

City of Los Angeles

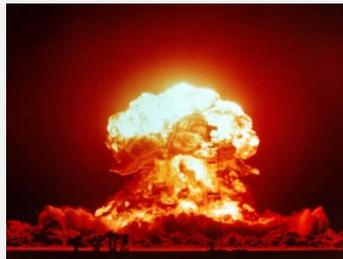
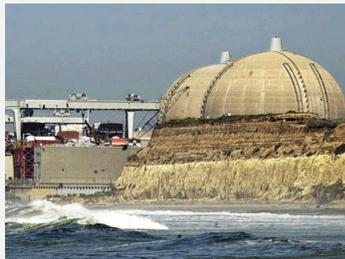
# EMERGENCY OPERATIONS PLAN



CHEMICAL, BIOLOGICAL, RADIOLOGICAL AND  
NUCLEAR (CBRN) HAZARD SPECIFIC ANNEX

## NUCLEAR APPENDIX

APRIL 2021



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## **APPROVAL AND IMPLEMENTATION**

This document is a Hazard Specific Appendix to the City of Los Angeles Emergency Operations Plan (EOP). It serves as either a stand-alone Appendix or companion document to an applicable Functional Support Appendix. The Appendix was developed with input from all applicable City of Los Angeles departments and allied stakeholders. Upon completion, it is reviewed by the City's Emergency Management Committee. When approved by the Emergency Management Committee, it presents the document to the Emergency Operations Board (EOB) with a recommendation for approval. Upon review and approval by the EOB, the document goes to the Mayor of the City of Los Angeles with a recommendation to approve and forward to the City Council for adoption.

This Appendix was developed with input from all applicable Los Angeles City departments. It is compliant with the Federal Emergency Management Agency (FEMA) Comprehensive Preparedness Guide (CPG) 101, Developing and Maintaining Emergency Operations Plans, Version 2.0 (CPG 101 V.2)<sup>1</sup>.

Upon formal approval by the Mayor and adoption by the City Council, this document becomes an official Appendix to the City of Los Angeles EOP.

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<sup>1</sup> *Developing and Maintaining Emergency Operations Plans. Comprehensive Preparedness Guide (CPG) 101*, version 2.0 ed. (n.p.: U.S. Department of Homeland Security, Federal Emergency Management Agency, 2010).

## **APPENDIX DEVELOPMENT AND MAINTENANCE**

This Appendix is developed in support of the City of Los Angeles Emergency Operations Plan (EOP) to facilitate response to nuclear incidents. It is developed in collaboration with the City departments that have primary response or support responsibilities, as well as input from appropriate non-City agencies with identified activities related to nuclear incidents.

This Appendix is developed to describe the overall Citywide response function and capabilities, and is to be used by each department identified within this Appendix to develop their own standardized operating procedures (SOPs) specifically for their department to direct tactical operations. When developing SOPs, each department is to take into consideration all of the activities identified in this document directly related to their own department, as well as how those activities interact with, support, or require support from other departments identified within this plan. Departments must ensure that their SOPs are inclusive of planning for people with disabilities and others with access and functional needs. If, at any time, any department identifies a conflict in how their field response or support activities are performed in comparison to what is described in this Appendix or identifies a conflict between their listed activities and/or responsibilities within this Appendix and how they relate to or support another department's listed activities, such conflict is to be immediately reported to the Emergency Management Department— Planning Division.

This appendix is a living document and will be reviewed biennially by city departments and agencies that are identified within the Appendix, as well as any other departments or agencies that may need to be part of the review process. The review process will be led by the Emergency Management Department— Planning Division. Updates to the plan may occur prior to the biennial review if new guidelines or directives are established, after a disaster or emergency, or if there is an operational error in the document. In addition, if a department, agency, or stakeholder to this plan changes, develops, or amends, and policy, procedure, or operation that will change the content of this document, that entity is to immediately notify the Emergency Management Department (EMD)- Planning Division.



## CITY EMERGENCY OPERATIONS PLAN/ANNEX CROSS REFERENCE

During the response to this identified hazard, the following functional support shall be used as deemed necessary:

- Throughout this document, where public information and communication with the public is referenced, see the **Emergency Public Information Annex**.
- Where internal communications systems are referenced, see the **Communications Annex**.
- Where early warning and notification is referenced, see the **Early Warning and Notification Annex**.
- Where sheltering, mass care, mass feeding and the provision of functional needs support services (FNSS) is referenced, see the **Mass Care and Sheltering Annex; Resettlement Processing Center Annex; and the Logistics Annex**.
- Where reference is made about evacuations, see the **Evacuation Annex**.
- Where reference is made about Federal, State, Local or Non-Governmental Organizations providing recovery information, see the **Local Assistance Center Annex and Recovery Annex**.
- Where reference is made about response and restoration of critical infrastructure, see the **Critical Infrastructure Annex**.
- Hazard Specific Annexes include the **Tsunami Annex, Earthquake Annex, Adverse Weather Annex, Brushfire Annex, Urban Flooding Annex, Off-Airport Major Aircraft Response Annex, Debris Flow Annex, Civil Disturbance Annex, Terrorism Prevention and Protection Annex** and the **Chemical, Biological, Radiological, and Nuclear (CBRN) Annexes**.
- All actions related to fulfilling the purpose of this Appendix will adhere to the City of Los Angeles Citywide American with Disabilities Act (ADA) guides, documents, and checklists.
- Where City Departments have tasks assigned relative to this Appendix, please refer to that specific department's Standard Operating Procedures (SOPs).

## BACKGROUND

A nuclear blast, produced by explosion of a nuclear detonation, involves the joining or splitting of atoms (called fusion and fission) to produce an intense pulse or wave of heat, light, air pressure, and radiation. A nuclear detonation produces an explosion far surpassing that of any conventional explosive. The bombs dropped on Hiroshima and Nagasaki, Japan, at the end of World War II produced nuclear blasts.

When a nuclear detonation occurs, the exothermic reaction creates a rapidly expanding fireball of hot gas or plasma. Everything inside of this fireball vaporizes, including soil and water, and is carried upwards. This creates the mushroom cloud that we associate with a nuclear blast, detonation, or explosion. Radioactive material from the nuclear device mixes with the vaporized material in the mushroom cloud. As this vaporized radioactive material cools, it becomes condensed and forms particles, or radioactive dust. The condensed radioactive material then falls back to the earth; this is what is known as "fallout". Because fallout is in the form of particles, it can be carried long distances on wind currents and end up miles from the site of the explosion. Fallout is radioactive and contamination on anything it lands, including food and water supplies.

In a nuclear blast, injury or death may occur as a result of the blast itself or as a result of debris thrown from the blast in a wide impact area. The effects on a person from a nuclear blast will depend on the size of the blast and the distance the person is from the explosion. People may experience moderate to severe skin burns, depending on their distance from the blast site. Those who look directly at the blast could experience eye damage ranging from temporary blindness to severe burns on the retina. Individuals near the blast site would be exposed to high levels of radiation and could develop symptoms of radiation sickness called acute radiation syndrome (ARS). While severe burns would appear in minutes, other health effects might take days or weeks to appear. These effects range from mild, such as skin reddening, to severe effects such as cancer and death, depending on the dose of radiation absorbed by the body, type of radiation, route of exposure, and length of time of exposure.

People may experience two types of exposure from radioactive materials from a nuclear blast: external exposure and internal exposure. External exposure would occur when people were exposed to radiation outside of their bodies from the blast or its fallout. Internal exposure would occur when people eat food or breathe air that was contaminated with radioactive fallout. Both internal and external exposure from fallout could occur miles away from the blast site. Exposure to very large doses of external radiation may cause death within a few days or months. External exposure to lower doses of radiation and internal exposure from breathing or eating food contaminated with radioactive fallout may lead to an increased risk of developing cancer and other health effects.

## **I. PURPOSE, SCOPE, SITUATION AND ASSUMPTIONS**

### **A. Purpose**

The Nuclear Appendix details roles and responsibilities for the managed response to a nuclear emergency and can be used in conjunction with other plans designed for the safety and protection of the population. Organizations, operational concepts, responsibilities, and procedures, regarding nuclear capabilities are defined within this Appendix.

The Appendix has been developed to meet the following objectives:

- Provide a concept of operations and identify roles and responsibilities for each appropriate department within the City of Los Angeles;
- Define communication and coordination guidelines for rapid notification and response of City departments, stakeholders and the public in the event of a nuclear related emergency;
- Identify actions that can be accomplished within a few minutes to days to mitigate any adverse nuclear impacts;
- Describe roles and responsibilities related to nuclear issues between local, state and federal responding agencies and organizations;
- Detail the interagency coordination related to nuclear incidents between local, state and federal responding agencies and organizations;
- Provide a flexible and scalable approach in responding to the incident
- Ensure consistency in local, state, and federal responding agencies and organizations emergency response plans and operations.

### **B. Scope**

The scope of this Appendix is applicable to Los Angeles City departments with Emergency Operations Organization (EOO) responsibilities and other departments with essential resources.

This document will address:

- City Departments with emergency public safety functions;
- City Departments having routine interaction with the public; and
- City Departments performing emergency public safety or other critical services.

### **C. Situation Overview**

#### **1. Characteristics**

##### **a) Location**

The City of Los Angeles covers 502 square miles with approximately 468 square miles of land (214 square miles of which are hills and mountains) and approximately 29 square miles of water. The San Gabriel and Santa Susana Mountains bound the City on the North and the Santa Monica Mountains extend

across the middle of the City. The Palos Verdes Hills and Pacific Ocean bound the City on the South and West.

b) Demographics

According to the California Department of Demographic Research Unit's "*E-1 Population Estimates for Cities, Counties, and the State*"<sup>2</sup>, the 2016 population estimate for the City of Los Angeles is 4,040,079. This estimates out at approximately 8112 persons per square mile.

The City of Los Angeles is one of the most diverse cities in the entire world. Angelenos come from throughout the world, speak nearly 200 languages, and represent dozens of different religions. The community members who live, work, and play in Los Angeles include persons with disabilities and others with access and functional needs.

This plan will use the phrase *people with disabilities and others with access and functional needs* to describe both those that meet the definition of disability as well as people who may or may not meet the definitions of civil rights laws or some of the 60 plus diverse definitions of disability<sup>3</sup>. The definitions for people with disabilities as well as others with access and functional needs are provided below:

"People with disabilities and others with access and functional needs" is inclusive of broad and diverse groups of people who also directly benefit from physical, communication, and program access. This includes people who may or may not meet the definitions of civil rights laws or some of the 60 plus diverse definitions of disability.

By accommodating the needs of "people with disabilities and others with access and functional needs", a much larger portion, estimated to be up to 50% of the City's population, benefits (people of all ages with vision and hearing loss, physical disabilities, mental health disabilities, developmental, intellectual and other cognitive disabilities, behavioral health issues, people with learning, understanding, remembering, reading, and speech and mobility limitations, and people from diverse cultures; who have limited English proficiency or are non-English speaking; and who are transportation disadvantaged)<sup>4</sup>

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<sup>2</sup> California Department of Finance, *E-1 Population Estimates for Cities, Counties, and the State*, January 1, 2018 and 2019

<sup>3</sup> Los Angeles Department of Public Health, "Adult Disability in Los Angeles County." LA Health. Sept. 2006.

<sup>4</sup> Kales, J. and Enders, A. in "Moving Beyond 'Special Needs' A Function-Based Framework for Emergency Management Planning," *Journal of Disability Policy Studies*, Vol./No. 44/207, pp. 230-237.

## 2. Vulnerabilities

Disasters may exhaust local resources and therefore the City will continue to develop, update and/or maintain memorandum of understandings (MOUs), memorandum of agreements (MOAs), and contract amendments with private vendors to increase response capability and available resources.

Factors to consider are the type of disaster, the population density, and the terrain in areas of Los Angeles. In some instances, the consequences of a disaster along with terrain, and the geographical area, may impact the effectiveness of notification systems. The City of Los Angeles has multiple, accessible, redundant warning and notification systems that it will utilize to reach the public for warnings, notification, and support.

Due to the population density and terrain of the City of Los Angeles, the City recognizes that, despite a good faith effort, it may not have the capabilities or resources to reach every individual in terms of public warnings, notification and/or support.

The City of Los Angeles Local Hazard Mitigation Plan contains detailed hazard descriptions and vulnerability assessments of Terrorism and Weapons of Mass Destruction and Radiological Incidents.

It is important to note that no nuclear power plants are located in the City or County of Los Angeles. The closest facility is the San Onofre Nuclear Generating Station (SONGS), which has been certified by the United States Regulatory Commission to have permanently ceased power operations<sup>5</sup>. SONGS has an Emergency Planning Zone with a 10-mile radius. The southern-most portion of the City is approximately 70 miles north of the generating station.

SONGS was shut down in January, 2012 due to premature wear found on over 3,000 tubes in the recently replaced steam generators. Full retirement of the units prior to decommissioning will take some years in accordance with customary practices and actual decommissioning.

### **D. Assumptions**

This Appendix was created to integrate the concepts and structures defined by the National Incident Management System (NIMS), the California Standardized Emergency Management System (SEMS), and the National Incident Command System (ICS). All City, county, state, and federal processes, procedures, and protocols reflected or referenced in this document were current as of the date of approval of this Appendix.

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<sup>5</sup> United States Nuclear Regulatory Commission. Certification Letter of Permanent Cessation of Power Operations. <http://www.nrc.gov/info-finder/decommissioning/power-reactor/songs/decomm-plans/permanent-cessation-letter.pdf>

- Only departments that have a response role or a role closely supporting the response to a radiological and/or nuclear event are included in this document. The departmental roles listed are limited to those applicable to the event.
- Primary consideration is given to the preservation of life. Additionally, time and effort must be given to providing critical life-sustaining needs. Responders involved in an Improvised Nuclear Device (IND) event need to be prepared to see numerous victims with serious traumatic injuries and illness including: severe burns, blindness, deafness, amputations, and radiation sickness.
- In a catastrophic incident, damage control and disaster relief will be required from the State and federal government, other local governments and private organizations.
- Activating the EOC is dependent on the scope and scale of the incident.
- Electronic communications utilizing information technology systems will be compliant with Section 508 of the Rehabilitation Act.
- All printed public education materials that are produced to support this Appendix for distribution to the general public shall be available in accessible formats.
- Many residential, commercial and institutional structures could be damaged; requiring a large Urban Search & Rescue/Heavy Rescue mobilization.
- Residents could be displaced; requiring shelter and social services needs. Sheltering activities could be short term or long term depending on the severity of the incident.
- An incident may cause disruption of Los Angeles' critical infrastructure systems, such as energy, transportation, communications, public health and medical systems. Additionally, potable water supplies, and sewer services could be compromised. Communications infrastructure could be damaged; causing disruption in land-line telephone, cellular telephone, radio, microwave, computer and other communication services. Transportation infrastructure could be damaged and in limited operation. Vital vehicle and rail corridors could be damaged and impassable. Re-establishment of transportation infrastructure will be critical.
- Some local emergency personnel who normally respond to incidents may be among those affected and will be unable to perform their duties as assigned.
- Response capabilities and resources of the City of Los Angeles, including mutual aid (activated as needed) from surrounding jurisdictions and support from the State of California may be insufficient and quickly overwhelmed.
- Intentional threat to public safety or national security (e.g. acts of terrorism) will elicit criminal investigation and may require incident response and a crime scene investigation simultaneously.
- A CBRN or hazardous materials incident may include multiple hazards, such as chemical or biological contaminants, which may require concurrent implementation of other local, state, and federal plans and procedures.
- In a catastrophic incident, damage control and disaster relief will be required from the State and Federal government, other local governments and private organizations.

- A significant incident may produce environmental impacts (e.g., persistent radiological contamination) that severely challenge the ability and capacity of governments and communities to achieve a timely recovery.
- Some events requiring evacuation will have little to no warning.
- The City Emergency Operations Center (EOC) could be activated.
- Large-scale movement of populations may be necessary; otherwise non-impacted jurisdictions may become “host” to displaced populations.
- Power outages may occur.

## II. CONCEPT OF OPERATIONS

### A. Terminology

**Access and Functional Needs:** Access and functional needs as defined by the National Response Framework may be present before, during, or after an incident in one or more areas and may include, but are not limited to, maintaining independence, communication, transportation, supervision, and medical care. Utilize Emergency Support Function (ESF) #6 to coordinate assistance without regard to race, ethnicity, religion, nationality, gender, age, disability, English proficiency, or economic status of those who are seeking assistance as a result of a disaster.

**Absorbed dose:** The amount of energy deposited by ionizing radiation in a unit mass of tissue is expressed in units of joule per kilogram (J/kg), and called “gray” (Gy).

**Acute exposure:** An exposure to radiation that occurred in a matter of minutes rather with continued exposure over a period of time.

**Acute Radiation Syndrome (ARS):** A serious illness caused by receiving a dose greater than 75 rads of penetrating radiation to the body in a short time (usually minutes). The earliest symptoms are nausea, fatigue, vomiting, and diarrhea. Hair loss, bleeding, swelling of the mouth and throat, and general loss of energy may follow. If the exposure has been approximately 1,000 rads or more, death may occur within 2 – 4 weeks.

**Adequate shelter:** Shelter that protects against acute radiation effects and significantly reduces radiation dose to occupants during an extended period.

**Alpha particle:** The nucleus of a helium atom, made up of two neutrons and two protons with a charge of +2. Certain radioactive nuclei emit alpha particles. Alpha particles generally carry more energy than gamma or beta particles, and deposit energy very quickly while passing through tissue. Alpha particles can be stopped by a thin layer of light material, such as a sheet of paper, and cannot penetrate the outer, dead layer of skin. Therefore, they do not damage living tissue when outside the body. When alpha-emitting atoms are inhaled or swallowed, however, they are especially damaging because they transfer relatively large amounts of ionizing energy to living cells.

**As Low As Reasonably Achievable (ALARA):** A process to control or manage radiation exposure to individuals and releases of radioactive material to the environment so that doses are as low as social, technical, economic, practical, and public social services considerations permit.

**Beta burn:** Beta radiation can induce skin damage.

**Beta particles:** Electrons ejected from the nucleus of a decaying atom. Although they can be stopped by a thin sheet of aluminum, beta particles can penetrate the dead skin layer, potentially causing burns. They can pose a serious direct or external radiation threat and can be lethal depending on the amount received. They also pose a serious internal radiation threat if beta-emitting atoms are ingested or inhaled.

**Blast effects:** The impacts caused by the shock wave of energy through air that is created by detonation of a nuclear device. The blast wave is a pulse of air in which the pressure increases sharply at the front and is accompanied by winds.

**Contamination (radioactive):** The deposition of unwanted radioactive material on the surfaces of structures, areas, objects, or people where it may be external or internal.

**Decontamination:** The reduction or removal of radioactive contamination from a structure, object, or person.

**Dirty bomb:** A device designed to spread radioactive material by conventional explosives when the bomb explodes. A dirty bomb kills or injures people through the initial blast of the conventional explosive and spreads radioactive contamination over possibly a large area—hence the term “dirty.” Such bombs could be miniature devices or large truck bombs. A dirty bomb is much simpler to make than a true nuclear weapon.

**Dose (radiation):** Radiation absorbed by an individual’s body; general term used to denote mean absorbed dose, equivalent dose, effective dose, or effective equivalent dose, and to denote dose received or committed dose.

**Effective dose:** A dosimetric quantity useful for comparing the overall health effects of irradiation of the whole body. It takes into account the absorbed doses received by various organs and tissues and weighs them according to present knowledge of the sensitivity of each organ to radiation. It also accounts for the type of radiation and the potential for each type to inflict biologic damage. The effective dose is used, for example, to compare the overall health detriments of different radionuclides in a given mix. The unit of effective dose is the sievert (Sv);  $1 \text{ Sv} = 1 \text{ J/kg}$ .

**Electromagnetic Pulse (EMP):** A sharp pulse of radiofrequency (long wavelength) electromagnetic radiation produced when an explosion occurs near the earth’s surface or at high altitudes. The intense electric and magnetic fields can damage unprotected electronics and electronic equipment over a large area.

**Exposure (radiation):** A measure of ionization in air caused by x-rays or gamma rays only. The unit of exposure most often used is the roentgen.

**Exposure rate:** A measure of the ionization produced in air by x-rays or gamma rays per unit of time (frequently expressed in roentgens per hour).

**Fallout:** The process or phenomenon of the descent to the earth's surface of particles contaminated with radioactive material from the radioactive cloud. The term is also applied in a collective sense to the contaminated particulate matter itself.

**Fission (fissioning):** The splitting of a nucleus into at least two other nuclei that releases a large amount of energy. Two or three neutrons are usually released during this transformation. See also Fusion.

**Fusion:** A reaction in which at least one heavier, more stable nucleus is produced from two lighter, less stable nuclei. Reactions of this type are responsible for the release of energy in stars or in thermonuclear weapons.

**Gamma rays:** High-energy electromagnetic radiation emitted by certain radionuclides when their nuclei transition from a higher to a lower energy state. These rays have high energy and a short wave length. All gamma rays emitted from a given isotope have the same energy, a characteristic that enables scientists to identify which gamma emitters are present in a sample. Gamma rays penetrate tissue farther than do beta or alpha particles, but leave a lower concentration of ions in their path to potentially cause cell damage. Gamma rays are very similar to x-rays.

**Geiger counter:** A radiation detection and measuring instrument consisting of a gas-filled tube containing electrodes, between which an electrical voltage but no current flows. When ionizing radiation passes through the tube, a short, intense pulse of current passes from the negative electrode to the positive electrode and is measured or counted. The number of pulses per second measures the intensity of the radiation field. Geiger counters are the most commonly used portable radiation detection instruments.

**Gray (Gy):** A unit of measurement for absorbed dose. It measures the amount of energy absorbed in a material. The unit Gy can be used for any type of radiation, but it does not describe the biological effects of the different radiations.

**Hazardous material:** Any chemical, chemical mixture or contaminant that is toxic, corrosive, volatile, reactive, explosive, or flammable and has the capacity of inducing great bodily injury or illness or that has been determined to be capable of posing an unreasonable risk to health, safety, or property. Hazardous materials include all chemical, biological, and radiological substances, including those also referred to as Weapons of Mass Destruction (WMD), whether accidentally or intentionally released.

**Hot spot:** Any place where the level of radioactive contamination is considerably greater than the area around it.

**Internal exposure:** Exposure to radioactive material taken into the body. Radioactive material can enter the body via multiple pathways such as ingestion, inhalation, and open wounds.

**Ionizing radiation:** Any radiation capable of displacing electrons from atoms, thereby producing ions. High doses of ionizing radiation may produce severe skin or tissue damage.

**Nuclear Blast:** A nuclear blast is different than a radioactive dispersal device (RDD), or “dirty bomb”.

**Personal Protective Equipment (PPE):** Includes all clothing and other work accessories designed to create a barrier against hazards. Examples include safety goggles, blast shields, hard hats, hearing protectors, gloves, respirator, aprons, and work boots.

**rad:** A unit expressing the absorbed dose of ionizing radiation. Absorbed dose is the energy deposited per unit mass of matter. The units of rad and Gray are the units in the traditional and SI systems for expressing absorbed dose. 1 rad = 0.01 Gray (Gy); 1 Gy = 100 rad

**Radiation:** Energy moving in the form of particles or waves. Familiar radiations are heat, light, radio waves, and microwaves. Ionizing radiation is a very high-energy form of electromagnetic radiation.

**rem:** A unit of absorbed dose that accounts for the relative biological effectiveness of ionizing radiations in tissue (also called equivalent dose). Not all radiation produces the same biological effect, even for the same amount of absorbed dose; rem relates the absorbed dose in human tissue to the effective biological damage of the radiation. The units of rem and Sievert are the units in the traditional and SI systems for expressing equivalent dose. 1 rem = 0.01 Sieverts (Sv); 1 Sv = 100 rem

**Roentgen (R):** Unit of exposure measurement of ionized radiation produced by gamma rays. For the purpose of this guidance, one R of exposure is approximately equal to one rem of whole-body external dose.

- 1,000 micro-roentgen ( $\mu\text{R}$ ) = 1 milli-roentgen (mR)
- 1,000 milli-roentgen (mR) = 1 Roentgen (R), thus
- 1,000,000  $\mu\text{R}$  = 1 Roentgen (R)

**Roentgen absorbed dose (rad):** A basic unit of absorbed radiation dose. It is a measure of the amount of energy absorbed by the body. The rad is the traditional unit of absorbed dose. It is being replaced by the unit gray (Gy), which is equivalent to 100 rad. One rad equals the dose delivered to an object of 100 ergs of energy per gram of material.

**Roentgen equivalent man (rem):** A unit of equivalent dose. Not all radiation has the same biological effect, even for the same amount of absorbed dose. Rem relates the absorbed dose in human tissue to the effective biological damage of the radiation. It is determined by multiplying the number of rads by the quality factor, a number reflecting the potential damage caused by the particular type of radiation. The rem is the traditional unit of equivalent dose, but it is being replaced by the sievert (Sv), which is equal to 100 rem.

**Roentgen per hour (R/h):** A unit used to express gamma or x-ray exposure in air per unit of time (exposure rate).

**Shelter-in-place:** Staying inside or going immediately indoors in the nearest yet most protective structure.

**Shielding:** The material between a radiation source and a potentially exposed person that reduces exposure.

**Sievert (Sv):** A unit used to derive a quantity called dose equivalent. This relates the absorbed dose in human tissue to the effective biological damage of the radiation. Not all radiation has the same biological effect, even for the same amount of absorbed dose. Dose equivalent is often expressed as millionths of a sievert, or micro-sieverts ( $\mu\text{Sv}$ ). One sievert is equivalent to 100 rem.

**Suitcase Bomb:** "suitcase" bombs that have been described in new stories in recent years are small nuclear bombs. A suitcase bomb would produce a nuclear blast that is very destructive, but not as great as a nuclear weapon developed for strategic military purposes.

**X-ray:** electromagnetic radiation caused by deflection of electrons from their original paths, or inner orbital electrons that change their orbital levels around the atomic nucleus. X-rays, like gamma rays can travel long distances through air and most other materials. Like gamma rays, x-rays require more shielding to reduce their intensity than do beta or alpha particles. X-rays and gamma rays differ primarily in their origin: x-rays originate in the electronic shell; gamma rays originate in the nucleus.

**For a list of acronyms, see Attachment D-1**

## **B. Initial Size-Up**

The Initial Size-Up Phase of response occurs when pre-identified stakeholder departments (public safety and critical infrastructure) take precautionary measures to ensure response capability or take immediate mitigation measures.

The best initial action for the public immediately following a nuclear explosion is to take shelter in the nearest and most protective building or structure and listen for

instructions from authorities. Structures offer varying levels of protection from gamma radiation.

The nuclear blast causes the most casualties in a ground level urban nuclear explosion. Although many would survive the blast overpressure itself, they will not easily survive the high velocity winds, or the crushing injuries incurred during the collapse of buildings from the blast overpressure or the impact of high velocity shrapnel (e.g., flying debris and glass). Fire departments must also take into consideration that the thermal effect causes burns to people and may ignite certain flammable materials. The primary effect of a nuclear explosion is the blast it generates.

Initial notification will occur by 9-1-1 calls for local public safety response due to a noticeable explosion or visual area disturbance. 9-1-1 notification will provide response by LAFD and LAPD who will respond with appropriate LAFD Hazardous Materials Teams, LAFD JHAT and the LAPD HMUs. Victims of the immediate effects of a nuclear detonation are likely to suffer from major burns from thermal injuries, physical trauma including lung and eardrum damage and eye injuries, in addition to radiation exposure.

Following a nuclear blast, it will be necessary to facilitate the response of critical assets. Response to a nuclear detonation will be provided from neighboring response units; therefore, advance planning is required to establish mutual aid agreements and response protocols. It is noted that significant Federal responses may not be available on scene for 24-hours to several days. The following agencies should be notified:

- The EMD Duty Officer/Duty Team can be contacted at 213-200-6414 to facilitate coordination and notification of City resources. EMD will contact the appropriate personnel, additional departments, and resources for assistance.
- Los Angeles County Department of Public Health – Radiation Management at 213-351-7897 during work hours or 213-974-1234 after hours.
- The event must be reported to the EPA National Response Center for EPA Region IX who relays each report to the pre-designated Federal On-Scene Coordinator as well as other affected federal and state partners can be contacted 24 hours a day, 365 days a year at 800-300-2193. The EPA Emergency Operations Center may be contacted at 202-564-3850.
- Notification to the United States Department of Health and Human Services (HHS) and Federal Emergency Management Agency (FEMA) will activate Emergency Support Functions (ESFs) in support of the event. The Secretary of the Department of Health and Human Services can declare a public health emergency.
- Federal, State, tribal, and local governments that become aware of a nuclear incident should notify the coordinating agency and the Department of Homeland Security (DHS) National Operations Center (NOC) at 202-282-8101 and comply with other appropriate statutory requirements for notification.
- State, tribal, and local law enforcement agencies should continue to contact the local Federal Bureau of Investigation (FBI)/Joint Terrorism Task Force regarding

ongoing terrorist activities, events, instances, or investigations. The coordinating agency provides notification of a radiological incident to the NOC and other Federal agencies, as appropriate. If a State requests radiological assistance directly from a Federal agency for a nuclear/radiological incident that falls under the jurisdiction of another coordinating agency, that Federal agency shall notify the coordinating agency of the request.

City departments and local partner agencies will also provide the initial elements of the City's situational awareness by providing initial field observations or critical infrastructure assessment. Assessments will be made from information gathered including specific location of detonation, size and type of weapon, date and time of day, population features, and meteorological conditions.

In addition, all City Departments will follow the policies and procedures as outlined in their individual Department's Emergency Plan regarding the release, recall or assignment of personnel in an emergency situation. Departments will begin to implement their Department Emergency Plans and perform personnel accountability, including determining the release, recall or reassignment of personnel. Departments will also take precautionary measures to ensure response capability or take immediate mitigation measures. Public safety departments will begin to prioritize calls for service concentrating on response efforts with life preservation/life safety as a primary response effort, and property conservation as secondary response effort. Other departments, with vital services, will also begin their response efforts.

### **C. Initial Response**

Initial response actions will typically be provided from neighboring response units as local units may be unable to respond due to the catastrophic nature of the incident. All agents with response responsibilities should use a zoned approach to save lives and manage risks to emergency response worker life and health. Radiation safety and measurement training should be required of any workers that could potentially be deployed to a radiation area.

The Los Angeles County Multi-Agency Radiological Response Plan (MARRP) will be activated when a responding agency at the scene is overwhelmed and requests additional resources outside of its agency. The following agencies are authorized to activate (and deactivate) the MARRP:

- Incident Command/Unified Command (IC/UC)
- Los Angeles County Department of Public Health
- Los Angeles County Department of Public Health, Radiation Management
- Los Angeles County Fire Department Hazardous Materials Unit

Beginning 15 minutes to 1 hour after a nuclear detonation, the Department of Homeland Security's (DHS) Interagency Modeling and Atmospheric Assessment Center

(IMAAC) will begin to provide plume and fallout projections to Federal, State, and local authorities.

If the City Emergency Operations Center (EOC) is activated for a nuclear incident, the EOC will identify and coordinate the necessary resources to support the incident and the situational awareness for all supporting agencies. The EOC Director will be filled by an employee from the Emergency Management Department (EMD) and will have primary responsibilities related to the incident during that phase of the operation. The EOC may transfer command to different departments several times based on the phase of the incident.

During the initial life preservation/life safety phase of the incident, the Fire Department may be the lead department as the EOC Director. This lead role may become a Unified Command role or transferred to the Police Department if civil unrest situations occur. As life safety and property issues are dealt with, the transfer of the lead role as EOC Director may again transfer to the Department of Water and Power for restoration of vital services and debris removal.

Responders will identify incident control zones. In the fallout zone, it is imperative to communicate protective action orders to the public. Effective preparedness requires public education, effective communication plans, messages, and means of delivery. See Attachment D-2: Nuclear Damage Zones for more information about health and survival implications. There are no clear boundaries between the damage zones.

Fallout is a major source of residual radiation hazard. However, the lack of apparent fallout should not suggest the lack of radiation; therefore, appropriate radiation monitoring should always be performed to determine the safety of an area.

No evacuation should be attempted until basic information is available regarding fallout distribution and radiation dose rates. Evacuations should be prioritized based on the fallout pattern and radiation intensity, adequacy of shelter, impending hazards (e.g., fire and structural collapse), medical and people with disabilities' needs, sustenance and resources (e.g., food and water), and operational and logistical considerations.

Decontamination of people and animals is an important consideration for any CBRN response.

#### **D. Expanded Response**

Decontamination efforts should be limited to those locations that are absolutely necessary to use or occupy to accomplish lifesaving activities, including emergency infrastructure (e.g., emergency gas line shutdown).

The Department of Energy (DOE) National Atmospheric Release Advisory Center serves as the operations hub for the IMAAC. IMAAC fallout maps provide guidance on

potentially contaminated areas and impacted populations and are useful for planning radiation monitoring. As the response continues, IMAAC uses field data to refine model predictions, reducing the degree of uncertainty in the estimated impacts. Other DOE assets will begin arriving in 24 – 72 hours including Radiological Assistance Program (RAP) teams and Federal Radiological Monitoring and Assessment Center (FRMAC) resources that can aid with actual measurements of radiation. IMAAC cooperates closely with the FRMAC to provide updated maps of estimated dose and dose rates.

Triage systems for mass casualty trauma incidents will be specified by the lead response agency. During scarce resources conditions, emergency responders and first responders will likely have to modify conventional clinical standards of care and adopt contingency and then crisis standards of care to maximize the number of lives saved.

If radioactive iodine is not present, then taking Potassium Iodide (KI) will not protect people. If radioactive iodine is present, then taking KI will help protect a person's thyroid gland from radioactive iodine. However, KI will not protect from other radioactive substances that may be present along with radioactive iodine. Distribution of prophylactic drugs such as KI to the City population will be at the direction of the Los Angeles County Health Officer. Upon such direction, medical point of dispensing (M-POD) sites will be utilized at points throughout the City. For further information regarding M-PODs, please refer to Attachment D-3: Medical Points of Dispensing (M-PODs) Implementation Guidelines for a program summary.

Waste management officials will need to work with Incident Commander to identify waste management priorities. Clearing debris from roads and other infrastructure during the emergency phase to facilitate lifesaving and other emergency response activities will be a response priority. Locations and mechanisms for the screening of debris that may contain human remains will need to be identified, and for the staging and holding of waste and for short-term storage, categorization, segregation, transportation, and preparation for disposal.

#### **E. Immediate Recovery**

During a nuclear event, recovery efforts are secondary and transparent to the initial life preservation and life safety response. The key objectives of recovery are to restore homes, jobs, services and facilities quickly and efficiently. All actions described in the response phase as secondary emphasis are actually recovery efforts. These include restoration of vital services including water, electricity, natural gas, sewer services and communications.

There will be a spectrum of injury types and severity, including those from blast, radiation, and heat (or fire). These may occur alone or in combinations and will overwhelm the normal medical health system.

Additional recovery efforts include extended sheltering operations for displaced residents including transition and relocation into long term temporary housing. Successful Citywide recovery is dependent on systematic planning for the restoration of services, housing and economic vitality. The City will assist in rebuilding safely and wisely, which will reduce future hazards and optimize community improvements.

Psychiatric disorders associated with terrorist attacks can be expected to develop over time. The social, psychological, and behavioral impacts of a nuclear detonation will be widespread and profound, affecting how the incident unfolds and the severity of its consequences. Among the key issues are the mental health impacts on the general public, potential effects on emergency responders and other caregivers, and broader impacts on communities and society.

After a nuclear detonation, fatality management will be one of the most demanding aspects of the response. The large number of fatalities will overwhelm the normal Medical Examiners/Coroners system. A respectful, culturally sensitive plan for fatality management, despite diminished capacity of the infrastructure, will have a direct impact on the citizens' perception of the government's ability to manage the emergency and the resilience and recovery of the community and the nation.

Population monitoring activities and decontamination services should remain flexible and scalable to reflect the prioritized needs of individuals and availability of resources at any given time and location.

#### **F. Documentation and Time-Keeping**

During an emergency situation or incident, it is important to keep specific records related to staff assignments and costs, related to the response to and recovery from the emergency/incident. Each department has their own internal processes for ensuring proper documentation of actions, incident specific cost tracking, personnel time keeping, and record retention of these documents.

In accordance with standard cost accountability practices for unique events, man-made and/or natural disasters, all City Departments are required to document their financial costs of labor, materials and equipment in addressing the event. The City Administrative Officer (CAO) is the Applicant's Authorized Representative to Governor's Office of Emergency Services (Cal OES) and the Federal Emergency Management Agency (FEMA). Financial tracking and management will be coordinated through Group 10 of the CAO Disaster Grants Finance and Administration Section and appropriate units in accordance with the Incident Command System (ICS) as required by the State Emergency Management System (SEMS) and National Incident Management System (NIMS).

Each City department, proprietary and City Council controlled agency operates their respective accounting operations/practices within the guidelines of the Mayor's Executive Directives, the California Disaster Assistance Act (CDAA) and the Federal Code

of Regulations Title 44 of the Stafford Act to maximize potential reimbursement eligible costs and minimize ineligible costs.

### III. ORGANIZATION AND ASSIGNMENT OF RESPONSIBILITIES

#### A. City of Los Angeles

1. Airports, Los Angeles World (LAWA)
  - a) Reconnaissance and Information Gathering
    - i. Fact Gathering
      - The Airport Response Coordination Center (ARCC) is the initial central location for situational awareness information collection from all LAWA divisions and airports to begin developing a common operating picture. The ARCC can be reached by phone at 424-646-5292.
      - If safe, Airport Police, and Fire personnel conduct windshield surveys of airport facilities as necessary.
      - Airport Operations coordinates with Federal Aviation Administration (FAA) Control Tower to assess movement areas and determine whether or not air traffic needs to be altered or halted, including any necessary rerouting of inbound aircrafts.
    - ii. Assessment
      - All divisions will assess their work area and those with response functions will assess impacts on operational and emergency response capabilities and report their findings to the ARCC or Department Operations Center (DOC), if activated.
      - Airport Operations will determine incident impacts on airport operations.
      - Information Management and Technology Group (IMTG) will determine impact on airport communications and data transfer systems.
      - The Facilities, Maintenance and Utilities Group (FMUG) will survey airport facilities and utilities and provide information on any structural or utility damage, airfield and roadway damage (including the Sepulveda Tunnel), and fuel farm status.
    - iii. Information Sharing
      - The LAWA mass notification system will be used to send information to designated responders, tenants, and stakeholders to inform them of the initial event and on-going airport status information.
      - LAWA employees can call the employee information line to hear important recorded messages at 888-529-2411(or at 888-LAWA-411).
      - Public address messages will be disseminated in a multi-modal fashion throughout terminals as necessary for public information and safety. Public Relations and the Public Information Officer (PIO) are responsible for external relations and public information dissemination.
      - LAWA Public Information and Public Relations line will be activated for those outside the airport at 424-646-5260.
      - In some incidents, a Joint Information Center (JIC) will be established.
      - Airline coordination will include distribution of contact information regarding Public Assistance Centers for passengers and their families.

b) Incident Stabilization

i. Incident Response

- 9-1-1, Airport Police or LAFD Metropolitan Fire Dispatch will typically notify first responders.
- The LAPD Hazardous Devices Section, Emergency Services Division, Hazardous Material (HazMat) Teams/Units shall direct all searches of aircraft or facilities at the Los Angeles International Airport.
- DOC Activation is dependent on severity and duration of the incident and level of assistance necessary from multiple LAWA divisions or outside agencies.
- The ARCC Duty Manager will make the decision to activate the DOC and will make notifications to key LAWA divisions and partner agencies, as necessary, to report to the DOC. If activated, the DOC will begin to coordinate support to field responders and provide central communications coordination.
- Essential DOC Representatives (at minimum and at any activation level) will most likely include Airport Police, Airfield Operations, Terminal Operations, Information Management and Technology Group, FMUG, Public Relations and the Emergency Management Division.
- Airport Police will provide airport security, crowd and traffic control, and secure the perimeter of the incident site. Access for first responder vehicles will be given priority. Temporary traffic re-routing will be facilitated by traffic personnel, barricades, and appropriate signage.

i. Airport Operations will coordinate and communicate with terminal tenants including airlines and concessionaires regarding situational awareness and instructions.

ii. Ongoing Information Gathering, Assessment, and Sharing

- Once activated, the ARCC will transfer the collection of situational awareness information to the DOC. The DOC will provide situational awareness to the City of Los Angeles EOC.
- Public Relations and the Public Information Officer (PIO) continue to be responsible for external relations and public information dissemination and will determine information dissemination using the most effective methods available.

iii. Assess Transition to Recovery/Demobilization

The DOC will coordinate with the ICP to develop incident objectives related to recovery and demobilization during the response phase of the incident and assess the capacity to de-escalate resources engaged in response operations and support.

c) Initial Recovery

i. Initial Recovery Operations

- Access will be provided for concessionaires, airline personnel and other on-property vendors to resume operations as soon as possible.

- Airport Operations will continue to coordinate with Air Traffic Control in efforts to resume normal operations.
  - Temporary re-routing of traffic shall be facilitated by barricades, sign boards and traffic personnel.
  - FMUG will mitigate and repair any damage to areas and facilities compromised by the incident including continued structural stabilization and debris removal as necessary and possible.
- ii. Ongoing Information Gathering, Assessment and Sharing  
The DOC will assess the capacity to de-escalate resources, incident command positions and latent impact of the incident on operations and recovery from reports from divisions.
- iii. Demobilization of Department/Agency Resources
- The DOC will evaluate the department's ability to determine intervals or timelines for demobilization of resources and personnel and communicate demobilization plans to relevant Departments and the EOC.
  - Determine a plan and time period in which assets will be demobilized and restored to normal activity. Reductions of resources may coincide with restoration of public services and lifting of temporary safety restrictions.
- d) Department Command and Control
- The ARCC is responsible for initial command and control functions and will transfer command and control of all functions when the DOC is activated.
  - The DOC is focused on supporting the ICP and providing resources and situational awareness.
  - LAWA Airport Police will establish as ICP location which is led by Unified Command including Airport Police, LAFD, and Airport Operations. Other agencies such as FBI, CBP and TSA may be requested as the incident dictates.
- e) Communications
- i. Primary Communications
- Telephone (landline, cellular, and satellite)
  - 800/900 MHz two-way radio system
  - Airport Police Communications Center
  - Mass Notification System
  - E-Mail System
  - Everbridge
  - LAWA Intranet
  - FAA Alert “Red Phone”
  - Société Internationale de Télécommunications Aéronautiques (SITA) Communication System
- ii. Alternate Communications
- Amateur Radio
  - Text Messages
  - Emails

- Messengers/Runners
- Video Conferencing
- Wireless Emergency Alert (WEA) System
- Internet
- Employee Information Line at 888-529-2411(or at 888-LAWA-411)

2. Building and Safety, Los Angeles Department of (LADBS)

a) Reconnaissance and Information Gathering

i. Fact Gathering

- The Operations Section Chief has overall control of all field operations and establishes priorities for damage assessment.
- Inspection teams can be utilized as availability and conditions permit. (This may be the only source of reporting for structural damage.)
- Field Commanders shall initiate inspections using a Safety Assessment Team (SAT) to develop situational awareness as necessary.
- Surveys are conducted along a pre-established map route or through windshield surveys within each district. Surveying time may vary according to existing conditions.

ii. Assessment

- Initial information reporting for preliminary damage assessments originates from field command resources to command staff by radio or status check.
- All reports are directed to the Planning Section Chief who will monitor reports to maintain situational status and forward data to appropriate staff for assessment of potential consequences of incident (e.g. life safety, incident stabilization and property damage).

iii. Information Sharing

- Information will be transmitted through appropriate channels to command staff (General Assessment Branch Director and Operations Chief) for compilation, evaluation, and action. Information on issues such as areas of damage, road closures, and high-risk security areas are communicated to the Operations Chief to inform SATs and inspectors.
- The DOC will provide damage assessment reports to the Mayor, City Council, and EMD through Web EOC.
- Issue policy statements to the Mayor, other City Departments, and media outlets through the Public Information Officer (PIO). The PIO will provide information to and from LADBS if a Joint Information Center (JIC) is activated.
- Prepare and disseminate Public Service Announcements (PSAs).

b) Incident Stabilization

i. Incident Response

- Deploy SATs with assistance from cooperating entities for detailed identification and record of structural damage.
- Safety Assessment Team (SAT) members shall establish contact, in the order listed, with one of the following persons for reporting and/or deployment instructions:
  - Their respective SAT leader;
  - Alternate SAT leader;
  - Personnel Branch Director; or
  - Department Operations Center (if activated).
  - SAT leaders will contact the Safety Assessment Branch Director for reporting and/or deployment instructions.
  - Create dynamic listing of contaminated, damaged and severely damaged buildings.

ii. Ongoing Information Gathering, Assessment and Sharing

- Evaluate SAT results based on the Safety Assessment System and Reporting System. Safety Assessment System and Reporting ensures rapid recording of mapped and tabular information related to injuries, deaths, structural damage, etc.
- Assess survivability of public and private buildings and develop a prioritized list of affected buildings.
- Notify City residents and patrons of the evaluated safety assessment by placing color placards at the main entrance of the buildings. For buildings that have been “red tagged” or deemed to be unsafe to enter, LADBS shall place barriers well in advanced of the entrance of the structure to provide people who are blind or are vision impaired with a physical barrier to alert them. Barriers or scene tapes used by Law Enforcement and/or Firefighters to mark an area closed to the public is an example of an approved barrier.

iii. Assess Transition to Recovery and Demobilization

- Develop incident objectives related to recovery and demobilization during the response phase of the incident and assess the capacity to demobilize resources engaged in response operations and support.

c) Initial Recovery

i. Demobilization of Department/Agency Resources

- Evaluate the department's ability to demobilize resources and personnel.
- Determine intervals or timelines for demobilization of resources and personnel.
- Communicate demobilizations and demobilization plans to relevant departments and the EOC.
- Use established plans for demobilizing resources and personnel for graduated demobilization.

- Determine a plan and time period in which assets will be demobilized and restored to normal activity. Reductions of resources may coincide with restoration of public services and lifting of temporary safety restrictions.
- d) Department Command and Control
- The LADBS General Manager establishes overall policies and coordinates with City EOB when activated.
  - The Operations Chief assesses overall needs of the Department, deploys resources based on determination of needs and contacts the LADBS General Manager, Executive Officer, or Bureau Chief (per protocol) and advise them of objectives and operations.
  - The General Assessment Director establishes the Department ICP and staging areas, as necessary, to provide locations for departmental coordination and control of all emergency operations for each incident.
  - Tactics to accomplish directives will be established by command staff and vary according to existing conditions. Command staff establishes operational priorities based on problem assessments and availability of resources following overall objectives to maintain life safety, incident stabilization, and preservation of property.
- e) Communications
- i. Primary Communications
    - Commercial Telephone LAN Lines
    - Mobile Telephones
    - 800 MHz radios
    - Wireless Emergency Alert System (WEA)
    - Department Hot Line: (213) 482-0011
  - ii. Alternate Communications
    - Wireless Priority Services (WPS)
    - E-mail and Internet
    - Government Employee Telecommunication Services (GETS)
    - Facsimile machines
    - Couriers
    - Back-up telephone system for LADBS—one for the DOC and the other at the LADBS workstation in the City EOC.
  - iii. Primary Field Communications
    - Cell phones and 800 MHz hand-held radios will be primary field communications systems between the DOC, ICP, and other field personnel.
    - Multi-channel radios may be reconfigured to communicate with mutual aid, or other assisting agencies and departments.
    - Landline communications will be established, if practical, to reduce radio traffic.

3. Emergency Management Department (EMD)
  - a) Reconnaissance and Information Gathering
    - i. Fact Gathering
      - EMD Duty Officer and Duty Team will obtain information from department sources.
      - Direct staff in collecting and consolidating ongoing reconnaissance information from field units, the ICP and other available information sources.
      - If the EOC is activated, the Situation Status Unit of the Planning Section will gather information.
    - ii. Assessment
      - Work with other Departments to determine the scope of the incident and its impact on City functions and facilities, as well as residents.
      - The Situation Status Unit of Planning Section will assess and vet information from all sources (City Department notifications, memos, media, etc.)
    - iii. Information Sharing
      - EMD will facilitate information sharing between departments. This is typically done via conference call initiated by the Duty Officer/Team.
      - Should the City EOC be activated, the Situation Status Unit of the Planning Section will present a situational status report to management staff.
  - b) Incident Stabilization
    - i. Incident Response
      - The EMD Duty Officer and Duty Team coordinate and execute the processes to activate the City EOC in accordance with EMD standard operating procedures.
      - Relevant stakeholders, including the Mayor, EOB members, and the LA County OEM Operational Area will be notified of activation of the City EOC and level of activation.
      - All critical functions provided by EMD in support of Citywide response/recovery are related to the operations of the EOC.
    - ii. Ongoing Information Gathering, Assessment and Sharing
      - The EMD Duty Officer will communicate with the County OEM Duty Officer to monitor the incident.
      - Monitor, record, evaluate and assess information obtained by LAFD and LAPD during initial size up to anticipate future emergency management needs of the departments.
    - iii. Assess Transition to Recovery and Demobilization
      - Develop incident objectives related to recovery and demobilization during the response phase of the incident.

- Assess the capacity to de-escalate resources engaged in response operations and support.
- c) Initial Recovery
- i. Initial Recovery Operations
 

Evaluate long-term recovery needs, and facilitate resource coordination between stakeholders.
  - ii. Ongoing Information Gathering, Assessment and Sharing
    - Continuously improve situational awareness by evaluating and disseminating information from field operations and relevant stakeholders.
    - The Communications Division and Joint Information Center (JIC) will ensure that the City has a unified voice during a crisis.
  - iii. Demobilization of Department/Agency Resources
    - EMD management staff will evaluate its ability to demobilize resources and personnel, determine intervals or timelines for demobilization of resources and personnel and communicate plans to relevant Departments.
    - Determine a plan and time period in which assets will be relinquished and restoration to normal activity will occur. Reductions of resources may coincide with restoration of public services and lifting of temporary safety restrictions.
4. Fire Department, Los Angeles (LAFD)
- a) Reconnaissance and Information Gathering
    - i. Fact Gathering
      - Notification
        - Civilian call-out via 9-1-1 or other notification process.
        - Fire Department observations
        - Fire prevention inspections
        - Hazardous materials site inspections
        - Credible pre-incident information.
      - Initial size-up from the first officer on-scene and a comprehensive size-up by the Incident Commander includes:
        - Correct Address
        - Description of Incident
        - Life Hazards
        - Assistance Needed
        - Special Problems (e.g. Exposures, Weather, Access, etc.)
        - Location of Command Post
        - Approximate Duration of Incident
      - Emergency communications from the field should indicate at least the following:
        - Conditions - General Situational Status

- Incident conditions (fire location and extent, hazmat spill or release, number of injured/patient, etc.)
  - Incident Action Plan (offensive and defensive, etc.)
  - Status of tactical priorities.
  - Safety considerations.
  - Actions – Deployment and assignment of operating companies and personnel.
  - Needs – Appraisals of need for additional resources.
  - INCRNE Network provides geographic and other support software providing a common operational platform for both data and visual awareness.
- ii. Assessment
- Evacuation warnings or orders from the Mayor are determined with information gathered and input from the Chief of Police and Fire Chief.
- iii. Information Sharing
- Los Angeles Police Department (LAPD) DOC will provide information to the Joint Hazard Assessment Team (JHAT.)
  - JHAT will provide information exchange with multiple agencies at the local, state, and federal levels on the hazards, established protocols, and security clearances.
  - LAFD ICBRNE provides live incident data across response organizations regardless of their location. Responders do not need to be on-scene to assist.
- b) Incident Stabilization
- i. Incident Response
- If a hazardous condition is observed which endangers life or property, the scene shall be isolated. All incidents involving patients or a threat to public safety fall under the responsibility of LAFD.
  - Primary efforts will be coordinated and assisting with the evacuation of populations and the preservation of life. This will take precedence over search and rescue efforts.
- ii. Ongoing Information Gathering, Assessment and Sharing
- Continue pre-identified modes of information gathering and reporting. Updates should be made continuously to Metro Fire Communications for progress reporting and resource requirement assessments.
- iii. Assess Transition to Recovery and Demobilization
- Develop incident objectives related to recovery and demobilization during the response phase of the incident and assess the capacity to de-escalate resources engaged in response operations and support.
- c) Initial Recovery
- i. Initial Recovery Operations
- Determine priorities with regards to recovery operations.
  - Provide fire protection, rescue and medical aid in evacuated and

- relocated areas.
- Provide atmospheric monitoring through Hazardous Materials Squads and/or JHAT.
- ii. Ongoing Information Gathering, Assessment and Sharing
  - Continuously communicate with the EOC on LAFD responses and activities and improve situational awareness by assessing the available information from field units and the EOC.
- iii. Demobilization of Department/Agency Resources
  - Evaluate the department's ability to demobilize resources and personnel.
  - Determine intervals or timelines for demobilization of resources and personnel.
  - Communicate demobilizations and demobilization plans to relevant Departments and the EOC.
  - Use established plans for demobilizing resources and personnel for graduated dismissal.
  - Determine a plan and time period in which assets will be relinquished and restoration to normal activity will occur. Reductions of resources may coincide with restoration of public services and lifting of temporary safety restrictions.
- d) Department Command and Control
  - In all instances, LAFD officers will retain command of all LAFD personnel and equipment.
  - Hazardous material spills on freeways are under the jurisdiction of the California Highway Patrol (CHP). ICs will coordinate with the CHP in the abatement of hazardous material spills on Freeways.
- e) Communications
  - Radios
    - 700/800 MHz, Ultra High Frequency (UHF) and Very High Frequency (VHF) Radios. (LAFD is licensed to use 700/800 MHz bands and the Los Angeles City repeaters operate only on 800 MHz)
    - 800 MHz is the primary radio used for LAFD operations. Portable radios are indicated with red engravings and a red antenna band.
    - 700 MHz is used for drills and emergency operations for non-critical messaging on digital simplex channels. The 700 MHz band is programmed into the “red” 700/800 MHz band radios.
    - UHF/500 MHz is used for mutual aid incidents with surrounding fire and police agencies and hospital base station contact. UHF portable radios are indicated with blue engravings and a blue antenna band.
    - VHF/100 MHz is used by surrounding fire agencies for tactical and routine operations and by the Hospital Emergency Administrative Radio (HEAR). VHF portable radios are indicated with white engravings and a white antenna band.
    - Most common agencies contacted via voice radio by LAFD members are

the LAPD, Los Angeles County Fire Department (LACoFD), Ventura County Fire Department (VNC), Angeles National Forest (ANF) and Verdugo Fire Communications Center.

- 800 MHz Radio channels, MDT messages, and phone calls into and from Metro Fire Communications are recorded on a 24-hour basis. All Radios are assigned a four-digit identification number transmitted and recorded every time a radio is keyed.

5. General Services, Department of (GSD)

a) Incident Stabilization

i. Incident Response

- Provides support to departments and public utilities and local agencies in the EOC during activations
- Ensure procurement of barricades or other emergency supplies through the emergency response and EOC activation via Logistics. Including resourcing warehouse stores for available assets
- BMD provides facility maintenance support to city facilities under their purview.

ii. Assess Transition to Recovery and Demobilization

- Develop GSD incident objectives related to recovery and demobilization during the response phase of the incident.
- Assess the GSD capacity to de-escalate resources engaged in response operations and support.

b) Initial Recovery

i. Initial Recovery Operations

- Coordinate the restoring utilities and access roadways/driveways service at GSD facilities and buildings with critical public utility infrastructure service under BMD purview or as directed by the GM.
- Provide construction-related support activities, including damage evaluation and repairs.
- Continue providing support work to public utilities, public works, local agencies and other City departments.

c) Department Command and Control

- Management activates the DOC when conditions warrant a centralized response. The DOC liaises between executive management and divisions.
- Emergency response objectives are to be based on life safety, property damage and restoration of normal operations.
- General Services General Manager will assign a lead to restore essential GSD controlled facilities, equipment and records. The lead will evaluate and coordinate needs based on up-to-date lists of GSD facilities and records.
- General Services General Manager will make the final determination regarding construction-related services to restore City government and services.

d) Communications

- i. Primary communications
  - Commercial telephone and city Centrex lines
  - Cellular telephone
  - E-mail
  - City Mail
  - Fax
  - 800 MHz two-way radio (mobile, desktop and hand-held)
  - Runners/messengers
- ii. Alternate Communications
  - Government Emergency Telecommunications Service (GETS)
  - AM and FM, Commercial radio
  - GSD Employee information line
  - Amateur (HAM) radio
  - Satellite Radio
  - Satellite Telephones
  - Short Message Service (SMS) and Multimedia Messaging Service (MMS)

e) Documentation

i. Record Keeping

- The GSD's Finance & Special Operations Division, in coordination with other divisions, is responsible for documenting costs associated with a departmental emergency/disaster response within the guidelines of ICS as required by Standard Emergency Management System and National Incident Management System.
- Oversee cost accounting, procurement, and claims processing associated with the emergency.

6. Police Department, Los Angeles (LAPD)

a) Reconnaissance and Information Gathering

i. Fact Gathering

- Notification
  - Civilian call-out via 9-1-1 or other notification process
  - Law enforcement patrol officer observation
  - Fire prevention inspections
  - Hazardous materials site inspections
  - Credible pre-incident information
- DOC Division monitors nationwide events, bulletins and advisories and provides information to command and staff officers as well as other City departments and outside agencies.
- In larger events, LAPD DOC Communications Division will be activated at Level II and become the DOC and headquarters for the Director of Emergency Operations.

- The DOC is activated by the Director of Emergency Operations and may also be activated by the Chief of Police, Commanding Officer, Counter-Terrorism and Special Operations Bureau (CTSOB), Office of Operations, or Director of the Office of Special Operations.
  - The DOC will gather information for situational status reports.
- ii. Assessment
- Provide the DOC with the personnel status report, damage assessment report from field unit surveys or aerial assessments.
- iii. Information Sharing
- DOC Division will provide information to the Chief of Police, who will advise the Mayor.
  - In LAPD led incidents, the Department will forward incident information to the Operations Control Division of LAFD.
  - In LAFD led incidents, the LAFD will contact the LAPD Communications Division.
  - Information will be shared with the City EOC if the EOC is activated.
- b) Incident Stabilization
- i. Incident Response
- Monitor the situation and status of the event.
  - If a hazardous condition is observed which endangers life or property, the scene shall be isolated. LAPD will contain the scene by establishing a perimeter and restricting access to the area by unauthorized persons.
  - If upon arrival, responding personnel discover a possible explosive device, personnel are instructed to evacuate the area (300 feet minimum distance) and disengage cellular telephones and radio signals that may interfere with the detonation device.
  - In a hazardous materials incident, notifications will be made to the geographic Area Watch Commander, LAPD DOC Communications Division LAPD DOC Communications Division, the Hazardous Materials Unit (HMU) of the Emergency Services Division (ESD) which includes the Bomb Squad and Air Support Division (via LAPD DOC Communications Division) as necessary.
  - After-hours notification shall be made to LAPD DOC Communications Division.
  - No attempt shall be made to neutralize, move, or transport any hazardous material except under the direction of an HMU specialist who will determine the hazard posed by the material and implement appropriate safeguards.
  - In dynamic incidents where a product has been released or there are injuries or complaints of injuries, officers shall request the Fire Department and HMU.

- If the incident is static and the product has not breached its containment vessel nor outwardly appears to present an immediate public safety hazard, officers shall request HMU.
  - The product shall be treated as an unknown hazard until analyzed and categorized by hazardous materials technicians from HMU.
  - Responding HMU technicians wearing appropriate personal protective equipment (PPE) shall:
    - Identify and designate control zones;
    - Determine the hazard and categorize the materials involved;
    - Mitigate threat posed to life, environment and property;
    - Collect, document, and book evidence (Proper packaging and labeling of hazardous chemical evidence prior to booking, is performed by Scientific Investigation Division (SID), Hazardous Chemical Team);
    - If conditions permit, obtain a sample and photograph the gross amount of the material; and
    - Arrange for the disposal of any quantity of that material that cannot be safely stored in available facilities.
  - In all events, LAPD personnel will be responsible for traffic control, ingress/egress of emergency vehicles, and the establishment and maintenance of the perimeter around a closed area by providing security checkpoints on surrounding streets from the location of the threat.
  - Establish a Contamination Reduction Zone (CRZ) perimeter; ensuring individuals are equipped with proper protective equipment.
  - Should the Bomb Squad respond to a reported or actual explosive device, they will conduct further investigation and make further suggestions to the ICP.
  - If investigation reveals that dangerous explosives may be involved, Criminal Conspiracy Section, Major Crimes Division, and the Hazardous Devices Section, Emergency Services Division, shall be immediately notified.
  - In event of a device detonation, personnel have been instructed to ensure evacuation of the area is conducted, mindful of the possibility of secondary or tertiary devices.
  - If a crime is such that latent or microscopic evidence or hazardous chemicals are present, the assistance of a related specialist from the Scientific Investigation Division shall be requested by telephone. Alternate communication may be made by radio. Should a Scientific Investigator be unavailable, notification may be made to Detective Support and Vice Division.
- ii. Ongoing Information Gathering, Assessment and Sharing  
Continue to monitor information updates and assess viability of threat and determine appropriate resource needs.

iii. Assess Transition to Recovery and Demobilization

- As control is established in the affected areas, Departmental resources assigned to incident-related operations may be reduced; however, there remains an obligation to assist and support other City departments and agencies working in the area in whatever law enforcement role that is necessary.
- Develop incident objectives related to recovery and demobilization during the response phase of the incident.
- Assess capacity and determine resource drawdown procedures to de-escalate resources engaged in response operations and support as appropriate.
- Assess long-term needs for road closures and perimeter control surrounding incident site.

c) Initial Recovery

i. Initial Recovery Operations

Provide security for sheltering, temporary distribution centers and other emergency response facilities, as appropriate.

ii. Ongoing Information Gathering, Assessment and Sharing

Continue to monitor information updates and assess viability of threat and determine appropriate resource needs.

d) Department Command and Control

Initial hazmat response and mitigation may be a joint response between the LAPD and LAFD. If an incident involves a criminal or terrorist act or a crime scene, and all lifesaving concerns have been addressed, command of the incident will be responsibility of LAPD.

7. Port of Los Angeles (POLA)

a) Incident Stabilization

i. Incident Response

- Environmental Management Division – Evaluate damage, or potential damage, to water quality or wildlife. Assist in identifying and classifying hazardous materials (e.g., flammability, toxicity, etc.) and proper removal procedures. Also prepare related reports.
- Goods Movement Division – Coordinate and assist with all supply chain entities. Monitor and provide status of external damage to cargo transportation corridors.
- Human Resources Division – Establish Department personnel pools and coordinate the management of citizen volunteers with the City's Personnel Department. Provide employee personnel information (e.g., telephone numbers, job classification, special skills, etc.) to the incident commander for recall procedures; assist with recall notification procedures; determine the status of vital records; has control over Port leased vehicles; and provides clerical assistance.

- Marketing Division – Provide liaison to Port customers, both locally and throughout the world. Coordinate the use of the Angelena II for Emergency Response; i.e. alternate Department Operations Center, People Movement.
  - Pilot Service – Conduct a survey of harbor waterways to establish routes of safe passage for vessels. Also move vessels to safety or to ensure Port safety and establish liaison with the U.S. Coast Guard, the Port of Long Beach and tugboat companies; monitor and control vessels at anchor, leaving or entering the Port; maintain radio communications with vessels and other agencies; and follow instructions from the U.S. Coast Guard Captain of the Port.
  - Planning and Research Division – Provide geographic indexing system support regarding Department property. Also provide administrative assistance and general Port information.
  - Port Police – Conduct initial response and survey of damage area(s). The Port Police watch commander is pre-designated as the Incident Commander, who will coordinate and direct all initial emergency activities by the Department. The watch commander will contact appropriate Department personnel for notification, advice and consultation purposes. If necessary, the Port Police will recall personnel responsible for directing, managing, and responding to a major emergency. All Emergency Notifications will go through the Watch Commanders office. Initially, coordinate the operations and functions of the Department Operations Center. Initially, facilitate and coordinate with the Emergency Operations Center (EOC) and terminal Facility Managers and Security Officers. Provide overall security of the POLA. Coordinate the operations and functions of the Department Operations Center. Facilitate and coordinate with the EOC and terminal Facility Managers and Security Officers.
  - Purchasing Division – Expedite the re-supply of materials, equipment and supplies. Also coordinate emergency purchases and mutual aid from other public agencies.
  - Risk Management Division – Assist in identifying and classifying hazardous materials (e.g., flammability, toxicity, etc.) and proper removal procedures. Determine applicable insurance coverage's and reimbursement measures. Also assist in evaluating employee safety matters related to state and local laws.
  - Wharfingers Division – Assist (along with Pilot Service), in providing information regarding the location and types of vessels at the Port.
- ii. Ongoing Information Gathering, Assessment and Sharing
- A Situation Status unit will be created that will list, track and map all areas of damage and concern. This should be a coordinated effort of GIS Mapping, Risk Management, Port Police, and any division that has specific issues that

could possibly lead to reimbursement.

- iii. Assess Transition to Recovery and Demobilization
  - Develop incident objectives related to recovery and demobilization during the response phase of the incident. A Demobilization Unit will be created depending on the scale of the incident and resources brought into the Port.
  - Assess the capacity to de-escalate resources engaged in response operations and support. The Planning Section will determine a time period in which assets will be relinquished and restoration to normal activity will occur.
- b) Initial Recovery
  - i. Initial Recovery Operations
    - Operations could transition to an Engineering, Construction, and Construction and Maintenance (C&M) lead.
    - Prioritization of repairs should require the approval of the Senior Management depending on the severity of damage.
  - ii. Ongoing Information Gathering, Assessment and Sharing

Situation status reports will continue to track and map areas of concern.
  - iii. Demobilization of Department/Agency Resources
    - Evaluate the department's ability to demobilize resources and personnel. Management will make a determination when outside agencies can be released and remaining repairs and restoration of services can be handled locally.
    - Determine intervals or timelines for demobilization of resources and personnel.
    - Communicate demobilizations and demobilization plans to relevant Departments and the EOC.
    - Incorporating decontamination projections, determine a plan and time period in which assets will be relinquished and restoration to normal activity will occur.
- c) Department Command and Control

The DOC will handle a coordinated disaster and will provide information to all the divisions within POLA.
- d) Logistics
  - Continuously update equipment and supply list critical to the response.
  - Procure and distribute emergency supplies.
  - Establish contact/vendors to supply barrier supplies and devices in the event City departments exhaust its resources.
  - Review and designate alternate worksites for employees.
  - Support Fire Department requests to provide equipment for road access.
  - Provide food, water and shelter for field personnel and others as needed.

- The Goods Movement Division will assist with all supply chain entities. Monitor and provide status of external damage to cargo transportation corridors.

8. Public Works, Department of (DPW)

a) Reconnaissance and Information Gathering

i. Fact Gathering

- Wastewater Treatment Plants will conduct a visual inspection of all operating systems and provide a status report to division manager or Bureau Operations Center.
- Upon notification of a hazardous materials incident that threatens surface waters, Sanitation's Watershed Protection Division (WPD) sends inspectors to assess the situation and will notify the Los Angeles County Fire Department, Hazardous Materials Unit to identify and categorize waste

ii. Assessment

- Operating Bureaus will prepare and present a situation status report to their General Managers and their Bureau's Emergency Management Coordinator.
- All Bureau supervisors shall assess need and notify effected personnel to shelter-in-place or evacuate if necessary.
- Sanitation continually conducts remote assessments of sewer flow and pumping capability and reports the status to division manager or Bureau Operations Center.
- Wastewater Treatment Plants monitor incoming flow for combustible gasses to prevent damage to the treatment process.

iii. Information Sharing

- Send representative to EOC when activated
- Update necessary reports with information from DPW employees in the field
- All Bureaus prepare and present a situation status report to Bureau Directors, the Board of Public Works, and the Emergency Operations Center.

b) Incident Stabilization

i. Incident Response

- DPW is the lead agency responsible for emergency debris clearance on essential transportation routes and for coordinating the permanent removal and disposal of all debris deposited along or immediately adjacent to public right-of-ways. A Debris Management Plan has been developed to provide a framework for City government and other entities to clear, remove, reduce, recycle, and dispose of debris generated during a public emergency within City limits.

- Debris generated as a result of an act of terrorism is highly variable in both quantity and type, depending upon the specific means utilized by the terrorists. Depending on the choice of weapons used to terrorize the population, the debris may consist of dead bodies, property damage and demolition debris. Nuclear and explosive devices will result in infrastructure damage and death. The debris may be contaminated and require special debris handling and disposal with the support of law enforcement authorities, the coroner's office, and health officials.
  - Bureau of Sanitation will send inspectors to work with LA County Fire Department's Hazardous Materials Response Team to identify spills and wastes containing any hazardous materials.
  - Bureau of Engineering will mobilize Bridge and Tunnel inspection teams as necessary and prepare to staff the City EOC with GIS mapping and DPW support to the PIO.
  - Bureau of Street Services and Street Lighting will provide roadway clearance for emergency response vehicles and evacuation routes.
  - The Bureau of Street Services and Street Lighting will assist DWP with barricades and cordoning of areas with electrical hazards.
- ii. Assess Transition to Recovery and Demobilization
- Develop incident objectives related to recovery and demobilization during the response phase of the incident.
  - Determine the gaps in response activities related to departmental roles and responsibilities and assess capacity to de-escalate resources engaged in response operations and support.
- c) Initial Recovery
- i. Initial Recovery Operations
- Working with other City Departments, DPW will establish recovery goals and determine priorities.
  - Develop a list of needed repairs and establish repair priorities.
  - Allocate resources and personnel according to established priorities
  - Determine any potential long-term recovery needs and seek mutual aid assistance if necessary.
- ii. Ongoing Information Gathering, Assessment and Sharing  
Assess latent impact of incident on operations and recovery.
- iii. Demobilization of Department/Agency Resources
- Determine a plan and time period in which assets will be relinquished and restoration to normal activity will occur. Reductions of resources may coincide with restoration of public services and lifting of temporary safety restrictions.
  - Evaluate the department's ability to demobilize resources and personnel and determine intervals or timelines for demobilization of resources and personnel.

- Communicate demobilizations and demobilization plans to relevant Departments and the EOC.
- d) Department Command and Control
- i. Communications
    - All DPWs bureaus shall verify lines of communications between management, staff, and other City agencies using and testing various communications available (telephonic, electronic, 800 MHz radios, and or runners) and shall report any broken means to designated management/supervisor
    - DPW maintains a confidential list of all bureau emergency contacts and distributes numbers through the Department EPC.
    - All bureaus shall perform communication equipment check of all cellular phones, hand held radios and base stations. including, charge batteries.
    - Each Bureau will alert off duty personnel of possible recall.
  - ii. Logistics
    - Division Managers and or Bureau Operations Center directors shall review and designate alternate worksites for employees as needed.
    - The Bureau of Sanitation has contractual agreements with several major hazardous materials contractors for emergency response and on-call services that are used on an as needed basis.
- e) Documentation
- i. Record Keeping
    - Initial Damage Assessments are to be reported on FEMA/ mandated forms.
    - The Bureau of Street Services shall document all activity on Storm/Disaster Daily Work Sheets.
    - Each Bureau is responsible for securing copies of all rental equipment charges, materials and copies of all field documentation charged to work order(s) used in the emergency, for tracking full cost recovery and future invoicing for seeking reimbursement from the California Governor’s Office of Emergency Services (Cal OES) and Federal Emergency Management Agency (FEMA).

9. Transportation, Los Angeles Department of (LADOT)

a) Reconnaissance and Information Gathering

i. Fact Gathering

If necessary and safe, staff members will conduct windshield surveys to assess damages and will report findings to the Communications Center who will relay information to the DOC.

ii. Assessment

Determine affected areas, potential need for road closures and determine viability of emergency travel routes to be used.

- iii. Information Sharing

The LADOT DOC serves as the centralized point for collection and dissemination of information and coordination of department resources for response, recovery and employee safety during emergency situations or during any other event/incident that warrants the activation of the DOC.
- b) Incident Stabilization
  - i. Incident Response
    - Provide assistance to LAPD and LAFD by directing and controlling traffic around incident sites prohibiting ingress of unauthorized vehicular traffic and facilitating egress of persons, as needed.
    - Install and maintain traffic control devices to move the public away from affected areas.
    - Coordinate transportation services for the public displaced from normal travel routes and facilities.
    - Develop and maintain emergency travel routes.
  - ii. Ongoing Information Gathering, Assessment and Sharing

LADOT will provide ongoing communication with essential facilities, field employees, other Divisions and the City's EOC.
  - iii. Assess Transition to Recovery and Demobilization
    - Develop incident objectives related to recovery and demobilization during the response phase of the incident.
    - Assess the capacity to de-escalate resources engaged in response operations and support.
    - The LADOT DOC will coordinate with the City's EOC, LAPD, and LAFD to assess the release of LADOT resources.
    - Determine alternate routes to keep traffic and public away from short and long-term recovery sites.
- c) Initial Recovery
  - i. Initial Recovery Operations

If necessary and safe, conduct initial damage/safety assessment of the transportation infrastructure including freeways, streets, bridges and railroads.
  - ii. Ongoing Information Gathering, Assessment and Sharing

Ensure communication is established with essential facilities, field employees, other Divisions and the City's EOC.
  - iii. Demobilization of Department/Agency Resources
    - Evaluate the department's ability to demobilize resources and personnel.
    - Determine intervals or timelines for demobilization of resources and personnel.
    - Communicate demobilizations and demobilization plans to relevant Departments and the EOC.
    - Use established plans for demobilizing resources and personnel for graduated dismissal.

- Determine a plan and time period in which assets will be relinquished and restoration to normal activity will occur. Reductions of resources may coincide with restoration of public services and lifting of temporary safety restrictions.
  - Assess long-term recovery needs.
- d) Department Command and Control
- The LADOT General Manager maintains responsibility for LADOT resources.
  - A succession plan has been established in the event the General Manager is not available.
- i. Communications
- Primary communications what will be used by LADOT staff include:
- Department Communications Center
  - Landline telephone
  - Cellular phone
  - 800 MHz and digital two-way radio system
  - Satellite phone
  - Department e-mail
  - Text messaging
- ii. Logistics
- Logistical needs should be determined as early as possible to facilitate procurement and distribution of requests for field operations supplies. All logistics requests are coordinated through the DOC and to the EOC as necessary.

## 10. Water and Power, Los Angeles Department of (LADWP)

- a) Reconnaissance and Information Gathering
- i. Fact Gathering
- Damage assessment information is reported to the DOC through surveys, safety inspections of specific facilities, systems and other areas; radio and TV reports; and communication with other City agencies.
- ii. Assessment
- LADWP Systems maintain established protocol to check the status of critical infrastructure and equipment to form safety assessment teams and prioritizing repair work for assignments.
- iii. Information Sharing
- Information is disseminated to line management to keep LADWP employees informed of the nature of the emergency, impact of the emergency on Department operations and services to customers, and plans and progress made in services restoration.
  - Public Affairs Division coordinates with the General Manager's office to develop situational status information for Citywide dissemination to other governmental agencies, the public, news media and employees.
- b) Incident Stabilization

- i. Incident Response
    - The LADWP Hazardous Materials Unit may be contacted to respond to hazardous materials events affecting department assets.
    - The LADWP Department Operations Center, called the Emergency Command Center, will be activated for command and management in the coordination of energy services response.
    - Emergency fencing and shoring of City facilities may be arranged if necessary to keep individuals away or to block off investigations and decontaminations.
    - Maintain secure areas for utility restoration crews.
    - Representatives will be assigned to assist in coordinating the repairs of utility facilities.
    - Provide temporary or emergency water (e.g. above ground service connections to fire hydrants) and power services as required.
  - ii. Ongoing Information Gathering, Assessment and Sharing
    - Information is gathered and shared through various portals such as PIER, Twitter, Media outlets, as well as internal e-mail distribution.
    - Water and Power Systems work closely with the LADWP Office of Public Affairs to validate information, craft and disseminate internal and external information, broadcast and print, regarding service interruptions and progress of restoration efforts.
  - iii. Assess Transition to Recovery and Demobilization
    - Develop incident objectives related to recovery and demobilization during the response phase of the incident.
    - Assess the capacity to de-escalate resources engaged in response operations and support.
    - Information regarding the demobilization of resources will be communicated from the field to the DOCs, and forwarded to the City EOC as appropriate.
- c) Initial Recovery
- i. Initial Recovery Operations
    - If the event targeted or affected critical infrastructure, patrol and trouble crews are deployed throughout the City and along major transmission routes to locate vulnerable areas and work to make repairs to restore services.
    - Maintain and/or restore water quality, and ensure water facilities are in secure and stable condition.
    - Provide resources (equipment, materials, vehicles and labor) to setup and distribute emergency water supply to the public.
  - ii. Ongoing Information Gathering, Assessment and Sharing
    - Continue water data gathering and documentation.
  - iii. Demobilization of Department/Agency Resources
    - Evaluate the department's ability to demobilize resources and personnel.

- Determine intervals or timelines for demobilization of resources and personnel.
- Communicate demobilizations and demobilization plans to relevant Departments and the EOC.
- Use established plans for demobilizing resources and personnel for graduated dismissal.
- Determine a plan and time period in which assets will be relinquished and restoration to normal activity will occur. Reductions of resources may coincide with restoration of public services and lifting of temporary safety restrictions.

d) Department Command and Control

i. Communications

The LADWP utilizes the following communications devices and systems for primary and redundant communication needs. Divisions will report to executive management on the current status of their communications abilities:

- Primary Communications
  - Internet (WebEOC)
  - Landline Telephone
  - 900 MHz and UHF/Low-band radio systems
  - Cell phones and Blackberries
  - Mass Notification System (PIER)
  - LADWP Intranet
  
- Alternate Communications
  - Government Emergency Telecommunications Service/Wireless Telephone System (GETS/WTS)
  - Out-of-State voice-mail systems
  - Mobile radio equipped vehicles
  - Base radio and radio frequency scanner set to City Fire, police, and medical service's frequencies and the National Weather Service
  - Satellite phones
  - Emergency Alert System or other broadcast media
  - 800MHz radio system
  - Amateur radio
  - Video conferencing
  - Messengers

e) Documentation

i. Record Keeping

- Critical documents that are generated during an emergency response that are needed for cost recovery are the responsibility of the divisions to archive and protect. Cost recovery documentation includes the following:

- Signed daily timesheets, civil service classifications, hours, base hourly rates and applicable fringe benefits for labor.
- Quantities, descriptions, purchase orders, invoices/vouchers, and payment records for materials or services.
- Usage records with dates, hours, and rates for equipment.
- Inventory depletion records for stock material usage.
- Contract documentation for services and materials.
- If any reports for damages are submitted to the EOC, a copy should be submitted to the CMC/OEM. All systems are responsible for the collection of information about the event; location, scope, category, and cost estimate of response and damages. OEM is the single point of contact during the recovery phase until the Project Worksheets are approved. After this point, the Financial Services Organization (FSO) of the LADWP is responsible for directing department-wide documentation related to /FEMA and insurance claims.
- Each of the three major systems in LADWP (Water, Power, and Joint) is responsible for compiling documentation and records of its own lead jobs or projects and coordinated by a system-level FEMA Documentation Coordinator.
- Damage cost estimates will be provided as requested by governmental authorities for the purpose of seeking State and/or Federal Disaster assistance upon approval of senior management.

## **B. County of Los Angeles**

Although the City of Los Angeles has no authority to assign responsibilities to county departments, many county departments are the primary agency responsible for providing certain services to the City of Los Angeles. Those county departments are listed in the following, along with the services they are responsible for providing in the event of a radiological emergency.

### **1. Coroner, Los Angeles County Department of**

It is the duty of the Department of Coroner to determine the circumstances, manner and cause of all violent, sudden, or unusual deaths. The Los Angeles County Department of Coroner is the lead agency on fatality management during a disaster. A mass or multi-fatality incident (MFI) results in a surge of deaths above what is normally managed by normal medico-legal systems. In the event of a major disaster within Los Angeles County, it may be several days before the Department of Coroner, County Morgue, or private mortuaries can respond, process and recover decedents. Federal or military assistance in fatality management may not be available to local jurisdictions in widespread incidents such as a pandemic.

### **2. Fire Department, Los Angeles County (LACoFD)**

The LACoFD is a first-responder agency responding to life and health threats of varying scope and degree. The Health Hazardous Materials Division's (HHMD's)

Emergency Operations Section (EOS) provides 24-hour-a-day response to spills and releases of hazardous materials and wastes throughout the County. HHMD Dispatch can be contacted Monday-Friday from 7:00am–5:00pm at 323-890-4317. After hours calls can be directed from 9-1-1 dispatch or 323-881-2455 (ask for Health HazMat).

HHMD EOS has three teams of highly trained, state-certified Hazardous Materials Specialists that:

- Determine the identity of the material(s) involved.
- Determine the type and severity of hazards present. The substance(s) involved must be classified or identified to determine the physical, chemical and toxicological properties that make it hazardous. These properties establish the risks and anticipated problems.
- Assess the threat to human health and environment.
- Assess the need for evacuations, site control, security and notifications.
- Direct interim remedial procedures to limit the spread of the materials.
- Determine the need to bring in other specialized HHMD units (Investigations, Cal-ARP).
- Perform environmental assessments using direct monitoring equipment, hazard categorization kits, and sampling equipment.
- Maintain written federal, state, and departmental or specialized records of the activities conducted at an incident.
- Issue cleanup and abatement orders to the responsible parties.
- Direct the proper and legal cleanup and removal of all released materials.
- Perform the final clearance inspection to certify that the site has been properly mitigated and allow re-occupancy when appropriate.

3. Health Services, Los Angeles County Department of (LACDHS)

LADHS serves the healthcare needs of the City's residents and encompasses clinics, the Emergency Medical Services Agency, rehabilitation services, and personal health services. The department runs four hospitals, as well as multiple comprehensive health centers. LADHS has mobilized command centers that automatically engage in the event of a natural or other disaster. In event of emergency, LADHS will communicate updated health information to residents via the news media and coordinate with local law enforcement and related federal agencies.

a) Los Angeles County Emergency Medical Services Agency (EMS Agency)

The EMS Agency coordinates and supports the County's emergency medical services system with hospitals, fire departments, ambulance providers and other healthcare partners to provide emergency medical services and maintains the County's emergency supplies. The EMS Agency serves as the lead for the emergency medical services system in the County and is responsible for coordinating all system participants in its jurisdiction, encompassing both public and private sectors.

4. Public Health, Los Angeles County Department of (LACDPH)

The LACDPH protects health, prevents disease, and promotes the health and well-being for all persons in Los Angeles County and is considered the City of Los Angeles' primary public health administrator. In radiological emergencies, the LACDPH is responsible for activating the Los Angeles County Multi-Agency Radiological Response Plan (MARRP). The LACDPH responds to all health emergencies and utilizes the following resources:

- a) Radiation Management has primary responsibilities for radiological monitoring and decontamination, and will dispatch a radiological monitoring team if needed. Whenever Radiation management is referenced in the MARRP, it includes the State Radiologic Health Branch—these two agencies seamlessly integrate during any radiological event.
- b) Public Health Emergency Response Team (PHERT) – a multidisciplinary team of public health personnel deployed in the early stages of a potential public health event to assist in coordinating public health functions during a multi-agency potential terrorism response. PHERT provides an on-scene presence, conducts rapid assessment, epidemiologic investigations, identifies risk factors for adverse outcomes, and targets resources for swift recovery and rehabilitation of affected communities. Any radiological disaster will require a rapid, coordinated response to assess the public health impact of an event.
- c) Geographic Information Systems (GIS) – during an emergency requiring LACDPH DOC activation, the EPRP will be responsible for staffing and maintaining the planning section with GIS aid. In this role, EPRP will be responsible for all incident-related data gathering and analysis activities to investigate and control public health incidents such as disease outbreaks and environmental events.
- d) Mass Prophylaxis Unit – plans and prepares for the rapid distribution of protective medications to residents of Los Angeles County that have been exposed or may potentially be exposed to a disease agent in an outbreak or act of terrorism which requires access to and distribution of pharmaceuticals to the public through emergency health clinics called Points of Dispensing (POD).

5. Sheriff's Department, Los Angeles County (LASD)

The Los Angeles County Sheriff's Department is the primary public safety agency for jurisdictions within the County of Los Angeles. The department maintains patrol divisions and homeland security, among many other responsibilities, for the County.

**C. State of California**

In California, the State's main role in any hazmat incident is to assist local government. However, the City of Los Angeles has no authority to assign responsibilities to State of California departments, many State departments have primary or support responsibilities for providing certain services to the City of Los Angeles. Those state departments are listed in the following, along with the services they are responsible for providing in the event of a radiological emergency.

1. California Department of Public Health (CDPH)

CDPH is the state agency responsible for protecting and ensuring the health of Californians. CDPH manages Branches, Divisions, and Laboratories to support the response to and recovery from radiological emergencies. Whenever Radiation Management is referenced in the Los Angeles County MARRP, it includes the Radiologic Health Branch (RHB)—these two agencies seamlessly integrate during any radiological event.

a) Radiologic Health Branch (RHB), Food, Drug, and Radiation Safety – is responsible for providing public health functions associated with administering a radiation control program. This includes licensing of radioactive materials, registration of X-ray-producing machines, certification of medical and industrial X-ray and radioactive material users, inspection of facilities using radiation, investigation of radiation incidents, and surveillance of radioactive contamination in the environment. RHB enforces the laws and regulations indicated below designed to protect the public, radiation workers, and the environment. RHB administers and enforces the following laws and implementing regulations:

- Radiation Control Law (Health & Safety Code Sec. 114960 et seq.)
- Radiologic Technology Act (Health & Safety Code Sec. 27(f).)
- Nuclear Medicine Technology Certification (Health & Safety Code Secs. 107150 through 107175.)
- Regulations implementing the above laws are in Title 17, California Code of Regulations, Division 1, Chapter 5, Subchapters 4.0, 4.5, & 4.6.

2. California Department of Transportation (Caltrans)

Caltrans is the state agency responsible for highway, bridge, and rail transportation planning, construction, and maintenance. Caltrans aids in pre-planning, road management and traffic control and routing. These tasks are also managed in cooperation with local law and state law enforcement. Caltrans and the California Highway Patrol have partnered in Southern California to maintain the Los Angeles Regional Transportation Management Center (LARTMC). LARTMC utilizes Intelligent Transportation Systems (ITS) such as Closed Circuit cameras (CCTV) to provide real-time data video, Changeable Message Signs (CMS) to provide lighted, digital message signs for real-time motorist traffic information during any emergency incident requiring surveillance and public information (travel alerts and warnings, road closures, and re-routing information).

3. California Division of Occupational Safety and Health (Cal/OSHA)

Cal/OSHA develops and implements a statewide emergency action plan for responding to significant events anywhere in the State of California. Regional and District Emergency Response Investigation Teams will assist federal, state and local Incident Command Systems in managing and investigating significant events such as catastrophic incidents, accidents, uncontrolled releases of hazardous substances or

natural disasters. All incidents shall be referred to the Radiologic Health Branch at CDPH for investigation. However, the Cal/OSHA will investigate incidents involving a combination of radioactive materials or sources and non-radioactive chemicals or physical hazards, but only when all radioactive materials or sources have been removed, or adequately controlled at the site, and the area has been deemed to be safe from radioactive exposures by personnel from the CDPH Radiologic Health Branch.

4. California Environmental Protection Agency (CalEPA)  
CalEPA develops, implements and enforces the state's environmental protection laws that ensure clean air, clean water, clean soil, safe pesticides and waste recycling and reduction.
  - a) The CalEPA Emergency Response Management Committee (ERMaC) coordinates preparedness for and responses to environmental emergencies in California under assigned statutory authorities. ERMaC's mission is to manage public health and environmental consequences of emergency events through effective, coordinated agency-wide preparedness, response, recovery and mitigation activities. ERMaC is responsible for emergency planning and training, and coordinates all Cal/EPA entities in emergency response and recovery. It serves as the forum for developing and maintaining the CalEPA collective Administrative Orders and emergency response plans.
  - b) CalEPA's Department of Toxic Substances Control (DTSC) – handles and responds to hazmat incidents. DTSC's Emergency Response Program (ERP) provides statewide response to actual and potential releases of hazardous substances that pose an acute threat to public health and/or the environment, including clandestine drug labs. The ERP also authorizes the expenditure of state funds; dispatches, assigns the scope of work, and provides direct oversight of hazardous materials contractors to perform assessment, stabilization, removal, and disposal as needed; and coordinates emergency response activities with various federal, state and local agencies including US EPA, Cal OES, California Department of Fish and Game, California Department of Justice, and local fire, health, and law enforcement agencies. Requests for assistance are handled by the DTSC Emergency Response Duty Officers who are on duty 24 hours a day, seven days a week, including weekends and holidays. Monday-Friday, 8:00 am-5:00 pm, call DTSC at (800) 260-3972 or (916) 255-6504. After hours, weekends, or on holidays, call the Cal OES Warning Control Center at (800) 852-7550 and ask to speak to the DTSC Emergency Response Duty Officer.
5. California Governor's Office of Emergency Services (Cal OES)  
Cal OES exists to enhance safety and preparedness in California to protect lives and property by effectively preparing for, preventing, responding to, and recovering from all threats, crimes, hazards, and emergencies. Cal OES is the coordinating entity between agencies. Requests for additional CalOES Type 2 Hazardous Materials Teams may be requested to assist local agencies.

6. California Highway Patrol (CHP)

The CHP provides safety, service, and security to the people of California by minimizing the loss of life, personal injury, and property damage; servicing the public; assisting other public agencies when appropriate; managing traffic and emergency incidents; and protecting public and state assets. The CHP is the state IC for any on-highway incident.

7. California National Guard - 95th Civil Support Team

In response to Presidential Decision Directive 39, the United States Army created Civil Support Teams to counter chemical/biological terrorist threat. The team managed under the National Guard and directed by the State Adjutant General, is completely self-contained and self-sufficient. The 95th Civil Support Team is primary responsible to Southern California, but can be deployed anywhere within the United States or its territories. The team is operational 24 hours a day, 7 days a week. They are located in Los Alamitos. The 9<sup>th</sup> CST primary responsibilities are:

- Assess a suspected nuclear, biological, chemical, or radiological event in support of the local Incident Commander.
- Advise the Incident Commander regarding appropriate actions.
- Facilitate requests for assistance to expedite arrival of additional state, federal and military assets to help save lives, prevent human suffering, and mitigate property damage, including additional CST Teams.

**D. Federal**

Although the City of Los Angeles has no authority to assign responsibilities to Federal agencies, many federal agencies provide support services to the City of Los Angeles. Those Federal agencies that may provide assistance include:

The Nuclear/Radiological Incident Annex (NRIA) to the National Response Framework (NRF) applies to incidents where the nature and scope of the incident requires a Federal response to supplement the State, Tribal, or local incident response. These incidents may occur on Federal-owned or -licensed facilities, privately owned property, urban centers, or other areas and may vary in severity from the small to the catastrophic and may result from inadvertent or deliberate acts.

1. Federal Bureau of Investigations (FBI)

To coordinate the Federal response, the FBI and FEMA have been assigned lead agency responsibility for crisis and consequence management, respectively, in response to a domestic terrorist threat or incident. The FBI is the lead agency for crisis management response to acts of domestic terrorism, which includes measures to identify, acquire, and plan the use of resources needed to anticipate, prevent, or resolve a threat or act of terrorism. The laws of the United States assign primary authority to the Federal government to prevent and respond to acts of terrorism; State and local governments provide assistance as required. The FBI provides

guidance on the crisis management response in the FBI Nuclear Incident Contingency Plan (classified) and the FBI Chemical/Biological Incident Contingency Plan (classified). The FBI Hazardous Materials Response Team for the Western Region responds at the request of the Field Division. The FBI main number is 703-632-7896.

2. National Oceanic and Atmospheric Administration (NOAA)

The NOAA is a federal agency focused on the condition of the oceans and the atmosphere – specifically hazardous chemical releases from toxic gas clouds, fires, and explosions. The NOAA HazMat Duty Officer is available 24-hours a day, seven days a week at 206-526-4911. The NOAA main number is 206-526-6317. NOAA provides the single Federal atmospheric prediction of hazardous material concentration to all levels of the Incident Command. The IMAAC is an off-site resource that supports the incident response remotely.

a) Interagency Modeling and Atmospheric Assessment Center (IMAAC)

The Interagency Modeling and Atmospheric Assessment Center (IMAAC) is an interagency center responsible for production, coordination, and dissemination of the Federal consequence predictions for an airborne hazardous material release.

b) Areal Locations of Hazardous Atmospheres (ALOHA)

Areal Locations of Hazardous Atmospheres (ALOHA) is a modeling program that estimates threat zones associated with hazardous releases, including toxic gas clouds, fires, and explosions. A threat zone is an area where a hazard (such as toxicity, flammability, thermal radiation, or damaging overpressure) has exceeded a user-specified Level of Concern (LOC).

3. United States Coast Guard (USCG)

The USCG Base in Los Angeles-Long Beach (LA/LB) provides direct support of USCG activities in Southern California. USCG provides Hazardous Materials Response Special Teams. The Pacific Strike Team maintains custody of a variety of response equipment to execute its USCG missions and duties under the National Response System. Personnel undergo a rigorous training program and are equipped to respond to oil discharges, HazMat releases, and WMD incidents.

4. United States Department of Defense (DOD)

The DOD supports local, state, and federal government agencies in planning for and responding to domestic emergencies. Local units may respond under the immediate response doctrine when necessary to save lives, prevent human suffering, or mitigate great property damage. Many units execute memorandums of understanding for mutual support of emergency services with local jurisdictions or municipalities.

a) Response Task Force (RTF) – May be deployed to support the federal crisis and consequence management operations in support of the Lead Federal Agency (LFA) during domestic operations. Certain DOD laboratories can also be called

upon to respond with specialized equipment and capabilities. Active Duty, National Guard, and Reserve forces possess expertise, trained manpower, and equipment that can support response to chemical, biological, radiological attacks at DOD installations and in civilian communities.

5. United States Department of Energy (DOE)

In radiological incidents, the DOE utilizes the Federal Radiological Monitoring and Assessment Center (FRMAC). The FRMAC is responsible for coordinating all environmental radiological monitoring, sampling, and assessment activities for the response. DOE leads the FRMAC for the initial response, then transitions FRMAC leadership to EPA for site cleanup. The FRMAC is established at or near the incident location in coordination with DHS, the coordinating agency, other Federal agencies, and State, tribal, and local authorities. A FRMAC normally includes representation from DOE, EPA, the Department of Commerce, the DHS National Communications System, the U.S. Army Corps of Engineers (USACE), and other Federal agencies as needed. Regardless of who is designated as the coordinating agency, when the FRMAC is activated, DOE, through the FRMAC or DOE Consequence Management Home Team (CMHT), coordinates all Federal environmental and agricultural radiological monitoring and assessment activities for the initial phases of the response. When the FRMAC is transferred to EPA, EPA assumes responsibility for coordination of radiological monitoring and assessment activities. Some participating Federal agencies have radiological planning and emergency responsibilities as part of their statutory authority. The monitoring and assessment activity coordinated by the FRMAC does not alter these responsibilities but complements them by providing for coordination of the Federal radiological monitoring and assessment response activities.

a) Aerial Measuring System (AMS)

The DOE AMS characterizes ground-deposited radiation from aerial platforms. These platforms include fixed-wing and rotary-wing aircraft with radiological measuring equipment, computer analysis of aerial measurements, and equipment to locate lost radioactive sources, conduct aerial surveys, or map large areas of contamination.

b) Accident Response Group (ARG)

The DOE ARG response element comprises scientists, technical specialists, crisis managers, and equipment ready to respond to the scene of a U.S. nuclear weapon accident to make the weapon safe for shipment.

c) National Atmospheric Release Advisory Center (NARAC)

The DOE NARAC provides a computer-based emergency preparedness and response predictive modeling capability. The NARAC is an off-site resource that supports the incident response remotely. NARAC provides real-time computer predictions of the atmospheric transport of material from radioactive releases and of the downwind effects on health and safety. When measurement data become available, they are used to improve model predictions.

d) Radiation Emergency Assistance Center/Training Site (REAC/TS)

The DOE REAC/TS provides medical advice, specialized training, and on-site assistance for the treatment of all types of radiation exposure accidents. Additionally, through the Cytogenetic Biodosimetry Laboratory (CBL), REAC/TS provides for post exposure evaluation of radiation dose received.

e) Radiological Assistance Program (RAP) Team

DOE RAP teams are located at various DOE Operations Offices, Site Offices, and National Laboratories. They can be dispatched to a radiological incident from Regional DOE Offices in response to a radiological incident. RAP teams provide first-responder radiological assistance to protect the health and safety of the general public, responders, and the environment and to assist in the detection, identification and analysis, and response to events involving radiological/nuclear material. Deployed RAP teams provide traditional field monitoring and assessment support as well as a search capability.

6. United States Department of Health and Human Services (HHS)

HHS is the United States government's agency for protecting the health of Americans and providing essential health services. In a radiation emergency, HHS provides just-in-time guidance for health care providers, primary physicians, with information on clinical diagnosis and treatment of radiation injuries during radiological and nuclear emergencies. The HHS Radiation Emergency Medical Management website is available at <http://www.remm.nlm.gov/index.html>

a) Centers for Disease Control and Prevention (CDC)

The CDC is one of the major operating components of the United States Department of Health and Human Services. The CDC Emergency Preparedness and Response website is CDC's primary source of information and resources for preparing for and responding to public health emergencies. The CDC Director's Emergency Operations Center (EOC) may be contacted at 770-488-7100. The CDC provides surveillance tools to monitor the state of health in the nation. These surveillance tools are crucial in the discovery and assessment of radiological emergencies:

i. National Notifiable Diseases Surveillance System (NNDSS)

NNDSS is a public health disease surveillance system that allows health officials monitor the occurrence and spread of diseases. Data is published in weekly and annual Morbidity and Mortality Weekly Report (MMWR).

ii. The CDC also has information on their Emergency Preparedness and Response website found at <http://www.bt.cdc.gov/radiation/>. The site includes agent-specific fact sheets, first responder information and lab information.

b) The Strategic National Stockpile (SNS) is the pharmaceutical and vaccine stockpile to counter potential biological and chemical threats and threats from widespread diseases that could affect large numbers of persons in the civilian population. The SNS is managed jointly by the Department of Homeland Security (DHS) and HHS.

7. United States Department of Homeland Security (DHS)

DHS maintains one vital mission: to secure the nation from the many threats we face and ensure a homeland that is safe, secure, and resilient against terrorism and other hazards. DHS prevents terrorism and enhances national security, secures and manages federal borders and ensures resilience to disasters.

a) Federal Emergency Management Agency (FEMA)

FEMA is the lead agency for consequence management, which entails both preparedness for and dealing with the consequences of a terrorist incident. Although the affected State and local governments have primary jurisdiction for emergencies, a terrorist attack involving weapons of mass destruction could create havoc beyond their capability to respond. FEMA established the Radiological Emergency Preparedness Program to (1) ensure the health and safety of citizens living around commercial nuclear power plants would be adequately protected in the event of a nuclear power plant accident and (2) inform and educate the public about radiological emergency preparedness. FEMA and the U.S. Nuclear Regulatory Commission (NRC) cooperate to promote and regulate REP in communities near commercial nuclear power plants. FEMA is the lead Federal agency for providing assistance to State, Tribal, and local governments and for review and evaluation of State, Tribal, and local REP plans and preparedness.

8. United States Environmental Protection Agency (EPA)

The EPA utilizes a Nuclear Incident Response Team (NIRT) consisting of DOE resources and EPA entities that perform nuclear or radiological emergency support functions (including accident response, search response, advisory, and technical operations functions), radiation exposure functions at the medical assistance facility known as the Radiation Emergency Assistance Center/Training Site (REAC/TC) and related radiological assistance functions. Under the Homeland Security Act of 2002, DHS has the authority to activate NIRT assets. When activated, the NIRT operates under DHS direction, authority, and control. When not operating as part of the NIRT, these assets remain under the control of the parent agency. NIRT Assets:

a) Aerial Measuring System

Airborne radiological sensing and surveying

b) Nuclear Weapons Accident Response Group

Technical expertise and equipment for response to U.S. nuclear weapon incidents

c) Federal Radiological Monitoring and Assessment Center

Operational and logistics management for radiological consequence management

d) National Atmospheric Release Advisory Capability

Computer modeling of radioactive and hazardous materials' transport, diffusion, and disposition.

e) Nuclear Emergency Support Teams:

- Nuclear/Radiological Advisory Teams provide limited search and detection capability directly supporting the Domestic Emergency Support Team
- Joint Technical Operations Team provides advanced technical capabilities to advise on render safe operations and the movement of nuclear devices
- Lincoln Gold Augmentation Team provides technical (nuclear) advice to U.S. military special mission units
- Search Response Team provides specialized search capability for lost or stolen nuclear devices, weapons or material.

f) Radiological Assistance Program

Regional first response for incidents involving radiological material

g) Radiation Emergency Assistance Center/Training Site (REAC/TS)

Advanced medical assistance and training for radiation exposure accidents.

- i. Radiological Emergency Response Team (RERT) – The EPA RERT provides resources, including personnel, specialized equipment, technical expertise, and laboratory services to aid coordinating and cooperating agencies and State, tribal, and local response organizations in protecting the public and the environment from unnecessary exposure to ionizing radiation from radiological incidents. The RERT is a designated Special Team under the FEMA National Continuity Programs Directorate. It may become part of the FRMAC if one is established. The RERT provides the following:
  - Monitoring, sampling, laboratory analyses, and data assessments using field emergency response assets.
  - Technical advice and assistance for containment, cleanup, restoration, and recovery following a radiological incident.
  - Assistance in the development and implementation of a long-term monitoring plan and long-term recovery plans.
  - Coordination with fixed laboratory assets for in-depth analysis and evaluation of large numbers of site-specific emergency response samples.
- ii. The EPA RadNet comprises a system of fixed and deployable radiation monitoring stations. The RadNet fixed monitoring stations provide a nationwide environmental monitoring network for assessment of nationwide impacts from a radiological incident. The deployable component can provide site-specific emergency monitoring for further assessment of localized impacts during radiological emergencies.

9. United States Nuclear Regulatory Commission (NRC)

The NRC was created as an independent agency by Congress in 1974 to ensure the safe use of radioactive materials for beneficial civilian purposes while protecting people and the environment. The NRC regulates commercial nuclear power plants and other uses of nuclear materials, such as in nuclear medicine, through licensing, inspection and enforcement of its requirements. The NRC emergency preparedness programs enable emergency personnel to rapidly identify, evaluate, and react to a

wide spectrum of emergencies, including those arising from terrorism or natural events such as hurricanes. NRC's incident response program integrates the overall NRC capabilities for the response and recovery of radiological incidents and emergencies involving facilities and materials regulated by the NRC or an Agreement State. Under the National Response Framework, the NRC will coordinate with other Federal, State, and local emergency organizations in response to various types of domestic events.

**E. Non-Governmental Organizations (NGO)**

Although the City of Los Angeles has no authority to assign responsibilities to non-governmental organizations, many NGOs provide support services to the City of Los Angeles. Those NGOs that may provide assistance include:

1. American Red Cross Los Angeles Region (Red Cross)  
The Red Cross has responsibilities as outlined in the EOPs of Los Angeles County, State of California, and FEMA and provides services associated with mass care of populations. In the event of a chemical incident requiring evacuation and sheltering, the Red Cross will engage in pre-determined operations for evacuation, mass care and sheltering and deploy an agency representative to the City EOC unless otherwise notified.
2. Hospitals (Non-Profit and For-Profit)  
Local hospitals and doctors will be the first to see illness in the event of a bioterrorist attack. Health care staff assists in early detection efforts by reporting unusual disease occurrence to the Public Health Department and by learning the syndromes associated with possible bioterrorist disease agents.

#### **IV. DIRECTION, CONTROL, AND COORDINATION**

This Nuclear Appendix may be activated when the Mayor proclaims a local emergency, or if there is an automatic activation. An automatic activation follows a disaster or event that the City has identified, in advance, as one that requires an immediate response. Disasters requiring automatic activation are those events that pose an immediate threat to public safety.

Some portions of this Appendix, such as the initial response, go into effect immediately following a nuclear-related event. The remainder of this Appendix is only activated when the incident grows in scope to a point where activation of the Emergency Operations Center (EOC) is warranted. Activation of the EOC is not necessarily automatic or necessary with all nuclear incidents.

In advance of or simultaneous with the City plan activation, City departments and agencies will also activate their departmental nuclear-related plans.

## **V. ADMINISTRATION, FINANCE, AND LOGISTICS**

Each department is required to have documented internal administrative procedures in place to track financial costs related specifically to the response and/or recovery of an incident. These procedures must include tracking all expenditures specifically related to the incident, including personnel costs such as straight and overtime payroll costs related specifically to the incident. Departments are also required to have in place, documented internal administrative procedures for requesting, fulfilling and tracking internal resource requests, department to department (DOC-to-DOC) resource requests, field to department (field-to-DOC) and department to EOC (DOC-to-EOC). Each department is responsible for the tracking of their own resources, including the tracking of personnel.

If an incident meets designated thresholds for Proclamation or Declaration of a State and/or Federal Emergency or Disaster, the Department of the Chief Administrative Officer (CAO), acting as the City's Authorized Agent, will develop a method for collecting financial documentation from departments as needed for submission as part of the City's reimbursement application process.

## **VI. AGREEMENTS AND UNDERSTANDINGS**

There are no Contracts, Memoranda of Agreements or Understandings for this Appendix.

## VII. AUTHORITIES AND REFERENCES

### A. Authorities

#### 1. Federal

- a) Americans with Disabilities Act of 1990, as amended.  
<http://www.ada.gov/pub/ada.htm>
- b) Atomic Energy Act (AEA) of 1954, as amended, (42 U.S.C. §§ 2011–2297 (2003)).
- c) Atomic Energy Act (AEA) of 1954, as amended, (42 U.S.C. §§ 2011–2297 (2003)).
- d) Comprehensive Environmental Response, Compensation and Liability Act (CERCLA or Superfund) 42 U.S.C. §9601 et seq. (1980).  
<http://epw.senate.gov/cercla.pdf>  
  
Emergency Planning and Community Right-to-Know Act (EPCRA) 42 U.S.C. 116. <http://www.gpo.gov/fdsys/pkg/USCODE-2010-title42/html/USCODE-2010-title42-chap116.htm>
- e) Energy Reorganization Act of 1974 (5 U.S.C. §§ 5313–5316, 42 U.S.C. §§ 5801–5891 (2002)).
- f) Executive Order 12656 of November 18, 1988.
- g) Homeland Security Act of 2002 (PL 107-296 Section 301)  
[http://www.dhs.gov/xlibrary/assets/hr\\_5005\\_enr.pdf](http://www.dhs.gov/xlibrary/assets/hr_5005_enr.pdf)
- h) Homeland Security Presidential Directive-5 (HSPD-5).  
<http://www.gpo.gov/fdsys/pkg/PPP-2003-book1/pdf/PPP-2003-book1-doc-pg229.pdf>
- i) National Incident Management System. Department of Homeland Security. December 2017.  
[https://www.fema.gov/media-library-data/1508151197225-ced8c60378c3936adb92c1a3ee6f6564/FINAL\\_NIMS\\_2017.pdf](https://www.fema.gov/media-library-data/1508151197225-ced8c60378c3936adb92c1a3ee6f6564/FINAL_NIMS_2017.pdf)

- j) National Response Framework. Department of Homeland Security. January 2019. [https://www.fema.gov/media-library-data/1582825590194-2f000855d442fc3c9f18547d1468990d/NRF\\_FINALApproved\\_508\\_2011028v1040.pdf](https://www.fema.gov/media-library-data/1582825590194-2f000855d442fc3c9f18547d1468990d/NRF_FINALApproved_508_2011028v1040.pdf)
  - k) Public Health Service Act (PHSA)
  - l) Robert T. Stafford Disaster Relief and Emergency Assistance Act, Public Law 93-288, as amended. [https://www.fema.gov/media-library-data/1582133514823-be4368438bd042e3b60f5cec6b377d17/Stafford\\_June\\_2019\\_508.pdf](https://www.fema.gov/media-library-data/1582133514823-be4368438bd042e3b60f5cec6b377d17/Stafford_June_2019_508.pdf)
  - m) Title 50, U.S. Code, War and National Defense
2. State of California
- a) California Code of Regulations, Title 19, Chapters 1 through 6, including:
    - i. Chapter 1, Standardized Emergency Management System. <https://law.resource.org/pub/us/ccr/gov.ca.oal.title19.html>
    - ii. Chapter 6, Disaster Assistance Act Regulations. <http://www.kintera.org/atf/cf/%7BE475D1A4-FB9C-4135-AE8B-9310119C7F19%7D/CHAPTER%206%20%20CDAA.pdf>
  - b) California Constitution. <http://law.justia.com/california/constitution/>
  - c) California Emergency Services Act, 2006. <http://hazardmitigation.calema.ca.gov/docs/ESA-all8-06-final.pdf>
  - d) California Health and Safety Code.
    - i. California Code - Section 25507: CAL. HSC. CODE § 25507. <http://codes.lp.findlaw.com/cacode/GOV/1/3/d2/2/5/7/s25507>
    - ii. Safe Drinking Water and Toxic Enforcement Act of 1986, Proposition 65. Section 25249.5 and 25249.6. <http://oehha.ca.gov/prop65/pdf/P65LAW6.pdf>
  - e) California State Emergency Plan. <http://www.calema.ca.gov/PlanningandPreparedness/Pages/State-Emergency-Plan.aspx>

3. County of Los Angeles
  - a) Operational Area Emergency Response Plan  
<http://lacoa.org/PDF/OA%20ERP.pdf>
  
4. City of Los Angeles
  - a) City of Los Angeles Emergency Operations Plan  
<http://emergency.lacity.org/EmergencyCheckList/EmergencyPlansAnnexes/index.htm>
  
  - b) Mayor's Executive Directive No. 15, Emergency Management. Issued March 17, 2011.
  
  - c) Mayor's Executive Directive No. 16, Disaster Service Workers. Issued March 17, 2011.
  
  - d) Mayor's Executive Directive No. 17, Emergency Operations Center. Issued March 17, 2011.
  
  - e) Mayor's Executive Directive No. 18, National Incident Management System. Issued March 17, 2011.
  
  - f) Mayor's Executive Directive No. 19, Mayor's Emergency Response Council. Issued March 17, 2011.
  
  - g) Mayor's Executive Directive No. 23, Individuals with Disabilities and Access and Functional Needs. Issued May 23, 2011.

## **B. References**

1. City of Los Angeles Department Emergency Plans
  - a) Los Angeles World Airports
  - b) Los Angeles Department of Building and Safety
  - c) Department on Disability
  - d) City of Los Angeles Emergency Management Department
  - e) Los Angeles Fire Department
  - f) City of Los Angeles General Services Department
  - g) Los Angeles Housing Department
  - h) Los Angeles Police Department
  - i) Port of Los Angeles
  - j) City of Los Angeles Department of Recreation and Parks (RAP)
  - k) City of Los Angeles Department of Public Works
  - l) Los Angeles Department of Water and Power (LADWP)

2. Federal Emergency Management Agency (FEMA) Biological Incident Annex.  
[http://www.fema.gov/pdf/emergency/nrf/nrf\\_BiologicalIncidentAnnex.pdf](http://www.fema.gov/pdf/emergency/nrf/nrf_BiologicalIncidentAnnex.pdf)
3. Federal Emergency Management Agency (FEMA) Emergency Support Function (ESF) #10 – Oil and Hazardous Materials Response Annex.  
<http://www.fema.gov/pdf/emergency/nrf/nrf-esf-10.pdf>
4. Federal Emergency Management Agency (FEMA) Nuclear/Radiological Incident Annex.  
[http://www.fema.gov/pdf/emergency/nrf/nrf\\_nuclearradiologicalincidentannex.pdf](http://www.fema.gov/pdf/emergency/nrf/nrf_nuclearradiologicalincidentannex.pdf)
5. 2012 Emergency Response Guidebook.  
<http://phmsa.dot.gov/staticfiles/PHMSA/DownloadableFiles/Files/Hazmat/ERG2012.pdf>
6. Local, Operational, and National COOP Plans and References  
<http://www.fema.gov/about/org/ncp/coop/index.shtm>
7. Planning Guidance for Response to a Nuclear Detonation, Second Edition, June 2010, Developed by the National Security Staff, Interagency Policy Coordination Subcommittee for Preparedness and Response to Radiological and Nuclear Threats. Accessed from <http://www.epa.gov/rpdweb00/docs/er/planning-guidance-for-response-to-nuclear-detonation-2-edition-final.pdf>
8. National Oil and Hazardous Substances Pollution Contingency Plan (NCP)  
<http://www.epa.gov/oem/content/lawsregs/ncpover.htm>

## ATTACHMENT D-1: ACRONYMS

Acronym	Full Name
ADA	Americans With Disabilities Act
μR	Micro-Roentgen
μSv	Micro-Sievert
ALARA	As Low As Reasonably Achievable
ALOHA	Areal Locations of Hazardous Atmospheres
AMS	Aerial Measuring System
ANF	Angeles National Forest
ARCC	Airport Response and Coordination Center
ARG	Accident Response Group
ARS	Acute Radiation Syndrome
ATC	Air Traffic Control
C&M	Construction and Maintenance
Cal/OSHA	California Division of Occupational Safety and Health
CalEPA	California Environmental Protection Agency
Cal OES	California Governor's Office of Emergency Services
Caltrans	California Department of Transportation
CAO	City Administrative Officer
CBL	Cytogenetic Biodosimetry Laboratory
CBRN	Chemical, Biological, Radiological, Nuclear
CCTV	Closed Circuit Television
CDC	Centers for Disease Control and Prevention
CDPH	California Department of Public Health
CHP	California Highway Patrol
City	City of Los Angeles
CMHT	United States Department of Energy Consequence Management Home Team
CMS	Changeable Message Sign
COOP	Continuity of Operations
CPG	Comprehensive Preparedness Guide
CRZ	Contamination Reduction Zone
CTSOB	Counter-Terrorism and Special Operations Bureau
DHS	United States Department of Homeland Security
DHS	United States Department of Homeland Security
DMAT	Disaster Medical Assistance Teams

DOC	Department Operations Center
DOD	United States Department of Defense
DOE	United States Department of Energy
DPW	Department of Public Works
DTSC	California Environmental Protection Agency Department of Toxic Substance Control
EAS	Emergency Alert System
EMD	Emergency Management Department
EMS	Emergency Medical Services
EMS Agency	Los Angeles County Emergency Medical Services Agency
EOB	City of Los Angeles Emergency Operations Board
EOC	Emergency Operations Center
EOO	Emergency Operations Organization
EOP	Emergency Operations Plan
EOS	Emergency Operations Section
EPA	United States Environmental Protection Agency
ERMaC	Emergency Response Management Committee
ERP	Emergency Response Program
ESD	Emergency Services Division
ESF	Emergency Support Function
FAA	Federal Aviation Administration
FBI	Federal Bureau of Investigations
FEMA	Federal Emergency Management Agency
FNSS	Functional Needs Support Services
FRMAC	Federal Radiological Monitoring and Assessment Center
FSO	Financial Services Organization
GETS	Government Employee Telecommunications Services
GIS	Geographic Information Systems
GSD	Department of General Services
Gy	Gray
HazMat	Hazardous Material
HEAR	Hospital Emergency Administrative Radio
HHMD	Health Hazardous Materials Division
HHS	United States Department of Health and Human Services
HMU	Hazardous Materials Unit
IAP	Incident Action Plan
IC	Incident Command
ICP	Incident Command Post

ICS	Incident Command Structure
IMAAC	Interagency Modeling and Atmospheric Assessment Center
IMC	Incident Management Center
IMTG	Information Management and Technology Group
ITS	Intelligent Transportation Systems
J/kg	Joule per Kilogram
JHAT	Joint Hazard Assessment Team
JIC	Joint Information Center
KI	Potassium Iodide
LA/LB	Los Angeles-Long Beach
LACDHS	Los Angeles County Department of Health Services
LACDMH	Los Angeles County Department of Mental Health
LACDPH	Los Angeles County Department of Public Health
LACoFD	Los Angeles County Fire Department
LADBS	Los Angeles Department of Building and Safety
LADOT	Los Angeles Department of Transportation
LADWP	Los Angeles Department of Water and Power
LAFD	Los Angeles Fire Department
LAPD	Los Angeles Police Department
LARTMC	Los Angeles Regional Transportation Management Center
LASD	Los Angeles County Sheriff's Department
LAWA	Los Angeles World Airports
LD	Light Damage
LFA	Lead Federal Agency
LOC	Level of Concern
MAC	Medical Alert Center
MARRP	Los Angeles County Multi-Agency Radiological Response Plan
MD	Moderate Damage
MFI	Mass or Multi-Fatality Incident
MMWR	Morbidity and Mortality Weekly Report
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
M-POD	Medical Point of Dispensing
mR	milli-roentgen
MSD	Maintenance Services Division
NARAC	National Atmospheric Release Advisory Center
NG	No-Go

NGO	Non-Governmental Organization
NIMS	National Incident Management System
NIRT	Nuclear Incident Response Team
NNDSS	National Notifiable Diseases Surveillance System
NOAA	National Oceanic and Atmospheric Administration
NOC	United States Department of Homeland Security National Operations Center
NRC	United States Nuclear Regulatory Commission
NRF	National Response Framework
NRIA	Nuclear/Radiological Incident Annex
OA	Los Angeles Operational Area
PHERT	Public Health Emergency Response Team
PIER	Public Information and Emergency Response
PIO	Public Information Officer
POD	Point of Dispensing
POLA	Port of Los Angeles
PPE	Personal Protective Equipment
PSAs	Public Service Announcements
R	Roentgen
R/h	Roentgen per hour
RAD	Roentgen Absorbed Dose
RAP	Radiological Assistance Program
RDD	Radiological Dispersal Device
REAC/TS	Radiation Emergency Assistance Center/Training Site
Red Cross	American Red Cross Los Angeles Region
REM	Roentgen Equivalent Man
RERT	United States Environmental Protection Agency Radiological Emergency Response Team
RHB	Radiologic Health Branch
RTF	Response Task Force
SA	Situational Awareness
SAT	Safety Assessment Team
SEMS	Standardized Emergency Management System
SID	Scientific Investigation Division
SITA	Societe Internationale de Telecommunications Aeronautiques
SNS	Strategic National Stockpile
SONGS	San Onofre Nuclear Generating System
SOP	Standard Operating Procedure
Sv	Sievert

TSA	Transportation Security Administration
UC	Unified Command
UHF	Ultra High Frequency
USACE	U.S. Army Corps of Engineers
USCG	United States Coast Guard
VHF	Very High Frequency
VNC	Ventura County
WMD	Weapons of Mass Destruction
WPD	Watershed Protection Division
WPS	Wireless Priority System
WTS	Wireless Telephone System

## **ATTACHMENT D-2: NUCLEAR DAMAGE ZONES**

In order to provide some basic parameters to describe the generic urban environment this document assumes a nominal 10 KT detonation in a modern city. While distances would vary, the zone descriptions apply to any size nuclear explosion. Building types will include a mix of high rise commercial structures of varying ages and design, with some residential high rises, and high daytime population density at the ground zero location. Building heights and population density are assumed to drop off with distance from the ground zero location in favor of low, lighter constructed buildings, and increased residential structures.

### **LIGHT DAMAGE (LD) ZONE:**

- Damage is caused by shocks, similar to those produced by a thunderclap or a sonic boom, but with much more force. Although some windows may be broken over 10 miles (16 km) away, the injury associated with flying glass will generally occur at overpressures above 0.5 psi. This damage may correspond to a distance of about 3 miles (4.8 km) from ground zero for a 10 KT nuclear explosion. The damage in this area will be highly variable as shock waves rebound multiple times off of buildings, the terrain, and even the atmosphere.
- As a responder moves inward, windows and doors will be blown in and gutters, window shutters, roofs, and lightly constructed buildings will have increasing damage. Litter and rubble will increase moving towards ground zero and there will be increasing numbers of stalled and crashed automobiles that will make emergency vehicle passage difficult.
- Blast overpressures that characterize the LD zone are calculated to be about 0.5 psi at the outer boundary and 2–3 psi at the inner boundary. More significant structural damage to buildings will indicate entry into the moderate damage zone.

### **MODERATE DAMAGE (MD) ZONE:**

- Responders may expect they are transitioning into the MD zone when building damage becomes substantial. This damage may correspond to a distance of about one mile (1.6 km) from ground zero for a 10 KT nuclear explosion. The determination is made by ground-level and/or overhead imagery.
- Observations in the MD zone include significant structural damage, blown out building interiors, blown down utility lines, overturned automobiles, caved roofs, some collapsed buildings, and fires. Some telephone poles and street light poles will be blown over. In the MD zone, sturdier buildings (e.g., reinforced concrete) will remain standing, lighter commercial and multi-unit residential buildings may be fallen or structurally unstable, and many wood frame houses will be destroyed.
- Substantial rubble and crashed and overturned vehicles in streets are expected, making evacuation and passage of rescue vehicles difficult or impossible without street clearing. Moving towards ground zero in the MD zone, rubble will completely block streets and require heavy equipment to clear.
- Within the MD zone, broken water, gas, electrical, and communication lines are expected and fires will be encountered.

- Many casualties in the MD zone will survive, and these survivors, in comparison to survivors in other zones, will benefit most from urgent medical care.
- A number of hazards should be expected in the MD zone, including elevated radiation levels, potentially live downed power lines, ruptured gas lines, unstable structures, sharp metal objects and broken glass, ruptured vehicle fuel tanks, and other hazards.
- Visibility in much of the MD zone may be limited for an hour or more after the explosion because of dust raised by the shock wave and from collapsed buildings. Smoke from fires will also obscure visibility.
- Blast overpressures that characterize the MD zone are an outer boundary of about 2–3 psi and inner boundary of about 5–8 psi. When most buildings are severely damaged or collapsed, responders have encountered the severe damage zone.

**SEVERE DAMAGE (SD)<sup>6</sup> ZONE:**

- Few, if any, buildings are expected to be structurally sound or even standing in the SD zone, and very few people would survive; however, some people protected within stable structures (e.g., subterranean parking garages or subway tunnels) at the time of the explosion may survive the initial blast.
- Very high radiation levels from prompt and residual origin and other hazards are expected in the SD zone, significantly increasing risks to survivors and responders. Responders should enter this zone with great caution, only to rescue known survivors.
- Rubble in streets is estimated to be impassable in the SD zone making timely response impracticable. Approaching ground zero, all buildings will be rubble and rubble may be 30 feet deep or more.
- The SD zone may have a radius on the order of a 0.5 mile (0.8 km) for a 10 KT detonation. Blast overpressure that characterizes the SD zone is 5–8 psi and greater.

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<sup>6</sup> Previously called “No-Go (NG) Zone”.

## **ATTACHMENT D-3: MEDICAL POINTS OF DISPENSING (M-POD) IMPLEMENTATION GUIDELINES**

### **PROGRAM SUMMARY:**

#### **MEDICAL POINTS OF DISPENSING (M-PODs) IMPLEMENTATION GUIDELINES**

This program is under constant review and may be updated at any time. Contact the City of Los Angeles Emergency Management Department (EMD) for the latest version and for more complete details.

### **SUMMARY**

The Medical Points of Dispensing (M-POD) Implementation Guidelines provides a scalable, collaborative, and operation-based framework that is consistent with the City of Los Angeles Emergency Management Structure, Los Angeles County Department of Public Health and Federal and State Emergency Management Guidelines.

As noted in Los Angeles County's Public Health All-Hazards Emergency Response Plan, the City and County of Los Angeles is vulnerable to terrorism and natural disasters. With increasing concern that Los Angeles is vulnerable to possible chemical, biological, or radiological attacks, as well as the dangers posed by pandemic influenza and other emergent disease threats. Public Health is now recognized as an essential element of emergency planning and response.

The City of Los Angeles does not directly provide public health services, as these services are provided by the Los Angeles County Department of Public Health (LACDPH). However, the City plays a critical support role in assuring that public health agencies, both local and state, can efficiently and effectively perform their mission to protect the public health in emergency situations. Among the critical functions the City performs are:

- Safety and security for public health workers and clients.
- Locating venues and facilities for the administration of mass public health services including mass prophylaxis, inoculation and immunization.
- Traffic control, crowd management and security.
- Materials, supplies and logistics.
- Crisis communications.
- Non-clinical support personnel.
- Transportation resources in support of public health missions.

These guidelines provide a flexible framework for addressing a wide variety of situations requiring the large-scale dispensing of medication to protect the public's health. This includes, but is not limited to, mass dispensing of oral prophylactic medication or vaccine related to any intentional or naturally-occurring disease event.

All M-PODs function and operation will be accessible and have the ability to be accessed by all people, including people with disabilities and others with access and functional needs.

### **WHAT IS AN M-POD AND MASS PROPHYLAXIS?**

An M-POD is part of the Public Health response to a disease outbreak or bioterrorism attack. M-PODs are temporary mass medication dispensing sites that are capable of providing medications (prophylaxis) or vaccinations to protect the general population from biological threats or epidemics. Routine medical care is not provided in an M-POD.

The purpose of an M-POD is to quickly dispense medications to large groups of people in order to stop the spread of a disease. Only individuals who have potentially been exposed to the disease causing the public health emergency will be able to receive antibiotics or vaccine at an M-POD. M-PODs are designed to provide medication(s) that will PREVENT someone from becoming ill with a disease. Persons who are already ill will not be able to seek treatment at an M-POD. Those persons who are ill and require treatment will have to be seen at a clinic or the hospital.

Mass prophylaxis is needed when a bioterrorism or communicable disease threat is detected by the LACDPH Acute Communicable Disease Control Program. LACDPH will establish one or more M-POD sites to rapidly dispense prophylactic medications to unaffected members of the community in order to prevent the spread of a disease. Residents who are ill will be treated at hospitals, not at M-POD sites.

The number of M-POD sites to be activated will be determined by the LACDPH and will depend on the population likely to be affected by the incident. The higher the possible affected population, the more M-POD sites will need to be activated. In the beginning of an incident, the M-POD staffing will likely be almost entirely from LACDPH. Each M-POD site will be jointly managed by the City of Los Angeles and the LACDPH through unified command.

While M-POD sites are active and dispensing operations are underway, LACDPH will also be conducting disease investigation operations in order to obtain a greater understanding of the communicable disease threat and how to respond to it more effectively. As the nature and severity of the threat becomes clearer from the investigation, mass prophylaxis operations may be expanded or contracted in scope.

### **PURPOSE**

These guidelines will be used during a public health emergency when it becomes necessary to conduct large-scale medication dispensing to the general public. These guidelines will contain all information necessary for M-POD management, including point-of-contact information, client flow charts, staffing models, M-POD site management guidance, and how to access maps and other information for specific M-POD sites.

## **SCOPE**

The City of Los Angeles Emergency Management Department (EMD) has developed these guidelines for M-POD management. Copies of these guidelines will be maintained in the following locations:

- City of Los Angeles Emergency Management Department.
- City of Los Angeles Emergency Operations Center (EOC).
- Each site designated as a POD.
- Los Angeles County Department of Public Health Emergency Preparedness and Response Program.
- Each City of Los Angeles Department with POD set-up and management responsibilities.

## **ASSUMPTIONS AND DEFINITIONS**

To qualify as a NON-EMERGENCY public health event, the Los Angeles County Department of Public Health notifies EMD of the need to activate at least one (1) M-POD with a minimum of fourteen (14) days notice OR the public health event does not present an imminent life threat.

To qualify as an EMERGENCY public health event, the Los Angeles County Department of Public Health notifies EMD of the need to activate at least one (1) M-POD with less than 48 hours notice OR the public health event presents an imminent life threat.

Only the Los Angeles County Public Health Officer has the authority to declare a public health emergency.

The City of Los Angeles supports Los Angeles County Department of Public Health in implementing and managing M-PODs by providing non-clinical resources including, but not limited to:

- Facilities (when available) along with corresponding Incident Action Plans.
- Security and traffic control officers (as necessary).
- Non-clinical staff.
- Barricades, tables, chairs, and other non-public health specific supplies.

## **ROLES & RESPONSIBILITIES**

The Emergency Management Department (EMD) coordinates response and reconstruction activities on behalf of all City departments and partner agencies. While some activities may fall under the jurisdiction of the County of Los Angeles, City departments and partner agencies maintain support and/or coordination responsibilities. City departments and partner agencies are responsible for tracking their respective personnel and resource costs incurred by recovery activities.

All responsibilities attributed to a specific position must be completed by the person who holds that position on a permanent basis or an appointed designee. The private sector may play an integral role in recovery efforts, especially those that manage, maintain, or support critical infrastructure.

Accordingly, significant coordination and outreach with those businesses may be required. Federal and State response and recovery operations may be mutually coordinated to ensure effective mobilization of resources to the impacted areas in the City. If a local and state Proclamation of Emergency has been issued by the Mayor and Governor respectively, the State of California and the Federal government have the authority to implement a range of recovery assistance and funding programs for individuals and families, businesses, and non-profit organizations.

Government cannot necessarily direct efforts for individuals, families, businesses, and communities, but can stabilize the community, facilitating the restoration of services, reducing obstacles, and providing financial assistance.

## **AUTHORITIES**

### **A. Federal Statutes and Executive Orders**

The Public Health Security and Bio-terrorism Preparedness and Response Act of 2002 is designed to improve the ability of the United States to prevent, prepare for, and respond to bioterrorism and other public health emergencies. The Act also addresses the provision of federal assistance to state and local governments in the event of bio-terrorism or other public health emergency.

The Public Health Services Act provides that the Secretary of the Department of Health and Human Services (HHS) may declare a public health emergency under certain circumstances, and authorizes the Secretary to prepare for and respond to public health emergencies. The Act also empowers the Secretary to make and enforce quarantine regulations necessary to prevent the introduction, transmission, or spread of communicable diseases from foreign countries into the States, or from one state to another.

The Animal Health Protection Act of 2002 includes the statutory framework which allows the USDA's Animal and Plant Health Inspection Service (APHIS) Veterinary Services to act to protect U.S. animal health from a foreign pest or disease.

Executive Order 13295 specifies certain quarantinable communicable diseases for which quarantine regulations may be promulgated. Such regulations may provide for the apprehension, detention, or conditional release of individuals to prevent the introduction, transmission, or spread of suspected communicable diseases.

### **B. State Statutes**

The California Emergency Services Act (Chapter 7, Government Code) codifies policies and procedures to be followed by state and local agencies in responding to emergencies and disasters. In addition to conferring emergency powers on the Governor and specified local officials, the Act provides the statutory authority for California's mutual aid system.

The California Disaster Assistance Act (Chapter 7.5, Government Code) defines the roles and responsibilities of state agencies in responding to emergencies, and provides for the funding of state disaster response activities.

The California Master Mutual Aid Agreement has been adopted by most cities and all 58 counties in the State. The Agreement creates a formal structure within which each jurisdiction retains control of its own personnel and equipment resources, while giving and receiving help whenever it is needed. The State is a signatory to this agreement and provides available resources to assist local jurisdictions in emergencies.

The California Code of Regulations (Title 19, Chapters 1 thru 6) details emergency response procedures to be followed by State and local agencies. These regulations establish the Standardized Emergency Management System (SEMS) for response to emergencies.

Emergency medical service statutes in California are governed under Division 2.5, Health and Safety Code. The Health and Safety Code also details the authorities of the county Public Health Officer (PHO) including authority to:

- Enforce orders and regulations pertaining to quarantine (H&S Sec. 101030)
- Take preventive measure to protect the public health during a state of emergency
- Take emergency measures as may be necessary to prevent the spread of disease during a disaster or emergency.

#### C. County Authorities

The following California Health and Safety Codes grant authorities to the County Health Officer:

- Section 101375: When the governing body of a city in the county consents by resolution or ordinance, the County Health Officer shall enforce and observe in the city all of the following:
  - Orders and quarantine regulations prescribed by the Department and other regulations issued under this code.
  - Statutes relating to the public health.
- Section 101380: The resolution or ordinance shall be adopted and a certified copy served on the Clerk of the Board of Supervisors on or before the first day of March of any year, and the services of the County Health Officer in the City shall commence on the first day of July following service of notice. The services shall continue indefinitely until the governing body of the City terminates them by adoption of a resolution and ordinance and service of a certified copy on the Clerk of the Board of Supervisors on or before the first day of March of any subsequent year. The services of the County Health Officer shall terminate on the first day of July following service of notice.

#### D. Los Angeles City Ordinances

- Administrative Code Division 8, chapter 3 establishes the emergency operations organization of the City and defines its structure and responsibilities. This code section also authorizes the mayor to declare a local emergency, and enumerates other powers the mayor may exercise in an emergency situation.
- Mayoral Directive EP-1 requires City employees to report to work in an emergency, empowers the Mayor to assign employees to emergency duties; stipulates that all requests for Mutual Aid must be approved by the Mayor; and requires each department to prepare and annually update an emergency plan.
- Administrative Code Article XII - Department of Health - This article suspended July 1, 1964 upon transference City Health Department functions to Los Angeles County by City Ordinance No. 127,509, by authority of City Charter, Section 2(11)(t.)

#### **POD LOCATIONS**

The City of Los Angeles has identified 90 locations as M-POD sites. Each site has been evaluated and a site plan has been completed. Each site plan consists of M-POD footprint, client flow, security plan, traffic management plan and other facility and floor plans.

#### **INCIDENT ACTION PLANS**

Each site identified has an Incident Action Plan (IAP) developed for use as both a pill and vaccine M-POD. These plans include strategies, tactics, and procedures for non-emergency and emergency M-PODs.

#### A. Incident Command Forms

Each IAP contains ICS forms and attachments applicable to all M-PODs, and those that are specific to emergency or non-emergency M-PODs. Unified Command will keep only those forms and attachments that are applicable to the public health event and remove all others.

ICS FORMS	FOR USE AT ALL MEDICAL PODS	FOR USE AT EMERGENCY MEDICAL PODS	FOR USE AT NON-EMERGENCY MEDICAL PODS
202 Event Objectives	X		
203 Organization Assignment List	X		
204 Assignment List: Form Distribution Group	X		
204 Assignment List: Registration/Screening Group	X		
204 Assignment List: Dispensing Group	X		
204 Assignment List: Evaluation Group	X		
204 Assignment List: Question & Answer Group	X		
204 Assignment List: Flow Control Group	X		
204a Assignment List Attachment: Diagram	X		
204 Assignment List: Law Branch – Exterior Security Group		X	
204a Assignment List Attachment: Diagram		X	
204 Assignment List: Law Branch – Interior Security Group		X	
204a Assignment List Attachment: Diagram		X	
204 Assignment List: Law Branch – Security Group			X
204 Assignment List: Law Branch – Traffic Control Group		X	
205 Communications Plan (Radio)	X		
205T Communication Plan (Telephone)	X		
206 Medical Plan	X		
213 General Message: Demobilization Planning	X		
214 Activity Log	X		
230 Daily Meeting Schedule	X		

ATTACHMENTS	FOR USE AT ALL MEDICAL PODS	FOR USE AT EMERGENCY MEDICAL PODS	FOR USE AT NON-EMERGENCY MEDICAL PODS
Operational Worksheet	X		
POD Layout and Client Flow	X		
Diagram of POD Layout and Client Flow	X		
General Briefing	X		
Safety Briefing	X		
POD Supply Delivery and Emergency Vehicle Access		X	
POD Client Parking		X	
POD Staff Transportation		X	
POD Staff Parking			X
Transportation Details	X		
Incident Commander Checklist	X		
Facility Map & Transportation Diagram		X	X

**D. Control Objectives**

- Provide a safe and accessible environment for people in an affected community to obtain prophylaxis within reasonable driving/walking distance.
- Los Angeles County Department of Public Health will dispense mass prophylaxis safely and efficiently, with support from the City of Los Angeles, and within a time frame defined by the nature of the public health emergency and the availability of the prophylaxis.
- Deploy sufficient staff to meet the POD demands (based on nature, location, and size of the Public Health emergency), and adjust the Organization Assignment List (ICS 203) as necessary.

**ACTIVATION GUIDELINES**

The EMD Duty Officer shall be the City’s official recipient of M-POD activation notices. The LACDPH will contact the EMD Duty Officer at 213-200-6414 or emddutyofficer@lacity.org. The Emergency Management Department shall:

- Gather as much information as possible as possible regarding M-POD activation for consideration by the EOB and the Mayor.

- Recommend and/or manage Emergency Operations Center (EOC) activation if necessary.
- Keep City Departments informed of the situation by issuing information through the Daily Briefs. The Daily Brief may be issued more than once per day.
- Issue updates. These updates will trigger actions from supporting agencies.
- Assist the Mayor’s Office in issuing public information. This information will be used to educate and inform the public.
- Be a single source contact for inquiries regarding M-POD activations.
- Coordinate with the County Office of Emergency Management.
- Provide updates, as necessary to the Director of Emergency Operations Center if activated.

There are three phases to setting up and managing M-PODs:

- First Phase: Setting up of the facility and securing it in preparation for arrival of Los Angeles County Public Health Department (LACDPH) Clinical Staff.
- Second Phase: Clinic staff arrives, prepares for dispensing of medications and dispensing begins.
- Third Phase: Dispensing is concluded. M-POD transitions to closing.

The following time frame is anticipated, although may be compressed depending on the number of POD to be activated:

	HOUR	ACTIVITY
<b>PHASE 1 (SET-UP)</b>	0	<ul style="list-style-type: none"> <li>• LACDPH Emergency Desk notifies the City of Los Angeles Emergency Management Department that M-PODs are necessary for mass prophylaxis and where the M-POD sites should be located.</li> <li>• The City determines which M-POD sites are best suited to serve the affected area.</li> </ul>
	1.0	<ul style="list-style-type: none"> <li>• The City of Los Angeles brings together the departments necessary to open PODS to conduct a briefing.</li> <li>• Recreation and Parks are notified as to which POD sites will be opened and are requested to begin set-up according to the POD IAP developed for that site.</li> <li>• EMD staff is briefed and assigned positions.</li> </ul>
	2.0	<ul style="list-style-type: none"> <li>• LAPD are notified and provided with the locations of the PODs to be opened and provided with a time security forces are to arrive.</li> <li>• DOT is notified of which M-POD sites will be opened and the time traffic control is to arrive.</li> </ul>
	6.0	LACDPH is notified by the City of Los Angeles that POD sites within the City are within one (1) hour of being ready for arrival of clinical staff.
<b>PHASE 2 (DISPENSING)</b>	7.0	LACDPH is notified by the City of Los Angeles that POD sites within the City are secured and staffed ready to receive clinical staff.
	8.0	M-PODs are opened to the public and operate through the necessary operational periods.
<b>PHASE 3 (DEMOBILIZATION/ CLOSURE)</b>		M-PODs are closed to the public and staff is demobilized. Facility is closed.

## **TRANSPORTATION OF VACCINES, MEDICATIONS AND MEDICAL SUPPLIES**

A public health emergency may require mass prophylaxis of vaccines or oral medications. In the event that Los Angeles County does not have sufficient resources to respond to a large-scale public health emergency, the City of Los Angeles may be asked to help by providing transportation and/or security resources to move the supplies throughout Los Angeles County. Supplies are stored on standard pallets (40”L x 48”W x 40”H) or large Lexan containers wheels. The optimal truck to be used to transport the supplies is a 22-24’ box bed truck with a lift gate. Truck of other configurations and specifications must be cleared by LACDPH before they can be used.

The Los Angeles County Sheriff’s Department (LASD) will be the lead agency for providing security for medical supplies during transport to any facility designated as a recipient. The LASD may request assistance from LAPD. The number of law enforcement vehicles and personnel that are required for this mission will be based on the number of trucks required for the event. Ideally, two law enforcement officers will be assigned to the Security Escort for each truck. If a vehicle and/or driver encounters problems during the trip (i.e. road closure, vehicle break down, etc.), then the driver must immediately notify the assigned Security Escorts and should also notify the Dispatcher as soon as it is practical to do so.

As delivery vehicles and their drivers are dispatched by the vehicle coordinator, Security Escorts will be assigned to the dispatched delivery vehicles. Prior to their departure from the RSS Warehouse, the officers assigned to the Security Escorts and the drivers should review the established routes, communication procedures and methods, as well as established Standard Operating Procedures (SOP) and emergency procedures.

## **POD ORGANIZATION**

Incidents occurring within the City of Los Angeles will be managed under Unified Command. Unified Command will determine other support agencies that should be involved. Unless deemed necessary to respond to a specific incident, the following unified command structures will apply:

- Emergency Management Department
- Los Angeles Police Department
- Department of Transportation
- Recreation & Parks Department

Since the number of available facilities may be limited, it is essential that facility requirements be determined jointly among the involved responding agencies and that decisions regarding the specific use of facilities be coordinated. Facilities must be physically and programmatically accessible to people with disabilities and others with access and functional needs.

To accomplish these actions a Facilities Support Branch will be designated under the Planning and Intelligence Section in the EOC during large-scale health emergencies where multiple facilities may be required. Various geographic divisions can be designated, if need, based on

the objectives of incident response. Once specific facilities are designated for specific purposes, support would be coordinated by the Logistics Section.

An actual response organization typically grows from the “Initial Response Organization” to fit the level of response necessary for a specific incident. The size and focus of the organization is dependent on the magnitude of the incident and can be expanded or contracted as necessary. Only positions that are required for an adequate response need to be filled. Organization should be kept as small as possible to accomplish incident objectives and monitor progress.

### **POD SITE PROCESS AND CLIENT FLOW**

There are four stations at each M-POD site:

#### **A. Registration**

The Registration Station is the first contact the public has with the M-POD. At the Registration Station, clients are greeted and receive registration forms. Clients fill out the registration forms to receive prophylactic medications for themselves and their families. Once the client completes the registration form, he or she hands it in and gets screened by a Registration Staff member. The staff member will ask questions to determine if the client or any of his/her family members have any contraindications for the prophylactic medication, or any other issue that would require more detailed evaluation or assistance (such as certain medical needs, physical accessibility, mental health conditions, language translation, and clients who are exhibiting symptoms).

If the client has no contraindications and needs no additional assistance, the Registration staff will send him or her to the Dispensing Station. If the client has contraindications or needs special assistance, the Registration Staff member will send him or her to the Evaluation Station. Head of Household Rule: At any M-POD site, an adult client can pick up medications for the rest of his or her family under the Head of Household rule. The client would have to include all of his or her family members on his/her completed registration form, and will be referred to the Evaluation station if any member of the client’s family has a contraindication.

#### **B. Dispensing Station**

Clients who have no additional assistance needs or contraindications are directed to the Dispensing Station. At this station, Dispensing Staff interview the client to ensure that he/she has no contraindications. If no contraindications exist, the staff members dispense the medications to the clients. After dispensing medications to the client, the Dispensing Staff will direct the client to either the Q & A Station if the client has additional questions or concerns, or to the Exit if the client is ready to leave. If a client has a contraindication which was missed by the Registration Station, the Dispensing Staff members will re-direct the client to the Evaluation Station.

#### **C. Evaluation Station**

Clients who have contraindications or need additional assistance are directed from Registration to the Evaluation Station. At the Evaluation Station, staff members evaluate

clients and provide additional assistance as needed, and then dispense medications to clients. Speed is not as crucial at the Evaluation Station as at Dispensing, because only a small percentage of clients are referred to the Evaluation Station. The types of assistance that are offered at the Evaluation Station include: Symptom Management, Accessibility Services, Mental Health Evaluation, Contraindication Evaluation, and Language Services (Interpreter). After clients have been evaluated and received their medication, they are directed to the exit, or if they have additional questions or concerns, to the Q & A Station.

#### D. Q & A Station

The Q & A Station is an optional station for clients who have received their prophylactic medications but have additional questions and concerns. Q& A Staff Members greet these clients and answer their questions as well as providing them with additional information and resources where the client can find information on their own. After the Q & A Staff have addressed the client's concerns, the client is directed to the Exit.

### **M-POD STAFFING**

The LACDPH will provide clinical staffing (doctors, nurses, pharmacist, screeners, runners and line monitors, etc.). Los Angeles County Department of Mental Health will provide counselors and other mental health professionals. The City of Los Angeles will provide security, traffic and crowd control, facility management and other non-clinical functions. The Los Angeles Administrative Code provides that the Mayor may require emergency service of any City officer, employee, or citizen, and may requisition necessary personnel or material of any City Department or agency. Upon authorization by the Mayor, the Personnel Department may assign City staff to provide POD support on an as-needed basis.

### **MEDICAL PLAN**

- A staff person who has a reaction to the medication being dispensed will be assessed and treated by the Public Health Clinical Staff. The Clinical Branch Supervisor, or the Operations Section Chief if the Clinical Branch Supervisor is not available, will make the determination if 9-1-1 is to be called. If there is a Public Health Physician present, they shall direct all patient care until ambulance arrives.
- If a staff person experiences a medical emergency outside of the M-POD facility, care shall be rendered and 9-1-1 shall be called. The Public Health Clinical Staff may render care, but may not assume patient care responsibility.
- After 9-1-1 is called and an ambulance is dispatched, send a runner to the street to direct the ambulance crew to the patient.
- Staff should follow their internal worker's compensation guidelines for on-the-job related illness or injuries.
- Notify City or County representatives of illness or injuries to their respective volunteers.
- Transport of a staff person to a hospital will be according to Los Angeles County Emergency Medical Services Protocol.
- If staff person refuses medical care and/or transport to the hospital, the refusal shall be documented on the Activity Log (ICS 214). The greatest source of liability for health care

providers is a patient who refuses care with being explained to possible adverse consequences of that refusal.

- An ambulance may not be assigned to the POD. If one is assigned, the Operations Section Chief will brief Ambulance on POD operations. If ambulance must leave, they will coordinate with the Operations Section Chief.

## **DEMOBILIZATION**

Consider the following when planning for demobilization:

- The number of clients in line, the amount of prophylaxis left, and the through-put per hour.
- If the amount of available prophylaxis is projected to run out before the M-POD closing, a line monitor must be placed at the end of the line to advise clients that only those in line are guaranteed prophylaxis.
- If there is sufficient prophylaxis to last until M-POD closing, bring the line inside the facility and close the door if there is room for them. If the facility is not large enough to handle the line, place line monitors at the end of the line and advise the public the facility is closed.
- If the line is going to be closed due to the prophylaxis running out before M-POD closing, place a line monitor with information on other/future M-POD locations.
- Consider releasing volunteers first.
- Consider releasing entire units/groups at the same time.