rem TEDE as an approximation of the lethality threshold is quite conservative. Radiation effects studies have estimated a 5 percent risk of early fatality following an acute dose of 140 rem, with a smaller but indeterminate risk expected for doses below that level. 3. Little if any risk of early fatality would be associated with 100 rem TEDE if the dose were received over a period of time from radioactive material taken into the body. 4. For non-radiological releases: A projected 15-minute average concentration of the substance in air that equals or exceeds the ERPG-3 or alternative value for that substance.

Threshold limit value. American Conference of Governmental Industrial Hygienists (ACGIH) exposure level limit considered to be acceptable in the workplace. Adopted in 1968, it is the oldest of the recommended standards. A common practice is to use the more stringent standard between Threshold Limit Values and Permissible Exposure Limits.

Threshold planning quantity. Threshold planning quantities (TPQs) provided by 40 CFR Part 355 for extremely hazardous substances (EHS). Facilities that have present an EHS in excess of the TPQ must notify the state emergency response commission and participate in the local emergency planning process.

Threshold quantity (TQ). Requirements established by the Clean Air Act of 1990 for substances that, in the case of accidental release, may reasonably be anticipated to cause death, injury, or serious adverse effects to human health or the environment. TQ values (listed in 40 CFR 68) were established primarily for off-site emergency response considerations. The TQ is not an appropriate screening level for hazard analysis or on-site emergency response considerations. An accidental release of a quantity of an extremely hazardous substance less than the TQ value could pose an immediate credible acute health effect risk to workers in the area surrounding the release site. [EMI SIG Task Group]

Threshold. A limit below which a stimulus causes no reaction; a limit below which no reaction occurs. In these Guidelines, it signifies a level of functional status or resources that separates two different levels of function. (See critical threshold and functional threshold.)

Thunderstorm. Sudden electrical discharges manifested by a flash of light (lightning) and a sharp or rumbling sound (thunder). Thunderstorms are associated with convective clouds (cumulonimbus) and are, more often, accompanied by precipitation in the form of rainshowers or hail, or occasionally snow, snow pellets, or ice pellets.

TIA. Terrorism Incident Annex.

Tidal bore. An abrupt rise of tidal water (caused by atmospheric activities) moving rapidly inland from the mouth of an estuary.

Tidal wave. A misnomer applied to tsunami. In a truer sense it refers to the amplification of a tidal cycle because of the effects of seiching or resonance induced by the passage of a low-pressure storm.

Tiered response. Incidents must be managed at the lowest possible jurisdictional level and supported by additional response capabilities when needed. It is not necessary that each level become overwhelmed, or fail, prior to surging resources from another level. Just the contrary, a tiered response will also be a forward-leaning response. Most incidents begin and end locally and are wholly managed at the community level. Many incidents require additional resources or support from across the community, and some require additional support from neighboring communities or the State. A few require Federal support. National response protocols recognize this and are structured to provide additional, tiered levels of support when there is a need for additional resources or capabilities to support and sustain the response and initial recovery. During large-scale events, all levels will take proactive actions to respond, anticipating resources that may be required.

Time weighted average. The most frequently used exposure guideline term; the average exposure concentration over a standard workday (8 hours). [EMI SIG Task Group]

Timeline coordinator. Individual, for complex exercises, who is responsible for ensuring the exercise timeline remains on schedule—a key factor for proper attainment of exercise objectives.

Timely Initial Assessment (TIA). A rapid assessment that yields a conservative estimate of the upper bound of the potential consequences. TIA actions are designed to require minimal time and effort and the results may have a high degree of uncertainty.

Timely. Fast enough for response activities to be effective in protecting worker and public health and safety.

Title 10 Status. In rare circumstances, the President would federalize National Guard forces for domestic duties under Title 10. In such cases, the forces are no longer under the command of the Governor. Instead, the Department of Defense assumes full responsibility for all aspects of the deployment, including command and control over National Guard forces.

Title 32 Status. National Guard forces employed under State Active Duty or Title 32 status are providing support to the Governor of their State and are not part of Federal military response efforts. When the National Guard is deployed in State Active Duty status, the Governor retains command and control of forces inside his or her State or territory. State Active Duty is based on State statute and policy, and the State is responsible for all costs relating to the deployment. Title 32 Full-Time National Guard Duty refers to Federal training or other duty, other than inactive duty, performed by a member of the National Guard. Title 32 is not subject to posse comitatus restrictions and allows the Governor, with the approval of the President or the Secretary of Defense, to order a Guard member to duty to: (1)

Perform training and other operational activities. (2) Undertake activities for the military protection of the territory or domestic population 1 of the United States, or of the infrastructure or other assets of the United States determined to be critical to national security, from a threat or aggression against the United States. (3) Conduct homeland defense activities that the Secretary of Defense determines to be 6 necessary and appropriate for participation by the National Guard units or members.

Tolerable risk. A risk which the exposed people are expected to bear without undue concern, once all reasonable practicable reduction measures have been adopted. ‘tolerable’ is sometimes used

interchangeably with ‘acceptable’, but its more negative connotations make it more appropriate for risks which are reluctantly accepted.

Tools. Those instruments and capabilities that allow for the professional performance of tasks, such as information systems, agreements, doctrine, capabilities, and legislative authorities.

Top of dam. The elevation of the uppermost surface of the dam proper not taking into account any camber allowed for settlement or kerbs, parapets, guardrails or other structures that are not a part of the main water retaining structure. This elevation is usually the roadway or walkway or the non-overflow section of the dam.

Tornado. Tornadoes are extremely complex wind events that cause damage ranging from minimal or minor to absolute devastation. In a simplified tornado model, there are three regions of wind: 1. Near the surface, close to the core or vortex of the tornado. In this region, the winds are complicated and include the peak low level wind speeds, but are dominated by the tornado’s strong rotation. It is in this region that strong upward motions occur that carry debris upward, as well as around the tornado. 2. Near the surface, away from the tornado’s core or vortex. In this region, the flow is dominated by inflow to the tornado. The inflow can be complicated and is often concentrated into relatively narrow swaths of strong inflow rather than a uniform flow into the tornado’s core circulation. 3. Above the surface, typically above the tops of most structures, the flow tends to become very nearly circular. In an actual tornado, the diameter of the core or vortex circulation can change with time, so it is impossible to say precisely where one region of the tornado’s flow ends and another begins.

Also, the visible funnel cloud associated with and typically labeled the vortex of a tornado is not always the edge of the strong extreme winds. Rather, the visible funnel cloud boundary is determined by the temperature and moisture content of the tornado’s inflowing air. The highest wind speeds in a tornado occur at a radius measured from the tornado core that can be larger than the visible funnel cloud’s radius. It is important to remember that a tornado’s wind speeds cannot be determined just by looking at the tornado.

Tornado. A violently rotating storm of small diameter; the most violent weather phenomenon. It is produced in a very severe thunderstorm and appears as a funnel cloud extending from the base of a cumulonimbus to the ground.

Total Effective Dose Equivalent (TEDE). The sum of the effective dose equivalent (for external exposures) and the committed effective dose equivalent (for internal exposures). Deep dose equivalent to the whole body may be used as effective dose equivalent for external exposures.

Toxic. Poisonous; relating to or caused by toxin; able to cause injury by contact or systemic action to plants, animals or people.

Toxic effect. The property of an agent producing damage to an organism. This usually refers to functional (systemic) damage but may be developmental in respect of tissue and skeleton in the case of the embryo. The damage may be permanent or transient/

Toxic pollutants. Any pollutant listed as toxic under Section 501(a)(1) or, in the case of sludge use or disposal practices, any pollutant identified in regulations implementing Section 405(d) of the CWA; toxics are injurious to human health or animals.

Toxicity. The degree of being poisonous; the capability of a poisonous compound to produce deleterious effects in organisms such as alteration to behavioural patterns or biological productivity or death.

Toxicology. The science of poisons, harmful chemical substances, organic toxins, and of their detection, effects, elimination and antidotes.

TRACES (United States Transportation Command [USTRANSCOM] Command and Control Evacuation System). Automated system used by DoD to regulate patients to health care facilities that have the capacity to treat the patient. The system also integrates the regulating of those patients with available transport assets and provides the ability to track the patient from point of origin to final destination. This system is used by VA Primary Receiving Centers to report available beds under the VA/DoD Contingency Plan and by VA Federal Coordinating Centers for reporting of private hospital sector NDMS beds.

Tracking and Satellite Communications System. A 24-hour, real-time tracking and two-way communications system designed to monitor the movement of radioactive materials including spent fuel, high-level waste, transuranic waste, and other high visibility shipments, as determined by DOE.

Traffic management point. A point established to control and limit access to a fire area. It provides a means of managing the entry of residents of the fire affected area so that they can secure their property and extinguish fires caused by the ember attack after the passage of the fire front.

Tragedy. An intensely sad, calamitous, or fatal event or course of events; disaster. The word ‘tragedy’ summons up in one’s mind the inevitability not only of this event but of other similar events in the past and more to follow. Responsibility can be successfully abrogated with the application of the label ‘tragedy’. One needs to look no further into the cause or causes of this event because it has now been lifted outside of one’s power and into the domain of Greek drama and fate. As a tragedy, it was fated to be and the only possible response is to accept it (and others of its kind) as part of the inescapable human situation. The event may be mourned and one may sympathize briefly with the victims. But one is freed (by thinking of it as a tragedy) from the need to examine the conceptual apparatus that led to this outcome.

Training. Training is instruction that imparts and/or maintains the skills (and abilities such as strength and endurance) necessary for individuals and teams to perform their assigned system responsibilities. Training objectives should be competency-based and specify a level of proficiency that relates to the relevant competencies (awareness, operations, or expert). As much as possible, training should address skills function under the conditions likely when the skill must be conducted.

Transitory hazards. Hazards, that are, stored at a particular facility/site for only a short period, such as during transit or as part of a testing program.

Transport. Conveyance of an object from one place to another.

Transportation Emergency Management Program (TEMP). DOE program that establishes a capability to provide planning and training support to offsite authorities for response to events involving non-weapons related shipments. TEMP was initially called the Transportation Emergency Preparedness Program (TEPP) but was renamed to TEMP to reflect the full range of the program.

Transportation Emergency Preparedness Program (TEPP). See Transportation Emergency Management Program (TEMP).

Transportation event. Any real-time occurrence involving any of the following transportation activities: material classification; packaging; marking; labeling; placarding; shipping paper preparation; loading/unloading; separation/segregation; blocking and bracing; routing; accident reporting; and movement of materials. Transportation events with injury(ies) may also require reporting in accordance with the criteria in the personnel safety category of reportable occurrences.

Transportation Safeguards System. The program, managed and operated by the Manager, Albuquerque Operations Office, under the programmatic direction of the Deputy Assistant Secretary for Military Application, that has the administrative and courier personnel, special transport and escort vehicles, and nationwide high frequency communications system required to carry out the total responsibility for the safe, secure, domestic transportation of all DOE-owned or controlled nuclear explosives, Category I or II quantities of special nuclear materials (excluding naval reactor core shipments), and other cargos deemed appropriate and agreed to by the Manager, Albuquerque Operations Office, and respective Heads of Departmental Elements.

Trauma. Injury of any nature.

Tremor. A shaking movement of the ground associated with an earthquake or explosion.

Triage area. An area which may be set aside at the entrance to the patient treatment post specifically for triage of casualties as they are brought to the area.

Triage tag. A form of casualty medical documentation, usually in the form of labels which can be attached to the casualty, which clearly identify the individual's priority for treatment and transport, and on which basic details of assessment and treatment are recorded.

Triage. The sorting into pre-established priorities. In reference to medical care and disasters, it means that scarce resources will be used to provide the maximum benefit to the population at large. The traditional triage is the transvertical triage (takes place within a short time frame). Longitudinal triage means sacrificing victims at the moment for the benefit of future victims.

Tribal. Any Indian tribe, band, nation, or other organized group or community, including any Alaskan Native Village as defined in or established pursuant to the Alaskan Native Claims Settlement Act (85 stat. 688) [43 U.S.C.A. and 1601 et seq.], that is recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians.

Tropical cyclone. Generic term for a non-frontal synoptic scale **cyclone** originating over tropical or sub-tropical waters with organised convection and definite cyclonic surface wind circulation including: 1) tropical disturbance: light surface winds with indications of cyclonic circulation; 2) tropical depression: wind speed up to 33 knots; 3) tropical storm: maximum wind speed of 34 to 47 knots; 4) severe tropical storm: maximum wind speed of 48 to 63 knots; 5) hurricane: maximum wind speed of 64 knots or more; 6) typhoon: maximum wind speed of 64 knots or more; 7) tropical cyclone (south-west indian ocean): maximum wind speed 64 to 90 knots; 8) tropical cyclone (bay of bengal, arabian sea, south-east indian ocean, south pacific): maximum wind speed of 34 knots or more.

True north. The direction from any point on the earth's surface to the north pole.

Trust position. A response position in which the assigned personnel are performing high-consequence activities, especially if performed in a relatively independent fashion. Examples include a surgeon who is operating without direct supervision, or a public health advisor who shapes response policies or procedures.

Tsunami intensity scale. An intensity scale providing descriptions of six levels of tsunami intensity.

Tsunami warning bulletin. A message issued to all participants in the tsunami warning system in the pacific on a pacific-wide basis after confirmation has been received that a tsunami has been generated that poses a threat to the population in part or all of the pacific. A tsunami warning will be followed by additional bulletins with updated information until the tsunami warning is cancelled.

Tsunami. A sea wave that may become one or more massive waves of water as it makes landfall. It is a secondary event caused by another natural event, usually an earthquake or underwater volcanic eruption or landslide.

Type. A classification of resources in the ICS that refers to capability. Type 1 is generally considered to be more capable than Types 2, 3, or 4, respectively, because of size; power; capacity; or, in the case of incident management teams, experience and qualifications.

Typhoid fever. A serious enteric infectious disease, transmitted by patients, carriers, water or food, such as contaminated shellfish. It is characterised by fever, slow pulse, skin eruption, abdominal signs, enlarged spleen and prostration. Many enteric diseases are labelled typhoid fever, but the latter only is caused by salmonella typhi. It is a popular belief that typhoid frequently follows floods and other disasters; it is in fact unusual, and mass vaccination is not recommended. Personal hygienic practices constitute the best prevention.

Typhoon. Name given to a tropical cyclone with maximum sustained winds of 64 knots or more near the centre in the western North Pacific.

U

UC. Unified Command.

UFC. Unified Coordination Group.

Unacceptable Risk. Level of risk as determined by the risk management process which cannot be mitigated to an acceptable safe level.

Unaffiliated volunteer. Volunteers with no prior association with the volunteer management system or association with a recognized volunteer organization or traditional disaster response agency.

Uncertainty phase. A situation wherein apprehension exists as to the safety of a vessel or aircraft and of the persons on board.

Unified approach. A major objective of preparedness efforts is to ensure mission integration and interoperability when responding to emerging crises that cross functional and jurisdictional lines, as well as between public and private organizations.

Unified Area Command (UAC). A unified area command is established when incidents under an area command are multi-jurisdictional.

Unified Command. 1. An application of ICS used when there is more than one agency with incident jurisdiction or when incidents cross political jurisdictions. Agencies work together through the designated members of the UC, often the senior person from agencies and/or disciplines participating in the UC, to establish a common set of objectives and strategies and a single IAP. 2. This management structure brings together the Incident Managers of all major organizations involved in the incident, to coordinate an effective response while allowing each manager to carry out his/her own jurisdictional or discipline responsibilities. UC links the organizations responding to the incident at the leadership level, and it provides a forum for these entities to make consensus decisions. Under UC, the various jurisdictions and/or agencies and nongovernment responders may blend together

throughout the organization to create an integrated response team. UC may be used whenever multiple jurisdictions or response agencies are involved in a response effort.

Unified command. A method for all agencies or individuals who have jurisdictional responsibility, or in some cases who have functional responsibilities at the incident, to contribute to: determination of overall objectives for the incident, and selection of strategies to achieve the objectives.

Unified Coordination Group. Under the National Response Framework, Using unified command principles, a **Unified Coordination Group** comprised of senior officials from the State and key Federal departments and agencies is established at the JFO. This group of senior officials provides the breadth of national support to achieve shared objectives. The Unified Coordination Group oversees the development of an exit strategy and demobilization plan. As the need for full-time interagency response coordination at the JFO wanes, the Unified Coordination Group plans for selective release of Federal resources, demobilization, transfer of responsibilities and closeout.

Unified Coordination Staff. The JFO structure normally includes a Unified Coordination Staff. The Unified Coordination Group determines the extent of staffing based on the type and magnitude of the incident.

Unified Incident Management. Unified Command: also referred to as Unified Incident Management. An application of ICS/IMS used when there is more than one agency with incident jurisdiction. Agencies work together through their designated Incident Commanders or Managers at a single location to establish a common set of objectives and strategies, and a single incident action plan.

Uninterruptible Power Supply. A power supply that provides automatic, instantaneous power, without delay or transients, on failure of normal power. It can consist of batteries or full-time operating generators. It can be designated as standby or emergency power depending on the application. Emergency installations must meet the requirements specified for emergency power.

Unit. The organizational element having functional responsibility for a specific incident planning, logistics, or finance/administration activity.

United Nations environment programme. Special programme of the united nations to promote a harmonious interrelationship between environment and development, by wise and technically sound utilisation of resources and by reducing the degradation and pollution of the environment. Acts in natural environmental catastrophes (earthquake, drought, deforestation) and man-made disasters (chemical explosion, oil spill, pollution).

United nations office for the coordination of humanitarian affairs. The united nations organisation responsible for coordination of humanitarian emergency response, policy development, and advocacy on humanitarian issues. Previously known as ‘united nations disaster relief organisation and ‘united nations department of humanitarian aid (undha)’.

United States Fire Administration. As an entity of the Department of Homeland Security’s Federal Emergency Management Agency, the mission of the USFA is to reduce life and economic losses due to fire and related emergencies, through leadership, advocacy, coordination and support. We serve the Nation independently, in coordination with other Federal agencies, and in partnership with fire protection and emergency service communities. With a commitment to excellence, we provide public education, training, technology, and data initiatives. The U.S. Fire Administration (USFA) was created in 1974 in response to a bleak assessment of fire safety in the United States. The report detailed the loss of nearly 12,000 citizens and 250 firefighters to fires each year. Through

firefighter training, public fire-safety education and research, the USFA cut fire-related deaths in half by 1998.

Unity of Command. The concept by which each person within an organization reports to one and only one designated person. The purpose of unity of command is to ensure unity of effort under one responsible commander for every objective.

Unity of Effort. Respects the chain of command of each participating organization while harnessing seamless coordination across jurisdictions in support of common objectives.

Universal precautions. Precautions for prevention of transmission of HIV, hepatitis B and other blood- borne pathogens and to prevent contamination of health care workers by all blood and body substances from all patients (including faeces, urine, vomitus and other secretions).

Universal task list. A menu of some 1,600 unique tasks that can facilitate efforts to prevent, protect against, respond to and recover from the major events that are represented by the National Planning Scenarios. It presents a common vocabulary and identifies key tasks that support development of essential capabilities among organizations at all levels. Of course, no entity will perform every task. Instead, this task list was used to assist in creating the Target Capabilities List.

Unreviewed Safety Questions (USQ). Whether or not a USQ issue constitutes a hazard is based on a determination made by examining the following circumstances: (1) temporary or permanent changes in the facility as described in the existing safety analysis; (2) temporary or permanent changes in the procedures as derived from safety analysis; and (3) tests or experiments not described in existing safety analysis. On identification of any of the above circumstances, an Unreviewed Safety Question exists if one or more of the following conditions result: 1) the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety as previously evaluated in the facility safety analysis could be increased; 2) the possibility for an accident or malfunction of a different type than any previously been evaluated in the facility safety analysis could be created; and 3) any margin of safety as defined in the bases of the Technical Safety Requirements could be reduced.

Unserviceable resources. Resources at an incident but unable to respond for mechanical, rest or personal reasons.

Unusual occurrence. A non-emergency occurrence that exceeds Off-Normal threshold criteria, is related to safety, environment, health, security, or operations, and requires immediate notification to DOE.

Update. A notification category that provides non-urgent emergency management information during all four phases of emergency management (see advisory — alert — activation for contrast between the other notification categories).

Urban Areas Security Initiative. In July 2002 the President approved the National Strategy for Homeland Security, a road map for the national effort to prevent and respond to acts of terrorism in the United States. The National Strategy recognizes the vital role of state and local public safety agencies in providing for the security of our homeland. In February 2003 the President signed into law the Fiscal Year (FY) 2003 Omnibus Appropriations Act which provides state and local governments with the vital funding they require to participate in the national effort to combat terrorism. The U.S. Department of Homeland Security (DHS), Office for Domestic Preparedness (ODP) FY 2003 Urban Areas Security Initiative (UASI) reflects a confluence of important Presidential initiatives designed to enhance the preparedness of the nation to combat terrorism.

Whereas most states and municipalities have strengthened their overall capability to respond to acts of terrorism involving chemical, biological, radiological, nuclear or explosive (CBRNE) weapons, there continues to be room for improvement in meeting our national priorities of preventing and responding to terrorist attacks. The Office for Domestic Preparedness is providing financial assistance directly to selected jurisdictions through the Fiscal Year (FY) 2003 Urban Areas Security Initiative. This financial assistance is being provided to address the unique equipment, training, planning and exercise needs of large high threat urban areas, and to assist them in building an enhanced and sustainable capacity to prevent, respond to, and recover from threats or acts of terrorism.

Urban Search and Rescue (US&R) Task Forces. The National US&R Response System is a framework for structuring local emergency services personnel into integrated disaster response task forces. The 28 National US&R Task Forces, complete with the necessary tools, equipment, skills and techniques, can be deployed by DHS/FEMA to assist State and local governments in rescuing victims of structural collapse incidents or to assist in other search and rescue missions. Each task force must have all its personnel and equipment at the embarkation point within 6 hours of activation. A task force can be dispatched and en route to its destination in a matter of hours.

Urban Search and Rescue (US&R). Urban search-and-rescue (US&R) involves the location, rescue (extrication), and initial medical stabilization of victims trapped in confined spaces. Structural collapse is most often the cause of victims being trapped, but victims may also be trapped in transportation accidents, mines and collapsed trenches.

Urban search and rescue. An integrated multi-agency response, which is beyond the capability of normal rescue arrangements, to locate, provide initial medical care, and remove entrapped persons from damaged structures and other environments in a safe and expeditious manner.

USACE. United States Army Corps of Engineers.

USFA. United States Fire Administration, FEMA/DHS, Emmitsburg, MD.

USG. United States Government.

USNORTHCOM. United States Northern Command.

USNORTHCOM Mission Statement. Conduct operations to deter, prevent, and defeat threats and aggression aimed at the United States, its territories, and interests within the assigned area of responsibility; and as directed by the President or Secretary of Defense, provide defense support of civil authorities including consequence management operations.

V

Validity. A term indicating that 1) independent evaluators can agree on the relevance and appropriateness of criteria for judging value and on evidence that reflects those criteria and 2) that safeguards are in place to control potential bias in measurement, data collection, analysis, and development of conclusions.

Vapor. An air dispersion of molecules of a substance that is liquid or solid in its normal physical state, at standard temperature and pressure.

Vapor density. The ratio of the density of a gas to the density of air. Products with a vapor density less than 1 will tend to rise and those with a vapor density greater than 1 will tend to sink in air.

Vapour. The gaseous form of a substance which is normally in the solid or liquid state at room temperature and pressure.

Vector control. Control of insects capable of transmitting disease.

Vector. Insects capable of transmitting disease. Includes flies, fleas, lice. Mites, mosquitoes and ticks.

Venom. A poison normally from a snake; insect; marine creature; or other animal.

Vermin. Rodents and animals capable of transmitting disease, e. g. rats, mice.

Vertical Evacuation. The evacuation of persons from an entire area, floor, or wing of a hospital to another floor (either higher or lower based upon the threat/event). (VHA Emergency Management Guidebook 2005)

Vesicular disease. Any exotic animal disease characterised by vesicles, which are surface cysts containing fluids — any vesicular disease is assumed to be foot-and mouth disease until proven otherwise.

Victim. 1. A person directly affected by a disaster. 2. A person who is killed.

Victim-rescuer syndrome. In disasters where survivors are at the mercy of outside support for survival or their daily requirements, a strong dependence can develop between a victim and those who are providing the aid. This dependency may not be easily terminated when the necessity for relief has ended.

Vision statement. To develop a society more resilient to natural disasters, where sustained planning, investment and action results in more sustainable communities.

VMAT. Veterinary Medical Assistance Team.

VOAD. Voluntary Organizations Active in Disaster.

Volcanic Dust. Dust of particles emitted by a volcano during an eruption. They may remain suspended in the atmosphere for long periods and be carried by the winds to different regions of the Earth.

Volcanic eruption. The discharge (aerially explosive) of fragmentary ejecta, lava and gases from a volcanic vent.

Volcano. Vent or chimney to the earth's surface from a resevoir of molten matter, known as magma, in the depths of the crust of the earth; The mountain formed by local accumulation of volcanic materials around an erupting vent.

Voluntary evacuation. This is a warning to persons within a designated area that a threat to life and property exists or is likely to exists in the immediate future. Individuals issued this type of waning or order are NOT required to evacuate, however it would be to their advantage to do so.

Volunteer emergency worker. A volunteer worker who engages in emergency activity at the request (whether directly or indirectly) or with the express or implied consent of the chief executive (however designated), or of a person acting with the authority of the chief executive, of an agency to which either the state emergency response or recovery plan applies.

Volunteer. Multiple definitions are used, with the issue of payment for services being the factor that is important to differentiate: 1) a person agreeing to provide service outside the scope of his/her employer and/or employed position, without additional or specific compensation for this voluntary commitment. This differentiates the volunteer from personnel who provide service as part of their job position in an assigned resource. An individual offering or providing this service is a volunteer even if the volunteer's time is compensated through his/her usual employer and employment rate; 2) in some contexts such as ESAR-VHP, a volunteer is defined as providing service without pay or remuneration; 3) for purposes of the NIMS, a volunteer is any individual accepted to perform services by the lead agency, which has authority to accept volunteer services, when the individual performs services without promise, expectation, or receipt of compensation for services performed. See, e.g., 16 U.S.C. 742f© and 29 CFR 553.101.

Volunteer services. There are statutory exceptions to the general statutory prohibition against accepting voluntary services under 31 U.S.C. 1342 that can be used to accept the assistance of volunteer workers. Such services may be accepted in emergencies involving the safety of human life or the protection of property. Additionally, provisions of the Stafford Act, 42 U.S.C. 5152(a), 5170a(2), authorize the President to use the personnel of private disaster relief organizations and to coordinate their activities.

Volunteers (*affiliated*). Affiliated volunteers are attached to a recognized voluntary or nonprofit organization and are trained for specific disaster response activities. Their relationship with the organization precedes the immediate disaster, and they are invited by that organization to become involved in a particular aspect of emergency management.

Volunteers (*convergent*). A volunteer is someone who willingly offers his/her services without expectation of financial compensation. Volunteers that spontaneously offer their help in the wake of a disaster are known as convergent volunteers.

Volunteers (*spontaneous*). Spontaneous volunteers, are individuals who offer to help or self-deploy to assist in emergency situations without fully coordinating their activities. They are considered unaffiliated in that they are not part of a disaster relief organization. Although unaffiliated volunteers can be significant resources, because they do not have preestablished relationships with emergency response organizations, verifying their training or credentials and matching them with the appropriate service areas can be difficult.

Volunteers (*unaffiliated*). Unaffiliatedvolunteers are not part of a recognized voluntary agency and often have no formal training in emergency response. They are not officially invited to become involved but are motivated by a sudden desire to help others in times of trouble. They come with a

variety of skills. They may come from within the affected area or from outside the area. (Also known as: convergent, emergent, walk-in, or spontaneous.)

Vulnerability (homeland security). Homeland security involves a systematic, comprehensive, and strategic effort to reduce America's vulnerability to terrorist attack. We must recognize that as a vibrant and prosperous free society, we present an ever-evolving, ever-changing target. As we shore up our defenses in one area, the terrorists may exploit vulnerabilities in others. The National Strategy for Homeland Security, therefore, outlines a way for the government to work with the private sector to identify and protect our critical infrastructure and key assets, detect terrorist threats, and augment our defenses.

Vulnerability. Vulnerability has been variously defined as the threat of exposure, the capacity to suffer harm, and the degree to which different social groups are at risk (Cutter 1996). Perhaps equally important is the notion that vulnerability varies by location (or space) and over time — it has both temporal and spatial dimensions. There are many types of vulnerability of interest to the hazards community, but three are the most important: individual, social, and biophysical. Individual vulnerability is the susceptibility of a person or structure to potential harm from hazards, social vulnerability, describes the demographic characteristics of social groups that make them more or less susceptible to the adverse impacts of hazards. Social vulnerability suggests that people have created their own vulnerability, largely through their own decisions and actions. Biophysical vulnerability, examines the distribution of hazardous conditions arising from a variety of initiating events such as natural hazards, chemical contaminants, or industrial accidents.

Vulnerability analysis. The process of estimating the vulnerability to potential disaster hazards of specified elements at risk. For engineering purposes, vulnerability analysis involves the analysis of theoretical and empirical data concerning the effects of particular phenomena on particular types of structures. For more general socio-economic purposes, it involves consideration of all significant elements in society, including physical, social and economic considerations (both short and long-term), and the extent to which essential services (and traditional and local coping mechanisms) are able to continue functioning.

Vulnerability assessment. Some emergency managers include geophysical and topographical factors in the vulnerability assessment process, while others include them in the risk assessment process. For example, Picket and Block (1991, 278-79), following the work of Terrence Haney, discuss the development of an earthquake hazard vulnerability model that utilizes data from five key areas: (1) geophysical, (2) topographical, (3) transportation and utility infrastructure, (4) structural facilities (buildings and bridges), and (5) demographic factors. Pearce et al. (1993, 4) argue that the consideration of geophysical and topographical factors belongs in the risk assessment process. For example, an analysis that concludes that the existence of a fault-line increases the likelihood of an earthquake occurring is part of risk assessment; however, the proximity of the community to the fault-line may increase or decrease the vulnerability of the population. Related to this argument is Anderson's (1992) suggestion that emergency planners should give special consideration to the growing vulnerability of metropolitan areas.

Anderson makes an important point, as often the consequences of disasters in metropolitan areas are related to how geographic and topographic information has been considered. If, for example, such information is perceived to be part of risk assessment, then proximity to a fault-line would lead to mitigation measures that could address the need to reduce risk by zoning against construction near the line, expropriating existing properties, and so on. If, on the other hand, such

information is perceived to be part of vulnerability assessment, then the issue becomes not one of reducing the likelihood of experiencing an earthquake but of how to decrease one's vulnerability by residing in an earthquake-resistant building, improving the infrastructure, or whatever.

Vulnerable groups. Categories of displaced persons with special needs, variously defined to include: unaccompanied minors, the elderly, the mentally and physically disabled, victims of physical abuse or violence and pregnant, lactating or single women.

Vulnerable xone. The area, for non-radiological hazards, that may be subject to concentrations of an airborne, extremely hazardous substance (EHS) at levels that could cause irreversible acute health effects or death to human populations within the area following an accidental release. The distance at which a level of concern would be exceeded as a result of a release of the hazardous material under severe (conservative) dispersion conditions. The vulnerable zone is intended to be used by community emergency planners in evaluating the risk of, and planning for, response to hazardous material releases.

W

Warm zone. The area where personnel and equipment decontamination and hot zone support takes place. It includes control points for the access corridor and thus assists in reducing the spread of contamination.

Warning. Dissemination of notification message signaling imminent hazard which may include advice on protective measures. For example, a warning is issued by the National Weather Service to let people know that a severe weather event is already occurring or is imminent, and usually provides direction on protective actions. A warning notification for individuals is equivalent to an activation notification for response systems.

Watch. A watch is a notification issued by the National Weather Service to let people know that conditions are right for a potential disaster to occur. It does not mean that an event will necessarily occur. People should listen to their radio or TV to keep informed about changing weather conditions. A watch is issued for specific geographic areas, such as counties, for phenomena such as hurricanes, tornadoes, floods, flash floods, severe thunderstorms, and winter storms. (adapted from Simeon Institute 1992). As such, a watch notification for individuals is equivalent to an alert notification for response systems.

Water (potable). Potable water is the provision of adequate supplies of water suitable for drinking and for the preparation of food.

Water and sanitation. The Basic Societal Function that includes the application of measures and techniques aimed at ensuring and improving environmental health in a community through the collection and distribution of water and the evacuation, and disposal of rain and liquid and solid wastes and human waste with or without prior treatment. In this context, potable water is the provision of adequate supplies of water suitable for drinking and for the preparation of food regardless of means.

Water hammer. An event in a steam system that is caused when water (condensate) is not properly and completely drained from the system either on startup or by the traps during normal operation. The water and steam do not mix and pulse waves (the hammer) are created that can reach thousands of pounds of pressure with the potential for catastrophic failure and/or personnel injury.

Water jet. A method to apply or distribute water from a hose. The water is delivered under pressure for penetration. Water jets are frequently used to keep tanks and other equipment exposed to flammable liquid fires cool, or for washing burning spills away from danger points. However, water jets will cause a spill fire to spread if improperly used and will only serve to spread a fire when directed into open containers of flammable or combustible liquids.

Water point. Natural or artificial water storage of value in fire operations. Generally indicated by a signpost with ‘w’, ‘wp’ or ‘water’.

Water reactive materials. Substances that react in varying degrees when mixed with water or when they come in contact with humid air; generally flammable solids.

Water spray. A method of applying or distributing water. The water is finely divided to provide for high heat absorption.

Water surface profile. A graph showing the flood stage at any given location along a watercourse at a particular time.

Watershed divide. Boundary line separating adjacent drainage basins.

Watershed management. The implementation of a plan or plans for managing the quality and flow of water within a watershed, the naturally defined area within which water flows into a particular lake or river or its tributary. The aims of watershed management are holistic and concern the maintenance of water quality, the minimization of storm water runoff, the preservation of natural flood controls such as wetlands and pervious surface, and the preservation of natural drainage patterns. Watershed management is, in many ways, an enlargement of most of the concerns that underlie floodplain management.

Watershed. All land within the confines of a drainage divide. This is also called a 'catchment', or 'drainage basin'. All surface water has a common outlet.

Watertable. In an aquifer (a layer of rock which holds water or allows water to percolate through it), the upper limit of the portion of ground saturated with water.

Weapon complex. The DOE activities that design, manufacture, or test nuclear weapons and/or explosive devices; retire nuclear weapon components; or administer the above programs. Included are Assistant Secretary for Defense Programs (DP-1), and his Principal Deputy Assistant Secretaries (DP-2, DP-3 and DP-4); Deputy Assistant Secretary, Research and Development (DP-10); Deputy Assistant Secretary, Military Application and Stockpile Management (DP-20); Associate Deputy Assistant Secretary for Technical and Environmental Support (DP-45); Deputy Assistant Secretary for Computing and Simulation (DP-50); and the Tritium Project Office (DP-60).

Also included are the DOE Operations Offices at Albuquerque (AL), Oakland (OK), and Nevada (NV); the weapons program facilities at Savannah River (SR) and the Y-12 facility at Oak Ridge (OR); the nuclear weapon laboratories at Livermore, Los Alamos and Sandia (Albuquerque and Livermore); the production facilities at Amarillo and Kansas City; and their contractors, including subcontractors and suppliers, that are concerned with nuclear weapons.

Weapon of mass destruction (WMD). As defined in Title 18, U.S.C. § 2332a: (1) any explosive, incendiary, or poison gas, bomb, grenade, rocket having a propellant charge of more than 4 ounces, or missile having an explosive or incendiary charge of more than one-quarter ounce, or mine or similar device; (2) any weapon that is designed or intended to cause death or serious bodily injury through the release, dissemination, or impact of toxic or poisonous chemicals or their precursors; (3) any weapon involving a disease organism; or (4) any weapon that is designed to release radiation or radioactivity at a level dangerous to human life.

Weather alert. A warning broadcast on radio or television of an approaching storm or gale, or of an impending cold change.

Welfare. The provision of immediate and continuing care of emergency affected persons who may be threatened, distressed, disadvantaged, homeless or evacuated; and, the maintenance of health, well-being and prosperity of such persons with all available community resources until their rehabilitation is achieved.

Wetlands. Those areas which are inundated or saturated by surface or ground water with a frequency sufficient to support, or that under normal hydrologic conditions does or would support, a prevalence of vegetation or aquatic life typically adapted for life in saturated or seasonally saturated

soil conditions. Examples of wetlands include, but are not limited to, swamps, fresh and salt water marshes, estuaries, bogs, beaches, wet meadows, sloughs, potholes, mud flats, river overflows, and other similar areas. This definition includes those wetland areas separated from their natural supply of water as a result of activities such as the construction of structural flood protection methods or solid-fill road beds and activities such as mineral extraction and navigation improvement. This definition is intended to be consistent with the definition utilized by the U.S. Fish and Wildlife Service in the publication entitled, Classification of Wetlands and Deep Water Habitats of the United States

Wetting agent. A chemical added in low concentration to water. It is used in firefighting to break down the surface tension of the water and to improve its penetration into fuels.

White Paper. A white paper is an article that outlines a problem and provides a strategic approach to addressing the identified issue. It may state an organization's position or philosophy about a social, political, or other subject, or provide a not-too-detailed technical explanation of an architecture, framework, or product technology. Typically, a white paper explains proposed policy and/or proposed actions for a design and development effort. White papers are commonly used to enhance a decision-making process.

WHO. World Health Organization.

Whole body counter. An assembly for measuring the total gamma radiation emitted by the human body and using one or more radiation detectors heavily shielded against natural ambient radiation.

Whole dose. The total radiation dose to the body received from all sources. This usually is for external radiation only as opposed to organ doses which can be received by inhalation or ingestion.

Wildfire. An unplanned fire. A generic term which includes grass fires, forest fires and scrub fires. syn. 'bushfire'.

Wildland. An area in which development has not occurred with the exception of some minimal transportation infrastructure such as highways and railroads, and any structures are widely spaced and serve largely recreational purposes.

Wind. Air in more or less rapid natural movement.

Wind chill index. Index used to determine the relative discomfort resulting from a specific combination of wind speed and air temperature, expressed by the loss of body heat in watts per square metre (of skin).

Wind direction. The direction from which the wind blows.

Wind fetch. The horizontal distance in the direction of wind over which wind waves are generated.

Wind force. Number on a beaufort scale corresponding to the effects produced by winds within a range of speeds.

Wind pressure. The total force exerted upon a structure by wind. For a flat surface it is the sum of the dynamic pressure exerted on the windward side and the pressure decrease, or suction, produced on the sheltered side. syn. 'wind load'.

Wind rose. A star-shaped diagram indicating the relative frequencies of the wind directions, and sometimes the frequencies of the wind speeds for different directions, recorded at a station for a specific period of time.

Windrow. A long line of piled slash or debris resulting from forest or scrub clearing.

Woodland. A plant community in which the trees form only an open canopy, the intervening area being occupied by lower vegetation, usually grass or scrub.

Worker. Persons working in the immediate area of concern within the process safety management control of a given facility or activity. Normally these individuals are covered implicitly under the worker health and safety plan for a given activity or operation. The term workers is meant to be all-inclusive, and includes all workers such as the facility workers, co-located workers, contractors, subcontractors' employees, and visitors.

Worker, disaster. A term that collectively describes all personnel involved with an incident. It is considered a more inclusive term than responder.

Workplace environmental exposure level. American Industrial Hygiene Association (AIHA) exposure level limit considered to be acceptable in the workplace.

World association for emergency and disaster medicine. Major worldwide organisation of professionals from a wide range of health disciplines engaged in or promoting better knowledge and practice of all aspects of emergency medicine and disaster medicine.

World health organization. The health arm of the united nations, aiming at the attainment by all peoples of the highest possible level of health. Coordinates efforts to raise health levels worldwide and promotes the development of primary health. Besides multiple public health programmes and actions, it is engaged in disaster preparedness and relief both at headquarters and at six regional offices, and coordinates the health sector of any united nations involvement in major emergencies.

World meteorological organization. Specialised agency of the United Nations Organization for coordinating, standardising and improving meteorological activities throughout the world and for encouraging the efficient exchange of information between countries, in the interest of various human activities.

World weather watch. The world-wide, coordinated, developing system of meteorological facilities and services provided by world meteorological organization **m**embers for the purpose of ensuring that all members obtain the meteorological information required both for operational work system for food aid, both for development projects and emergency relief in drought or famine, by mobilisation of bulk foodstuffs (while the food and agriculture organization mobilises resources). Has a food-for-work mechanism for refugee and disaster situations and research. The essential elements of the www are: the global observing system, the global data-processing system and the global telecommunication system (used also for transmission of seismic information in the far East).

Z

Zonation. The subdivision of a geographical entity (country, region, etc.) Into homogenous sectors with respect to certain criteria (for example, intensity of the hazard, degree of risk, same overall

Zone warden. A person who, during an emergency, assumes control over a particular floor or evacuation zone under the direction of the house warden.

Zoonosis. Diseases transmitted from animal to human.

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