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I. PURPOSE

All San Diego Fire-Rescue personnel shall operate utilizing the following procedures when responding to emergency incidents involving spills, leaks, vapor clouds or any other release of a hazardous material.

II. SCOPE

This policy shall apply to all SDFD Personnel.

III. AUTHORITY

The Fire Chief in coordination with the Assistant Fire Chief of Operations, Deputy Chief Shift Commanders authorizes the information within this policy.

IV. POLICY

A. First Responder Roles

1. All SDFD first responder personnel are trained and equipped to perform at the "First Responder Operational (FRO) Level."
2. As defined in Title 8, Section 5192 of the California Code of Regulations, the response objectives of FRO personnel are limited to:
 - a. Protect life, the environment, and property from the effects of the release.
 - b. Respond in a defensive fashion, working to contain the release from a safe distance, reducing spread and protecting exposures.
 - c. Initiate appropriate decontamination procedures to protect emergency responders, the public, equipment, and property.
 - d. Request additional resources as necessary to assist with the incident, including the Hazardous Materials Incident Response Team (HIRT).

B. "S-I-N" Guidelines

Actions that FRO personnel are trained to perform safely and effectively can be summarized by the S.I.N. acronym, which stands for *Safety, Isolate/Identify, and Notifications*

1. Safety
 - a. The first arriving company shall make every attempt to approach UPGRADE/UPWIND
 - b. Assume any unknown substance is hazardous
 - c. Utilize binoculars for size-up whenever possible
 - d. Initiate Incident Command System (ICS) procedures
 - e. When determining rescue needs at a hazardous materials incident, consider the possibility that the rescuers, without proper PPE, may become victims who will need rescuing.

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2. Isolate/Identify

- a. The first arriving company should initiate the process of establishing control zones, (as noted in SI 01 Section II. F, Safety Perimeters), and access control points along with initial evacuations.
- b. Refer to the North American Emergency Response Guide (ERG).
- c. No additional people should be allowed to enter the area.
- d. Identify the problem - spill, leak, vapor cloud, illegal dumping, etc.
- e. Attempts should be made to determine if it is a continuing release (dynamic) or is presently contained (static).
- f. Specific identification of the material(s) might be possible through shipping papers, placards, labels, Material Safety Data Sheets (MSDS), types of container, or witnesses.
- g. Hazardous substance control is primarily a function of HIRT, however first responders have the option to intervene if the hazardous material is moving and threatening public safety.
- h. All unknown substances should be considered flammable and poisonous until proven otherwise.

3. Notifications

- a. The first arriving company should request additional resources as needed to handle the incident, including HIRT.

C. Hazardous Materials Incident Response Team (HIRT)

1. The HIRT provides specialized emergency response services to actual or threatened releases of hazardous materials anywhere within the County of San Diego.
2. Upon arrival at an incident, the ranking or senior member of the HIRT shall assume the position of Hazardous Materials Group Supervisor.
 - a. The Haz Mat Group Supervisor will report to the Incident Command Post (ICP) and act as an advisor to the Incident Commander (IC).
3. In the event a HIRT battalion chief is on-scene, they may assume the role of Safety Officer or Liaison between the IC and the Haz Mat Group Supervisor.
4. All HIRT members are trained and equipped to perform at or above the "Hazardous Materials Technician Level." Their functions include:
 - a. Evaluate the incident specifics and provide a hazard and risk assessment to the IC
 - b. Perform specialized control, containment, and confinement operations
 - c. Identify unknown materials
 - d. Establish a decontamination plan
 - e. Determine proper personal protective equipment (PPE)

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- f. Develop an Incident Action Plan (IAP) and a Site Safety Plan
- g. Provide a Hazardous Materials Safety Officer
- h. Gather responsible party information for cost recovery
- i. Perform rescues requiring chemical protective clothing
- j. Insure proper notifications are completed
- k. Provide recommendations and assistance to the IC regarding site mitigation and clean-up procedures
- l. Evaluate cleanup contractor to insure safe and effective operations

D. General Guidelines for Handling Hazardous Materials Incidents

The following are general guidelines to consider for all hazardous materials incidents:

1. When dispatched to investigate a hazardous materials incident, the company officer should obtain as much information from FCC as possible to be better prepared to take appropriate action to safeguard the crew
2. When requesting a HIRT response, the IC can contact the team while they are en route, via cellular phone, assigned tactical channel, or MDC.
 - a. Once provided with incident specifics from the IC, HIRT can begin making notifications to appropriate agencies, request necessary resources, and perform research to determine the identity and hazards of the hazardous materials.
 - b. HIRT can also provide guidance to the IC regarding known hazards of the materials and provide recommendations for on-scene units for safe and effective handling of the incident until the arrival of HIRT.
3. The "Hazardous Materials Incident Command Worksheet" (Form FD-701) should be utilized to assist the IC in managing scenes involving hazardous materials
4. Personnel Safety Guidelines
 - a. Keep a safe distance from the spill
 - b. Stay uphill/upwind from the release
 - c. Wear full protective clothing and SCBA
 - d. Do not take any unnecessary risks
5. Safety of the Public
 - a. Set up isolation zones and deny entry into the area
 - b. Initiate protective actions if needed
 - c. Initiate evacuation procedures when appropriate (SDPD's primary responsibility)
 - d. Consider sheltering in place, when appropriate
 - e. Initiate the appropriate EMS response when needed
6. Identify Substance

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- a. Attempt to safely identify the substance through the use of placards, labels, manifests, bills of lading, shipping papers, MSDS, etc.
- b. Consider other sources to assist with identification:
 - 1) Hazardous Incident Response Team (HIRT)
 - 2) Company representative, manufacturer, chemist, truck driver, etc.
 - 3) North American Emergency Response Guide (ERG)
 - 4) NFPA Fire Protection Guide to Hazardous Materials

E. Containment Procedures

It is illegal to allow any substance other than clean water to enter the storm drain system. The City of San Diego has adopted a zero tolerance policy regarding pollutants entering the storm drain systems.

1. Every reasonable effort should be made to protect the storm drain systems if it can be done safely.
2. Do not attempt to wash away any spilled material unless it is required as a tactic to save lives, the environment, or property.
3. If safe to do so, confine the spill by building dikes, diversion dams, separation dams, or by covering the storm drains with visqueen.
4. If any amount of hazardous materials enters a storm drain, contact HIRT for guidance.

F. Petroleum Substance Spills

If a spill is a small quantity of a petroleum substance such as gasoline, diesel fuel, or motor oil and is too small to dike (less than 10 gallons), the following procedure should be followed:

1. Absorb the spill with dirt and sweep to the side of the road.
2. Do not attempt to wash down the roadway with water as this will make the roadway slippery. This will also allow pollutants to enter the storm drain and is illegal
3. Notify FCC of the exact location of the absorbed fuels.
4. FCC will notify Public Works for proper clean up and disposal.
5. If the spill is large enough to contain, dike as needed, and request HIRT to respond.

G. Releasing Resources

The following are guidelines to consider when releasing resources assigned to a hazardous materials incident:

1. Depending on the incident, an engine company may need to remain on-scene for extended periods until it is deemed safe.
 - a. In extreme cases, it could take days to safely mitigate an incident.

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- b. HIRT and County Department of Environmental Health (DEH) can provide guidance in this area.
 - c. Don't make an unwise decision because of haste to hurry back into service.
2. When it is determined safe to do so, San Diego Fire-Rescue may transfer scene management to another responsible party, such as law enforcement, County DEH, a cleanup contractor, or the property owner.
- a. Contact HIRT for guidance as needed

H. Responsible Party

- 1. The IC or company officer should make a reasonable attempt to identify the responsible party at every hazardous material incident.
- 2. This is the person or party who is responsible for payment of the costs associated with the clean up.
 - a. This will include reimbursement to the City for costs of the emergency response units at scene.
- 3. Examples of responsible parties include:
 - a. Truck driver, shipper, etc.
 - b. Property owner or property Management Company
 - c. Individual causing the spill
 - d. City, State, Federal, or other responsible agency representative

I. Cleanup and Disposal Procedures

- 1. Once a responsible party has been identified, cleanup operations shall be initiated by that person or persons.
- 2. Cleanup procedures may be handled in the following ways:
 - a. The responsible party may clean up the spill. This requires the IC and HIRT to determine that they have a safe and effective plan with the proper level of skill and personal protective equipment to perform the clean up themselves.
 - b. The responsible party may contract with a licensed clean up company. Invoices and manifests must also be signed by the responsible party.
 - c. If the responsible party is unable to pay for the cleanup, or the responsible party is unknown, and the spill endangers public health and safety, other means such as State Superfund may be available to pay for the cleanup.
 - d. The City may be liable for cleanup costs if there is no responsible party and criteria for Superfund monies are not met.
 - 1) Costs for clean up on public right of ways such as streets, sidewalks, and alleys are typically paid for out of the SDFD budget.

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- 2) Clean up on other City properties are paid for from the budgets of those respective departments. As an example, costs for clean up on Park and Recreation property are paid for by that department.
 - 3) SDFD still responds on these incidents to insure that there is no immediate danger to other city employees, or the public, and that the material is safe for handling by a licensed disposal company.
- e. Clean up on private property is the responsibility of the property owner. SDFD units will respond to stabilize the incident so that clean up can be safely performed by a private contractor at the property owner's expense.
- f. Never transport or move materials from their original location.
- 1) Hazardous materials moved from private property to City property become the responsibility of the City.
 - 2) Materials moved from private property to fire stations or accepted at fire stations from citizens become the responsibility of the Fire Department.
 - 3) When materials are moved, the Department's ability to fund the clean up from other sources is lost and the disposal costs become our responsibility.
 - 4) City residents seeking to dispose of household hazardous materials and automotive wastes have a no-cost service available to them.
 - 5) This "Household Hazardous Waste Program" is operated by the City Environmental Services Department.
3. First responders will be required to remain at scene until the incident has been mitigated and the cleanup has been completed or until released by the IC and/or HIRT.
 4. All manifests and invoices signed where the City of San Diego is identified as the responsible party or generator must be returned to the HIRT program manager at the Special Operations office.
- J. Reportable Releases – Proposition 65 Reporting Requirements (Chapter 66, Division 20, California Health and Safety Code)
1. This law, which became effective on January 1, 1987, requires that information obtained by "Designated Government Employees" which reveal the illegal discharge or threatened illegal discharge of hazardous waste must be reported to the following agencies *within 72 hours*:
 - a. San Diego County Department of Environmental Health
 - b. San Diego County Board of Supervisors
 2. Failure to report could result in felony prosecution and a substantial fine.
- K. Proposition 65 Reporting Criteria

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1. When determining if a release meets Proposition 65 reporting criteria, the IC shall determine if the hazardous material release or threatened release has caused or is likely to cause:
 - a. Injury to a person or persons
 - b. Substantial damage or contamination to food, crops, water supply, air, or the environment.
2. If the Incident Commander or HIRT determine that the reporting criteria are met, the HIRT will then:
 - a. Notify the San Diego County Department of Environmental Health (DEH), via telephone, as soon as possible.
 - b. HIRT will also prepare a written report and forward it to the Special Operations Battalion Chief, who is a "Designated Government Employee."
 - c. After the report is reviewed at this level, it will be sent to DEH.

L. Reportable Release Examples

1. Examples which require a City of San Diego Proposition 65 Report would include, but are not limited to the following:
 - a. When a person or persons are injured or complains of injury(ies), even minor, caused by a hazardous materials release in a fire, vehicle accident, explosion, or exposure with symptoms to a solid, liquid, gas, or vapor cloud.
 - b. A spill or release of flammable, corrosive, toxic, or reactive materials into the bay, ocean, storm drain, ground, or air.

Examples include fuel spills, sewage spills, gas leaks with evacuations, or contaminated run off from structure fires where hazardous materials are stored or handled by the occupancy.

M. Regulations for Hazardous Waste Operations and Emergency Response

1. In accordance with both State and Federal regulations, the following are required to be integrated into emergency response planning for hazardous materials incidents:
 - a. The Incident Command System (ICS) shall be utilized and the position of Incident Commander (IC) shall be instituted beginning with the officer of the first company to arrive at the incident scene.
 - b. The IC shall identify, to the extent possible, all hazardous substances or conditions present.
 - 1) Site security and control shall be established to limit exposures.

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- 2) Evacuation and/or Shelter-in-Place procedures shall be implemented as needed (refer to the “protective actions” section in the back of the North American Emergency Response Guidebook).
- 3) PPE that is worn shall be appropriate to the hazards encountered.
- c. Employees who may be potentially exposed to an inhalation hazard shall wear positive pressure SCBA until the IC determines, through the use of air monitoring, that a decreased level of respiratory protection will not result in hazardous exposures.
- d. The IC shall limit the number of emergency response personnel to the number required to handle the emergency. All operations in hazardous areas shall be performed in groups of two or more.
- e. Back-up personnel shall stand by with equipment ready to provide assistance or rescue and shall not engage in activities that will detract from that mission. Back-up personnel shall be protected, at a minimum, at the same level as the entry team.
- f. The IC shall designate a Hazardous Materials Safety Officer who is knowledgeable in the operations being implemented.
 - 1) This position will be assigned as soon as practicable; however, it will be assumed by a HIRT member upon their arrival.
- g. A decontamination procedure shall be developed, communicated to employees, and implemented before employees or equipment may enter areas where potential exposure to hazardous materials exists.
- h. The specific components of this procedure will be structured to meet the conditions present, however, it shall consist minimally of a firefighter in full protective clothing with appropriate respiratory protection, and equipped with a charged hose line in a ready position to immediately wash down contaminated persons and/or equipment.

N. Decontamination

San Diego Fire-Rescue utilizes three (3) types of decontamination (DECON) procedures regarding hazardous material exposures:

1. **Emergency Decon** refers to decontamination procedures that are urgent and field expedient.
 - a. Most often it is provided to civilians or response personnel who have had a direct exposure to hazardous solids, liquids, mist, smoke, and certain gases and are displaying related symptoms.
 - b. Emergency Decon is required before transporting any victim to a hospital.
 - c. A mass casualty incident may have victims requiring Emergency Decon.

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In this case, Emergency Decon shall be conducted prior to performing triage, treatment, and transport.

2. **Primary Decon** refers to that form of decontamination which is provided to personnel working in the Exclusion Zone or the Contamination Reduction Zone.
 - a. This generally includes HIRT members and decontamination teams working in Level A or Level B protective clothing.
 - b. Primary Decon may also be referred to as “Technical Decontamination”.
 - c. Primary Decon is conducted in the “Contamination Reduction Corridor” within the Warm Zone.

3. **Secondary Decon**
Secondary decon. is the process of evaluating protective clothing and equipment (which have received primary or emergency decontamination) for residual contamination, conducting a thorough decontamination, and providing the necessary maintenance prior to returning the equipment and protective clothing to an in-service status.
 - a. Secondary Decon is conducted after the incident and may require technical assistance provided by or coordinated through HIRT and the Director of Logistics.
 - b. Secondary Decon may also include a requirement for first responders to thoroughly shower prior to returning to an in-service status.

O. Hazard/Abandoned Waste Investigations

1. An engine company may be dispatched to investigate an unknown abandoned waste on public property, in the street, or in an open, unsecured area where property ownership and responsibility are not readily apparent.
2. These incidents may be resolved through assistance provided by HIRT.
3. HIRT operates the Environmental Response Team (ERT-1) as an auxiliary unit.
 - a. This vehicle is “permitted” to allow HIRT members with additional specialized training to profile, package, and transport hazardous materials from emergency responses to a designated collection facility.
4. Actions by the engine company responding to investigate abandoned waste shall include:
 - a. Attempt to find a responsible party.
 - b. If contact is made, inform the property owner of their responsibility to properly clean up and dispose of the waste.
 - c. For incidents on residential property, refer them to the Household Hazardous Waste program, operated by City Environmental Services.
 - d. Record the responsible party information and forward to HIRT.

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- e. If there is no responsible party, contact HIRT via FCC, cell phone, land line, MDC, or TAC channel.
- f. Upon notification of an incident, the HIRT Captain must obtain sufficient information to determine the appropriate resources to respond to the scene.
- g. A determination will be made by HIRT regarding the priority of response.
- h. A deferred response may require that engine company personnel provide prominent warning by banner taping the area prior to leaving the scene.
- i. If the answers to the following questions are all negative, it may be appropriate to delay a HIRT response with the ERT vehicle to allow scheduling of other operations priorities for the shift.