



STANDARD OPERATING PROCEDURES

100.00 HAZARDOUS MATERIALS RESPONSE TABLE OF CONTENT

DALLAS FIRE-RESCUE

Effective: 10/01/2012

Revised:

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101.00 OVERVIEW

DALLAS FIRE-RESCUE

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101.00 OVERVIEW

- A. Any hazardous materials incident represents a potentially dangerous situation. All natural disasters, terrorism attacks, or other large-scale emergencies will involve some manner of hazardous materials. Chemicals that are combustible, explosive, corrosive, toxic, or reactive, along with biological and radioactive materials can affect the general public or the environment as well as the emergency first responder. These incidents will differ widely in terms of intensity, duration, and significance in comparison to conventional fire and rescue activities.



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102.00 ORGANIZATION

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102.00 ORGANIZATION

- A. The Deputy Chief of Special Operations (812) is responsible for HazMat Response, including administration, special inventory, and compliance with applicable federal, state, and City of Dallas laws, regulations, ordinances, and codes.
- B. The Hazardous Materials Coordinator (810) reports to the Section Chief of Special Operations (815) and directs the functions relating to the operation of the HazMat Response Program. The HazMat Coordinator will be responsible for the procurement of equipment, supplies, and training related to HazMat response.
- C. The Hazardous Materials Operations Officer (835) reports to the HazMat Coordinator and assists with the functions relating to the operation of the HazMat Response Program.
- D. Hazardous Materials Response Team Station Officers will report to the Hazardous Materials Coordinator. Officers assigned to designated HazMat Stations will:
 1. Respond to HazMat incidents when dispatched as serve as the HazMat Officer. (In the absence of the HazMat Captain, the HazMat Lieutenant will assume the duties of the HazMat Officer.)
 2. Be responsible for the training, competency, and effectiveness of all personnel assigned to their command. This responsibility will include conducting HazMat drills and exercises on a routine basis and evaluating and documenting competency of each member on an annual basis. This is outlined in National Fire Protection Association (NFPA) Standard 471 and 472.
 3. Maintain the Department Form 157, In-Service Training Report for HazMat Technician Training for each member assigned to their command.
 4. Have knowledge and understanding of applicable Federal, State, and Local laws relating to HazMat response and training.
 5. Assist the HazMat Coordinator in evaluating, testing, and recommending new equipment. Acquisition of equipment, materials, and supplies will be through the HazMat Coordinator's office.
 6. Be responsible for the preparation, accuracy, completeness, and submission of all records and reports required by the Deputy Chief of Special Operations or the

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HazMat Coordinator.

- E. HazMat response is an adjunct to the regular Fire-Rescue Emergency Operations. Companies will function as regular Fire-Rescue companies when not assigned to a Hazardous Materials incident.
- F. All personnel assigned to a position designated and equipped for Hazardous Materials response, including the Deputy Chief of Special Operations, Special Operations Section Chief, HazMat Coordinator, and the HazMat Operations Officer will be trained and certified to the hazardous materials technician level as defined in Title 29 of the Code of Federal Regulations (CFR) part 1910.120, NFPA Standard 472, and the Texas Commission on Fire Protection (TCFP).
- G. The HMRT shall be comprised of the following:
 - 1. Deputy Chief of Special Operations (812)
 - 2. Special Operations Section Chief (815)
 - 3. HazMat Coordinator (810)
 - 4. HazMat Operations (835)
 - 5. Members of the designated HazMat response station
- H. Hazardous Materials Technicians defined above shall be eligible for hazardous materials technician assignment pay once the following conditions are met:
 - 1. HazMat Technician certification by the TCFP.
 - 2. Assignment to the HMRT.
 - 3. Successful completion of an entry-level medical evaluation via the annual HazMat physical.
 - 4. Annual HazMat Technician competency evaluation completed by a HMRT Officer.



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103.00 DEFINITIONS

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103.00 DEFINITIONS

- A. Confinement – Those procedures taken to keep a material in a defined or local area.
- B. Containment – The actions taken to keep a material in its container (e.g., stop a release of the material or reduce the amount being released).
- C. Cold Zone – The outermost area of a hazardous materials incident site, considered to be a non-contaminated area where special protective clothing measures are not necessary. It is designated as a staging area for authorized support personnel and may be the location of support equipment.
- D. Contaminant – A hazardous material that physically remains on or in people, animals, the environment, or equipment, and thereby creates a continuing risk of direct injury or a risk of exposure outside of the hot zone.
- E. Contamination – The process of transferring a hazardous material from its source to people, animals, the environment, or equipment, which may act as a further carrier.
- F. Control – The defensive or offensive procedures, techniques, and methods used in the mitigation of a hazardous materials incident, including containment, extinguishment, and confinement.
- G. Control Zones – The designation of zones at a hazardous materials incident based upon safety and the degree of hazard. For purposes of this document, these zones are defined as the Hot, Warm, and Cold zones.
- H. Decontamination (Contamination Reduction) – The physical and/or chemical process of reducing and preventing the spread of contamination from personnel and equipment used at a hazardous materials incident.
- I. Emergency Response Guidebook – A reference manual developed by the U.S. Department of Transportation (DOT) containing information to assist responders in protecting themselves, and the public during the initial phases of a hazardous materials incident.
- J. Environmental Hazard – A condition capable of posing an unreasonable risk to air, water, or soil quality directly impacting plants and/or wildlife.
- K. Hazardous Material – There are many definitions and descriptive terminology used for the term hazardous material, each of which depends on the nature of the problem being addressed.

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1. The U.S. Department of Transportation (DOT) uses the term *hazardous materials*, which covers nine hazard classes, some of which have subcategories called divisions.
 2. U.S. Environmental Protection Agency (EPA) uses the term *hazardous substances* for the chemicals that, if released into the environment above a certain amount must be reported, and, depending on the threat to the environment, federal involvement in handling the incident can be authorized.
- L. Hazardous Materials Response Team (HMRT) - A group of highly trained personnel who respond to releases of hazardous materials for the purpose of control, stabilization, or mitigation of the incident.
- M. Hazardous Materials Response Team (HMRT) Commander - An individual member of the HMRT that by virtue of his/her experience, training and rank is capable of assuming responsibility for the operation of the Team at incident involving hazardous materials. The HMRT Commander is responsible for the implementation of the phases of the incident operation plan dealing with HMRT objectives. The HMRT Commander is responsible for the assignment of resources within the HMRT, and the reporting on progress and the status of resources. The HMRT Commander directs the overall operations of the HMRT.
- N. Hot Zone – The area of greatest hazard as initially defined by the Incident Commander. The Hot Zone must be readily identified by using hazardous materials barrier tape, barricades, fences, natural barriers, etc. **NO PERSON SHALL BE ALLOWED TO ENTER THE HOT ZONE UNLESS THEY ARE WEARING THE APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT AND HAVE RECEIVED THE PROPER TRAINING.**
- O. Master Emergency Plan - the City of Dallas Master Emergency Operations Plan, Basic Plan, Annex “Q”, Hazardous Materials & Oil Spill Response. The Office of Emergency Management (OEM) maintains and publishes this plan. This plan defines Level I, II, and III HazMat Response. See also, Incident Classification and Levels of Response elsewhere in this section.
- P. Placard – A diamond shaped symbol applied to mobile carriers transporting hazardous materials. DOT placards are color coded for easy identification and the number (hazard class) on the placard identifies the following:
1. Explosive – Orange
 2. Flammable or Non-Flammable Gas – Green or Red
 3. Flammable, Combustible Liquids – Red
 4. Flammable Solids – Red candy stripe or Blue
 5. Oxidizers – Yellow

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6. Poison – White
 7. Radioactive – Yellow and White
 8. Corrosives – Black and White
 9. Other Regulated Materials – Black stripe on White
- Q. Perimeter – The geographical boundary at which access into an incident scene is restricted. Responders are allowed to enter only if they are appropriately trained and protected for the operations they will perform. If specific information is not available on the released material, no perimeter should be established any closer than 300 feet from the incident.
- R. Protective Actions – Steps taken to preserve the health and safety of emergency responders and the public during an incident involving the release of hazardous materials.
- S. Protective Action Distance – Distance from the site of the incident in a downwind direction, to designate the area where protective action should be taken. The Protective Action Distance varies depending on the material involved and the type of incident.
- T. Responsible Party - The person(s) or entity who is ultimately responsible for the clean-up, disposal, and restoration of damaged property at a hazardous material incident. In most instances the Department's involvement will be limited to containment, confinement, or any other measures needed to mitigate an incident to the point where it does not pose an unreasonable risk to life and/or property.
- U. Shelter-In-Place Protection – Precautions taken to isolate individuals from airborne contaminants and may include turning off heating, ventilation, and air conditioning (HVAC) systems and closing all windows and doors. Shelter-In-Place can be used for incidents where there is little or no time to react and it would be more dangerous to evacuate the building. This action is implemented to keep people in a safe environment during an emergency incident.
- V. Shipping Papers – A shipping order, bill of lading, manifest or other shipping documents which will provide information on the type and quantity of hazardous materials being transported, as well as basic hazard warnings.
- W. Site Advisor - A civilian familiar with the hazard site, its products or equipment involved; examples include building engineers, managers, truck drivers, railroad conductors, plant executives, etc. Such persons should be kept at the Command Post, if possible, to serve as advisors and to answer pertinent questions as the incident evolves.
- X. Spill – The release of any state of matter (solid, liquid, gas) of a hazardous material out of its original container.



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104.00 INCIDENT CLASSIFICATION LEVEL OF RESPONSE

DALLAS FIRE-RESCUE

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104.00 INCIDENT CLASSIFICATION AND LEVELS OF RESPONSE (RE: NFPA 471)

- A. There are three (3) levels of hazardous materials incident classification. A general guide recommended in NFPA 471 is established for suggested levels of response.
1. LEVEL I – A minor incident within the capabilities of the first responders. A Level I incident is defined as a release of less than five (5) gallons liquid or less than twenty (20) pounds solid of a known hazardous material. At the minimum, a Hot Zone and a Command Post must be established. The Incident Commander shall request the HMRT whenever hazardous materials are involved and additional expertise or equipment is required to protect persons or the environment.
 2. LEVEL II – A major incident that poses many additional problems for the first responders and may require assistance from other City and State agencies. A Level II incident is defined as the release of a known hazardous material of five (5) gallons or more liquid or twenty (20) pounds or more solid, the release of any quantity of a known gaseous toxic material, or the release of any quantity of an unknown solid, liquid, or gaseous toxic material. All gases other than natural gas will be considered toxic. A formal Command Post, a staging area, and incident control zones must be established and maintained. Localized evacuation and/or shelter-in-place procedures may be required. The Incident Commander shall request the HMRT.
 3. LEVEL III – A Level III incident is a local disaster. The incident has escalated beyond the capabilities of our local resources and jurisdiction. The incident may last for days and large scale evacuations may be necessary. All units dispatched to Level II incidents should be advised of the staging location, the appropriate entry route, and directed to report to the staging area. Equipment and personnel already on-scene should be moved to the staging area, if not already committed, needed, or contaminated. During this phase of the incident, the staging area may be used as the base for coordinating localized emergency operations. The staging area also serves as a rally point for aid coming into an incident site for post disaster support and recovery activities. The Incident Commander shall request the HMRT and any additional resources as directed by the HMRT commanding officer.



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105.00 CERTIFICATION

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105.00 CERTIFICATION LEVELS

- A. Every member of the Department is subject to be involved in the recognition of a hazardous substance release and will be trained to initiate an emergency response sequence by notifying the proper authorities of the release. As outlined in 29 C FR 1910.120 and National Fire Protection Association Standard 472, the Department will train members to various levels. These levels are:
1. First Responder Awareness Level - First responders at the awareness level are individuals who are likely to witness or discover a hazardous substance release and who have been trained to initiate an emergency response sequence by notifying the proper authorities of the release. They would take no further action beyond notifying the authorities of the release. First responders at the awareness level shall have received at least eight (8) hours of training that shall meet, as a minimum, the training outlined in 29 CFR 1910.120 and NFPA472 and the Texas Commission on Fire Protection (TCFP).
 2. First Responder Operations Level - First responders at the operations level are individuals who respond to releases or potential releases of hazardous substances as part of the initial response to the site for the purpose of protecting nearby persons, property, or the environment from the effects of the release. They are trained to respond in a defensive fashion without actually trying to stop the release. Their function is to contain the release from a safe distance, keep it from spreading, and prevent exposures. First responders at the operations level shall have received twenty-four (24) hours of training that shall meet, as a minimum, the training outlined in OSHA 29 C FR 1910.120, NFPA 472, and the Texas Commission on Fire Protection (TCFP).
 - a. All Department members who are certified firefighters and perform firefighting duties will be trained at the First Responder Operations Level during the rookie academy.
 - b. A minimum of 4 hours of continuing education pertaining to hazardous materials shall be required each year.

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- c. Annual Hazard Communications Act training will not be used for operations level continuing education training.
3. **Hazardous Material Technician** - Hazardous material technicians are individuals who respond to releases or potential releases for the purpose of attempting to control and/or stabilize the incident. HMRT members are trained to assume a more aggressive role than a first responder at the operations level in that they will attempt to approach the point of release in order to plug, patch, or otherwise stop the release of a hazardous substance. **Department hazardous material technicians shall have received a minimum of one-hundred twenty (120) hours of training in addition to that required for first responders at the operations level that shall meet, as a minimum, the training required by OSHA 29 CFR 1910.120, NFPA 472, and TCFP.**
 - a. **A minimum of twenty (20) hours of continuing education pertaining to hazardous materials shall be required each year for all members of the HMRT and any other member subject to filling a position on the HMRT.**
 - b. Annual Hazard Communications Act training will not be used for hazmat technician level continuing education training.



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106.00 CERTIFICATION AND CONTINUED EDUCATION TRAINING OF HAZMAT TECHNICIANS

DALLAS FIRE-RESCUE

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106.00 CERTIFICATION AND CONTINUED EDUCATION TRAINING OF HAZMAT TECHNICIANS

- A. The certification standard shall be based on applicable regulations and recommendations of federal, state, and local agencies and professional associations.
- B. The nine (9) core discipline training classes shall be completed as soon as possible given the consideration to class offerings and applicable time constraints; (PER-226, PER-241, PER-261, H-303, H-403, H-404, ICS 100, IS-700, IS-810). These skill sets are a requirement for all members assigned to the HMRT.
- C. Certification shall be maintained by participation in continuing education sessions, which are developed and implemented by the HazMat Coordinator or the HazMat shift Captains and approved by the Deputy Chief of Special Operations. A memo stating a member's continuing competency shall be completed by the HMRT shift Captains for each member annually. The memo will be signed by the respective HazMat shift Captain and forwarded to the HazMat Coordinator who will place it in the member's file.
- D. Records of continuing education training subjects and hours will be maintained on each HazMat technician. The Department Form 157 will be utilized to record the HazMat training received by each individual. In addition, the HazMat Coordinator shall maintain a training record on each respective member utilizing a copy of the Department Form 157.



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107.00 EQUIPMENT

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107.00 EQUIPMENT

- A. A reserve HazMat vehicle will be maintained at a suitable location. It may be deemed necessary by the Deputy Chief of Special Operations that the reserve HazMat vehicle should be stocked with equipment and supplies. The HazMat Coordinator, the HazMat Operations Officer, and the HazMat shift Captain shall determine what equipment and supplies should be carried. This vehicle, if stocked with equipment, shall be special called on incidents where it is determined by the HMRT Commander that additional equipment and/or supplies are needed.
- B. The HazMat Coordinator shall be responsible for maintaining an adequate inventory of supplies necessary for hazardous materials response and is responsible for acquiring tools and equipment necessary for a hazardous material incident. This equipment will be stored at a designated location.



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108.00 HMRT RESPONSE

DALLAS FIRE-RESCUE

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108.00 HMRT RESPONSE

- A. When responding to an incident, the HMRT will be composed of a minimum of ten (10) HazMat technicians, including one mandatory officer.
- B. On all HazMat responses, the HMRT Rescue assigned to the incident will be used to provide medical assistance and monitoring of the HMRT. This Rescue will not be used for victim transport. The members assigned to the Rescue may perform initial patient evaluations, but continuing patient care and/or transport must be provided by additional Rescues.
- C. When the Department HMRT is needed and designated companies are unavailable to respond because of an assignment, fire dispatch will inform that Incident Commander of the request. If possible, the Incident Commander will allow these companies to clear, in an effort to place the HMRT in service. If the Department HMRT is unavailable to respond to an incident, a mutual aid HMRT will be notified and dispatched in the following order:
 - 1. Plano Fire-Rescue
 - 2. Richardson Fire Department
 - 3. Frisco Fire-Rescue
 - 4. Dallas County Fire-Rescue
 - 5. Irving Fire Department
- D. If the HMRT companies are not in quarters, alarm notification will be made over the apparatus radio. One of the companies will return to the station and staff the HazMat Response Vehicle and proceed to the incident.
- E. Response to Automatic Assistance or Mutual Aid hazardous materials incidents:
 - 1. All agencies involved with mitigation of the incident shall attend a safety briefing prior to the commencement of response activities. When activities change or are modified, the Site Safety Plan shall be revised and personnel notified of the new procedures and safety concerns.
 - 2. The HMRT will operate under the incident command system (ICS) being utilized by the Automatic Assistance or Mutual Aid department.
- F. Often it is not known that a hazardous material is involved until the first response company arrives on the incident scene. In these situations, the first arriving response

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company shall immediately notify Fire Dispatch with all available information and make the request for the HMRT.

- G. The Incident Commander may disregard the HMRT when it has been determined that the incident does not require any of the HMRT special capabilities, (e.g., technical information, atmospheric monitoring, toxic or combustible gas monitoring, containment equipment, other field diagnostic equipment, etc.).



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109.00 MEDICAL SURVEILLANCE HMRT PERSONNEL

DALLAS FIRE-RESCUE

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109.00 MEDICAL SURVEILLANCE HMRT PERSONNEL

- A. A medical surveillance program for HMRT members will be conducted in accordance with the OSHA Regulations in 29 CFR 1910.120.
- B. All certified HazMat technicians entering the HazMat Program will receive a medical examination, prior to assignment to the HMRT, and then annually thereafter. All HazMat technicians must be medically certified as fit for participation as a HMRT member. Medical exams will be provided to HMRT members by the Department.
- C. Medical exams will be provided for any member when deemed necessary by the Deputy Chief of Special Operations due to an unusual exposure or other unusual circumstance.
- D. A medical exam will be required for HazMat technicians exiting the HazMat Program if one has not been completed within the previous six (6) months.
- E. Medical records on HazMat Technicians will be maintained and preserved for thirty (30) years after employment is terminated with the Department, {29 CFR 1910.120 (q)(9)}.



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110.00 HMRT STAFFING

DALLAS FIRE-RESCUE

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110.0 HMRT STAFFING

- A. A minimum of ten (10) HazMat Technicians will be on duty at the HMRT station. When possible, the complement of ten HazMat technicians will include two HazMat officers. At a minimum, one HazMat officer will be on duty at all times.
- B. Extreme care will be exercised by the Battalion Chief to see that scheduled and other controllable leave does not cause a reduction below these set minimum staffing levels. This should include using HazMat personnel as little as possible for special details, swinging, or other avoidable absences from the station.
- C. In the event that the situation unavoidably arises where less than the minimum required HazMat certified personnel are available on duty, a recall will be initiated. This recall will be according to Department policy as established in the Manual of Procedures.
- D. To facilitate the immediate response of the HazMat Task Force to reported incidents within the City and region, Station 3 will not be included on the overhaul lists maintained by Fire Dispatch.



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111.00 OPERATIONS

DALLAS FIRE-RESCUE

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111.00 OPERATIONS

- A. The Incident Commander, with the advice of the HMRT Commander, will direct operations at a hazardous materials incident according to the principles and procedures set forth in: Dallas Fire-Rescue ICS; Dallas Fire-Rescue Manual of Procedures; City of Dallas, Master Emergency Operations Plan, Annex "Q" Hazardous Materials & Oil Spill Response; and applicable federal, state, and local laws and regulations.
- B. The HMRT Commander shall direct all operations within the Hot and Warm Zones.
- C. In a HazMat incident, the clean-up, disposal of toxic waste and the restoration of the environment are the responsibility of the spiller, manufacturer, user, responsible party, etc.
- D. In accordance with the Uniform Fire Code, as adopted by the Dallas City Council, the Incident Commander, may in the interest of safety, public interest, or time, begin clean-up or recovery operations.
- E. The HazMat Group will use channel 10. All other communications will be through usual Department radio channels. The HMRT Communications Officer will interface between the HazMat channel 10 and all other Department radio channels. Pre-determined hand signals will be used by the HMRT personnel to communicate in the event of radio failure.
- F. The HMRT Commander will be responsible for the accurate completion of the appropriate HazMat reports which log the activities of the incident and the actions of the team members.



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112.00 PLAN OF ACTION AND SITE SAFETY PLAN

DALLAS FIRE-RESCUE

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112.00 PLAN OF ACTION AND SITE SAFETY PLAN

- A. The HMRT Commander, the Incident Commander, and civilian personnel familiar with the situation will meet at Command as soon as practical and assess the situation with regard to the nature of the hazard, the need for rescue, and the type of actions necessary for the control of the situation. The HazMat Officer will advise the Incident Commander with respect to the HMRT capabilities in the situation. The Incident Commander, with the assistance of the HazMat Commander, and civilian experts will formulate a Plan of Action to deal with the incident.
- B. A Site Safety Plan must be in place prior to HazMat operations commencing. The Incident Commander and HMRT Commander will complete a Site Safety Plan to deal with the incident.



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113.00 CLEAN UP, DISPOSAL OR REMOVAL

DALLAS FIRE-RESCUE

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113.00 CLEAN-UP, DISPOSAL OR REMOVAL

- A. In accordance with the Uniform Fire Code, Section 2703.3.1 the Department maintains full authority at hazardous materials incidents. In the exercise of such authority, the Department is authorized to remove or keep away from the scene any vehicle, vessel, or individual which may impede or interfere with the operation.
- B. Federal regulations clearly place the responsibility for the clean-up, disposal and restoration of the environment onto the spiller, manufacturer, owner, property owner, etc. of the product. The responsible party should provide for this action as soon as possible. (In the essence of safety, public interest, and/or time, the HMRT may begin clean-up, recovery, and/or product transfer operations, if within their capabilities.)
- C. Private contractors shall be used when the City of Dallas is responsible for, or has assumed responsibility for the control, clean-up and/or restoration of the spill, or at any other time when deemed necessary and appropriate by the Incident Commander.
- D. All requests for contractor response will be made by the HMRT Commander who will then make appropriate notifications to Storm Water Quality Management Division, if not already on the scene. (The HazMat Coordinator will maintain a list of contractors available for call. This list will be updated each quarter.)



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114.00 DECONTAMINATION

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114.00 DECONTAMINATION

A. General

1. The purpose of decontamination is to assure that any potentially harmful or dangerous residues, on persons or equipment, are confined within the Hot Zone. Decontamination is intended to prevent the spread of contaminants beyond the confined area, particularly to avoid carrying contaminants back to the fire station, other facilities, home, or to other environments. In all cases the primary objective must be to avoid contaminating anyone or anything beyond the Hot Zone.
2. The specific measures required decontaminating personnel, equipment, or apparatus will vary with the contaminant, the circumstances and the level of contamination. These factors must be considered on a case-by-case basis, within the guidelines described in this procedure.
3. The entry team will not go on air or enter the Hot Zone until the decontamination corridor is set-up and the decontamination team is ready. **In cases of extreme life hazard where a rescue is imminent, the HMRT Commander may allow the entry team to make entry while decontamination is being set up and prior to medical monitoring taking place.**
4. Incident Command and the HMRT Commander are responsible for assuring that a Decontamination Sector is implemented at incidents which involve a potential contamination problem. The HMRT Decon Officer in conjunction with the HMRT Communication Officer will determine the most appropriate decontamination procedure for managing the decontamination process.
5. The HMRT Decon Officer must assume that all personnel and equipment preparing to leave the Hot Zone are contaminated. Three courses of action are available:
 - a) Confirm not contaminated—using field diagnostic instruments or investigation based on the nature of the situation.
 - b) Decontaminate (as appropriate to the situation) and release.
 - c) Retain and package items for removal from the site for disposal or decontamination at a different location.

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6. The Decontamination Sector should be established within the Hot Zone into the Warm Zone perimeter. Personnel, equipment and apparatus shall not be permitted to leave the Hot Zone without approval from the HMRT Decon Officer.
7. The Decontamination Sector should provide a corridor leading away from the source of contamination toward the Warm Zone, with stations along the way for the deposit of tools, equipment, protective clothing and other items. Monitoring personnel and equipment should be appropriately placed along this corridor.
8. All contaminated items must remain within the perimeter of the Hazard Zone until decontaminated or safely packaged for removal. The HMRT Decon Officer will be responsible for supervising proper removal of these items.

B. Response

1. The Department has designated two (2) decontamination stations in the northern and southern sectors of the city respectively. These stations will house the Decontamination Units called Decon 29 and Decon 49.
2. The Decontamination Units will respond upon special call. When requested for assistance by an Incident Commander, the HMRT, or the Office of Emergency Management, the Decontamination Unit will be dispatched with the home station engine.
3. In the event their home station is out on another emergency, the Decontamination Unit will be out of service. Fire Dispatch should dispatch the other Decon unit to fill out the request.
4. It will be the responsibility of the Incident Commander and specifically the HMRT Commander, to ensure the Decontamination Unit is operated with a minimum staffing of six (6) attendants trained to the First Responder Operations Level.

C. Procedures

1. Upon receipt of an alarm, the member driving the apparatus will follow the course of action below:
 - a) Transfer firefighting PPE from regular assignment and secure on the Decontamination Unit.
 - b) Drive to the location keeping the proper safe distance with the other apparatus.
 - c) Upon arrival on the scene, notify the Incident Commander and then assume a stand-by position until directed by the HMRT Commander.

D. Decontamination Area Precautions

1. During the decontamination process, all personnel working in the Decontamination Sector must be adequately protected from the contaminants. The HMRT Decon

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Officer will identify and require the appropriate personal protective equipment (PPE). These individuals and their equipment may also require decontamination after use.

2. Any runoff or residue from decontamination procedures must be contained within the Hot Zone and retained for proper disposal. Contaminated runoff must not be allowed to spread or escape. Diking may be necessary and should be directed back to the Hot Zone.

E. Contaminated Patients

1. Patients in need of medical treatment should be removed from the source of the contamination as quickly as possible, but remain within the Hot Zone perimeter. These patients must not be allowed to contaminate further areas of persons.
2. It may be necessary to bring EMS treatment personnel (with adequate PPE) into the Hot Zone to deal with these patients, unless they can be rapidly and effectively decontaminated.

F. Principles of Decontamination

1. Removing clothing is the single most critical step in decontamination and may remove 80-90% of physical contamination.
2. Do not delay removal of clothes or application of a high-volume, low pressure water shower to set up tents, additional equipment or to create a technical decontamination solution.
3. Wash time should be between 30 seconds and three (3) minutes depending on the situation.
4. When the contamination involves chemical vapors, biological or radiological material, using gentle friction, such as rubbing with hands, clothes, or sponges is recommended to aid in removal of the contaminate. This action should begin with the head and proceed down the body to the feet.
5. Victim observation area(s) should be utilized to monitor for signs of delayed symptoms or evidence of residual contamination.
6. Secondary decontamination with an emulsifier such as soap may be necessary if an oily liquid hazard (e.g., sulfur mustard) is involved and initial decontamination is performed with water only. Though the use of a soap-water solution is best for physical removal of many hazards, specialized decontamination products will provide the most effective removal from victims' skin.
7. The key to successful Mass Decontamination is to use the fastest approach that will cause the least harm and do the most good for the majority of individuals.

G. Technical Decontamination Line Process / Structure (Personnel)

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1. In an incident involving technical decontamination two shelters will initially be constructed for grouped victims: Ambulatory and a Special Needs / Non-Ambulatory decontamination shelter for victims requiring assistance, staffed by a male and female support group.
2. Optimally, the Technical Decontamination setup will be managed by six (6) Operations Level personnel.
3. Station #1 – Personal Belongings Drop / Victim Accountability. Two (2) station attendants will be required.
 - a) Attendant #1 will issue the Pre-Decon Kit with included personnel tags. Direction will be given to deposit all critical personal belongings (wallets, keys, identifications, money, purses, etc.) into the large plastic container.
 - b) Attendant #2 will transfer the critical personal belongings and test for contamination with the appropriate field diagnostic device based on the identified threat. The attendant will package for safe storage until belongings are free of contamination and re-issued to the proper owners.
4. Station #2 – Clothing Removal. One (1) station attendant will be required.
 - a) Attendant #3 will have personnel remove all their clothing and deposit it into the specified containers.
 - b) These bags will be stored in the personal belongings check / decontamination area until all victims are processed.
5. Station #3 – Shower. One (1) station attendant will be required.
 - a) Attendant will have personnel enter the shower and ensure they wash all parts of their body, paying particular attention to their hair and body folds.
 - b) Attendant will have victims wash off any suspected contamination with soapy water or technical decontamination products and sponge, then re-rinse.
6. Station #4 – Monitoring. One (1) station attendant will be required.
 - a) Station attendant will monitor with the appropriate field diagnostic device for the identified contaminate. If any contamination is detected, the victim will be moved back into the shower to rewash, and then be retested.
 - b) Once the victims are tested and determined to be free of contamination, they will be sent forward to the clothing issue area.
7. Station #5 – Clothing Issue / Redress. One (1) station attendant will be required.
 - a) Attendant will issue the Post-Decon Kit and direct each person to redress.
 - b) The HMRT Decon Officer will release individuals who have been processed through the Decontamination Sector to the EMS staff for further evaluation.

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- c) The HMRT Decon Officer will determine when it is appropriate to release custody of clothing, personnel effects and equipment following consultation of medical and technical experts.

H. Transportation

1. Patients should be quickly treated for life-threatening injuries simultaneous with decontamination efforts. Once decontamination and treatment is completed, the patient should be covered and transported. The Rescue should be brought to the Warm Zone perimeter for loading. When feasible, the Rescue should be prepared by draping exposed surfaces with polyurethane covers or sheets. Patients should be wrapped or covered to lessen the off-gassing of products within the rescue. Rescue and treatment personnel may still have to wear protective garments and SCBA while enroute to medical facilities.
2. If it is necessary to transport contaminated patients to medical facilities, BioTel and the receiving hospital must be notified in advance of the nature of the contamination, in order to make necessary preparations. The Rescue will be considered contaminated and will require decontamination prior to returning to service. Helicopters such as CareFlight will not be used for transporting any contaminated patients due to off-gassing effects on the pilot and flight crew.

I. Decontaminated Persons

1. When individuals are decontaminated at the Decontamination Sector, they may be released to leave the Hazard Zone. This includes Department personnel, other emergency personnel, civilians and patients. The HMRT Decon Officer will determine when it is appropriate to release custody of protective clothing, personal effects and equipment after consulting appropriate medical personnel (i.e., health center physician, Poison Control Center physician, Dallas County Health and Human Services physician or toxicologist).
2. The HMRT Decon Officer may release individuals who are substantially decontaminated and direct them to medical facilities for further evaluation or decontamination. Individuals may also be directed to shower, change clothes or take other secondary decontamination measures.
3. These personnel should complete an exposure form. DCHHS's exposure control officer will initiate contact and follow-up measures.

J. Protective Equipment and Personal Effects

1. When feasible, protective clothing and personal effects should be decontaminated and released from the Hot Zone with the individual. If the HMRT Decon Officer

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determines it is not reasonable, these items will be impounded in the Decontamination Sector.

2. Personal effects will be carefully guarded by the Decontamination Sector personnel until a determination can be made regarding their final disposition.
- K. Tools and Equipment
1. The HMRT Decon Officer will determine when tools, equipment and apparatus may be released from the Hot Zone. No item shall be removed without approval.
 2. The HMRT Decon Officer may impound equipment for later evaluation and have it packaged for storage or transportation. This impoundment will be accomplished following consultation of medical and technical experts.
- L. Decontamination Setup
1. Contained in the Department Hazardous Materials Decontamination Training Lesson
 2. See Attached Annexes A, B, C.