



City of Winter Park Fire-Rescue Standard Operating Guideline

500.01

**Title: Hazardous Materials Response
Guidelines**

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Purpose: To establish the Fire Department's response, control and abatement procedures for any hazardous material release. In addition, the procedure will describe the policy for handling all hazardous material information collected for emergency response.

Scope: This policy will outline the "Hazardous Material" response of the Fire Department. It will detail the standard first response assignment for a Haz-Mat incident, what procedures are to be followed regarding recognition, notification, and abatement of the exposed material.

General: The Winter Park Fire Rescue Department will consider itself as a "First Response / Operations" level agency. This will encompass all defensive skills such as recognition, notification of individuals, or teams with offensive skills and equipment, containment of certain situations, minimizing harm to citizenry by evacuation, waterfog or protecting in place.

500.01.01. Level of Response

The Department shall be considered to respond at the HAZARDOUS MATERIALS OPERATIONS level. This degree of expertise allows the Incident Commander and those operating at the scene to function in an OFFENSIVE mode to control and or otherwise mitigate a hazard for which the personnel have adequate equipment and training. In the absence of adequate equipment and training to mitigate a specific hazard, personnel of the Department shall function in a DEFENSIVE mode.

The Incident Commander shall have the right and duty to call upon whatever means they deem necessary to handle the emergency. Assistance may be requested from any agency or organization that, in the opinion of the IC, may assist them in reducing the loss, or otherwise controlling the situation. Specific consideration shall be given to current interlocal agreements between the agency and neighboring agencies for HazMat responses.

Any time the Incident Commander deems a situation of a "working nature" either offensive or defensive, the Deputy Fire Chief and Fire Chief shall be notified. Any notification of State or Federal Authorities will be performed by the Deputy Fire Chief or the Incident Commander only in their absence. The exception to this will be for the initial call to either a product manufacturer or to Chem-Trec.

In addition, the Incident Commander should maintain command of the situation no matter who is requested to assist with the situation.

It will be vital for the Incident Commander to maintain a level of knowledge of the incident to allow them to notify outside agencies with enough lead-time to respond to control the incident. When a question exists over requesting of mutual aid, the request should be made.

A hazardous materials incident shall be considered completed when the hazard to life and property no longer exists. This may include maintaining command over all abatement and removal operations even if outside contractors are involved or until all hazards are removed.

All personnel should be aware of, and stay up to date on all D.O.T. requirements and NFPA 704 system for placarding so as to identify a material that will require immediate notification of additional responders.

In addition, Battalion Chiefs and Lieutenants should remain informed of any significant hazardous materials situations in their response areas and relay this information to all personnel. All MSDS information shall be passed on to the officer designated as the Department Haz-Mat coordinator and placed in the appropriate computer aided dispatching program.

Response: The first response assignment for Hazardous Materials Incidents in the City determined to be more than can be handled by a single engine response will be:

- 1 Engine Companies
- 1 Truck Company
- 1 Rescue Unit
- 1 HazMat unit (as determined by the IC)
- 1 Battalion Chief
- 1 EMS Supervisor

The Incident Commander may change the amount of resources dispatched and responding based upon the information received at the time of the call.

500.01.02. Decontamination

Decontamination is the process of removing or neutralizing contaminants that have accumulated on personnel and equipment - is critical to health and safety at emergency response sites. The Decon Officer or responsible person will ensure that all personnel, clothing, and equipment are cleaned prior to their return to service.

The Decon Officer is responsible for the following activities:

- Determine the appropriate level of Decontamination to be provided.
- Ensure that proper Decon procedures are used by the Decon Team, including Decon area set-up, Decon methods and procedures, staffing, and protective clothing requirements.
- Coordinate Decon operations with the Entry Officer and other personnel within the Hazmat Branch.
- Coordinate the transfer of Decontaminated patients requiring medical treatment and transportation with the HAZMAT Medical Group.
- Ensure that the Decon Area is established before any entry personnel are allowed to enter the Hot Zone.
- Monitor the effectiveness of Decon operations.
- Control all personnel entering and operating within the Decon area.

500.01.03. DECONTAMINATION SELECTION

When the incident is outdoors the Decon site should be accessible from a hard-surfaced road. Consideration when establishing a Decon site are: environmental sensitive areas (ponds, streams), water supply, access to showers, and runoff potential. The ideal outdoor site is upwind and uphill from the incident and remote drains, manholes, and waterways.

500.01.04. WARM (CONTAMINATION REDUCTION) ZONE

The Decontamination area will be set up in the warm zone. The area includes the Decontamination corridor. It is also the area which access control points connecting the hot and cold zones are established. The level of protective clothing worn in the warm zone is related to the level of protection the entry team wears when operating in the hot zone. If someone needs assistance in the hot zone, the backup team would assist. This team normally wears the same level of protection as the entry team. The Decontamination team is permitted to wear the next lowest level of protection. (If the

entry and back up teams have donned level A, the Decontamination team can be level B suits.)

Access and Decontamination corridors are set up adjacent to one another in the warm zone. They are normally a minimum of 25 feet wide. They need only be between 30 and 50 feet in length, depending upon the number of operational steps required and options available.

The two major phases of Decontamination are gross and secondary. Gross Decontamination involves the removal or chemical alteration of the majority of the contaminant. It must be assumed that some residual contamination will always remain on the host. This contamination can produce cross-contamination. Secondary Decontamination is the removal or alteration of most of the residual product contamination. It provides a more thorough Decontamination than the gross effort. But some contamination may still remain attached to the host, resulting in permeation and impregnation.

500.01.05. HEALTH AND SAFETY HAZARDS AND DECONTAMINATION SOLUTION AND TECHNIQUES SELECTION:

While Decon is performed to protect health and safety, it can pose hazards under certain circumstances. Decontamination methods may:

- Be incompatible with the hazardous substances being removed (i.e., a Decon method may react with contaminants to produce explosion, heat or toxic products).
- Be incompatible with the clothing or equipment being Decontaminated (some organic solvents can permeate and/or degrade protective clothing).
- Pose a direct health hazard to workers (vapors from chemical Decon solutions may be hazardous if inhaled, or they may be flammable).

500.01.06. TESTING FOR EFFECTIVENESS OF DECONTAMINATION:

The effectiveness of any Decon method should be assessed at the beginning of an operation and periodically throughout the operation. The following methods may be useful in assessing the effectiveness: Visual observation, such as discoloration, stains, corrosive effects, visible waste, alteration in fabric, ultraviolet light, chemical wipe sampling; monitoring devices, testing for permeation, etc.

All equipment used for Decon must be Decontaminated and /or disposed of properly. Buckets, brushes, clothing, tools, and other contaminated equipment should be collected, placed in containers and labeled. Also all spent solution and wash water should be placed in plastic bags, pending further Decon and / or disposal.

500.01.07. EMERGENCY DECONTAMINATION

In an emergency situation the primary concern is to prevent the loss of life or severe injury to operating personnel. If immediate treatment is required to save a life, Decontamination can be, in some cases, delayed until the victim is stabilized. If Decontamination can be performed without interfering with essential life-saving techniques or first aid, or if a worker has been contaminated with an extremely dangerous material that could cause severe injury or loss of life, emergency Decontamination procedures must be performed immediately. Clothing must be removed from the contaminated victims prior to transporting. If this is the case, the patient's dignity should be considered as much as possible.

Precautions should be taken so that any chemical exposure to the emergency workers or the transport vehicle is limited. Upon completion of patient transport, Decontamination of all equipment and personnel SHALL NOT BE PERFORMED AT THE HOSPITAL. Special arrangements shall be established for the proper Decontamination of all equipment and vehicles.

Emergency workers may need to return to the scene and report to the DECON SECTOR for proper Decontamination.

Required Report Forms for Hazardous Materials Incidents and Exposures

The following forms must be completed as needed for each Hazardous Materials response for each employee.

Form 500.01 A: **Individual Record of Hazardous Material Exposure**

To be completed on each employee exposed during a particular incident. This record will be kept on file to establish a particular employees' long-term exposure risk.

Form 500.01 B **Hazardous Materials Incident Notification Checklist**

To be used on the scene to assist the Incident Commander in making the proper notifications during the emergency.

Form 500.01 C **Hazardous Materials Incident Action Checklist**

To be used on the scene to assist the Incident Commander

Form 500.01 D **Safety Officer Data Sheet**

To be used on the scene of the emergency by the assigned Safety Officer.

Form 500.01 E **Incident Expense Sheet**

To be completed and forwarded to the carrier or party responsible for the spill for recoupment of the expended cost of the incident.

Form 500.01 F **Decontamination - Plan of Action Worksheet**

To be completed on-scene by the DECONTAMINATION OFFICER and turned in to the Incident Commander as part of the total incident package.

Form 500.01 G & H **Medical Status Worksheet for On-Scene Personnel**

To be completed and forwarded with all personnel involved in hazard mitigation or those who have been in any way exposed to the hazards involved. If any individual is in doubt whether they need to complete this form, it should be completed. A copy of this form shall accompany the employee to the hospital if needed.



A handwritten signature in black ink, appearing to read 'James E. White', is written over a horizontal line.

James E. White
Chief of Department



Hazardous Materials Individual Record of Exposure

FORM 500.01 A

NAME _____ DATE _____

UNIT ASSIGNMENT _____ INCIDENT # _____

INCIDENT LOCATION _____

MATERIALS INVOLVED:

ITEM #1 TRADE/COMMON NAME _____

U.N.I.D. # _____ CONTAINER / SIZE / QUANTITY _____

FORM: SOLID LIQUID GAS POWDER MIST
GRANULAR OTHER

ITEM #2 TRADE/COMMON NAME _____

U.N.I.D. # _____ CONTAINER / SIZE / QUANTITY _____

FORM: SOLID LIQUID GAS POWDER MIST
GRANULAR OTHER

CONTAMINATION

INGESTION INHALATION ABSORPTION

DURATION OF EXPOSURE - (HOURS - MINUTES - SECONDS)

PATIENT SYMPTOMS

ATTACH COPY OF TRAUMA REPORT

USE OF PROTECTIVE CLOTHING

HAZMAT SUIT - TYPE FULL SFF W/SCBA FULL SFF WO/SCBA UNIFORM

CAUSE OF EXPOSURE:

PERSON COMPLETING REPORT _____

COMPLETE REPORT FOR EACH INDIVIDUAL EXPOSED. FILE IN EXPOSURE RECORD BOOK, H-M-I



Hazardous Materials Incident Notification Checklist

FORM 500.01 B

- LAW ENFORCEMENT (EVACUATION, PERIMETER, CROWD AND TRAFFIC CONTROL)
- HAZ-MAT RESOURCE LIST / OTHER AGENCIES AND TEAMS
- HOSPITALS (TREATMENT ON-SCENE, MASS CASUALTY, POISONS)
- MED-COM (CIVIL EMERGENCY MANAGEMENT NOTIFICATION)
- CITY STREETS DEPARTMENT
- CITY LAKES DIVISION (RUN-OFF POTENTIAL)
- FLORIDA DEPARTMENT OF TRANSPORTATION D.O.T. (BULK SAND DELIVERIES)
- TECO GAS COMPANY
- ORANGE COUNTY POLLUTION CONTROL DEPARTMENT
- FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION (NOTIFICATION)
- SHERIFF'S DEPARTMENT BOMB SQUAD (ORDINANCE REMOVAL)

LOCAL RESOURCES

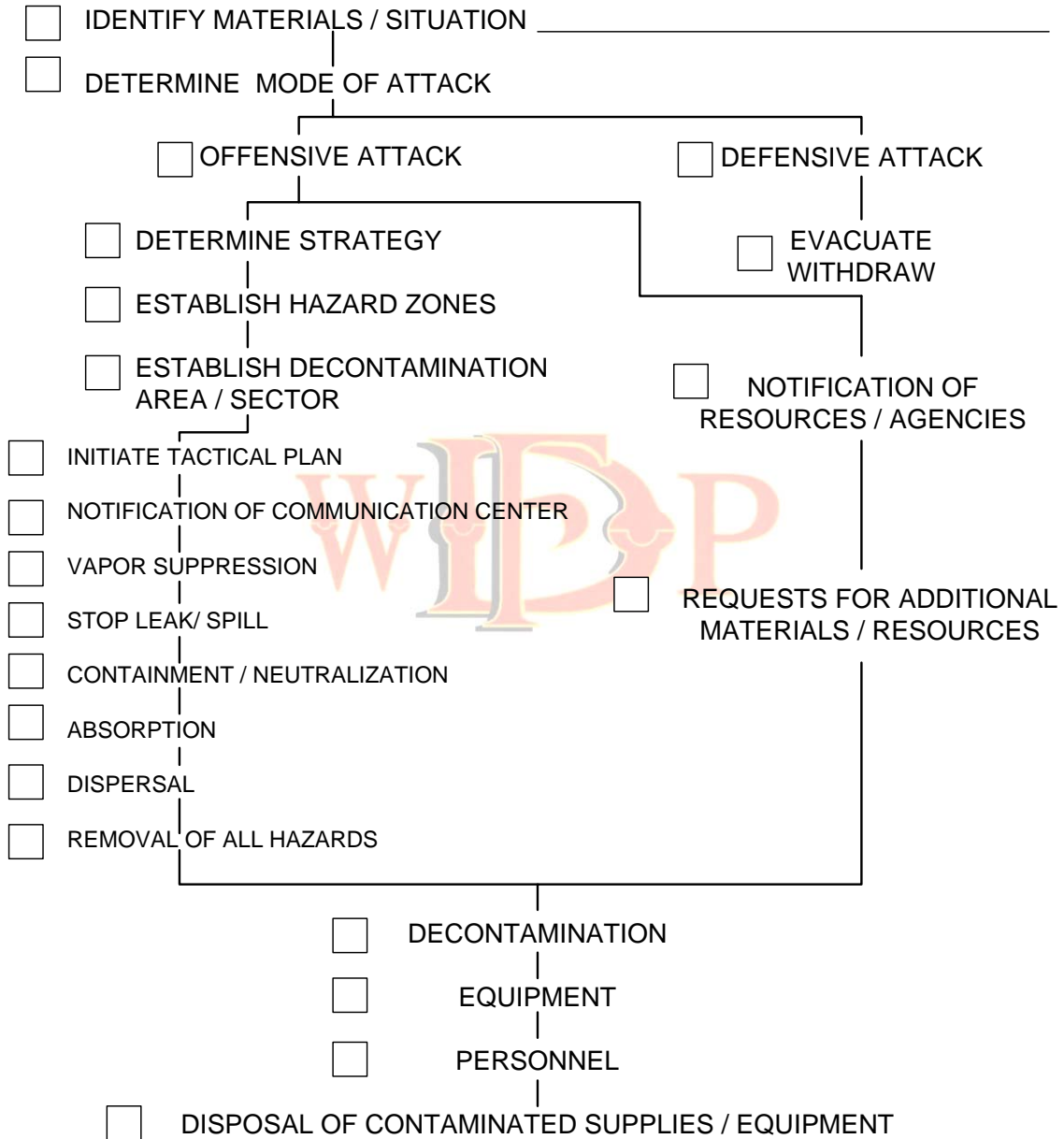
- ___ UCF/ROLLINS CHEMISTRY DEPARTMENT
- ___ P.B.&S. CHEMICALS
- ___ ASGROW OF FLORIDA
- ___ EARTH RESOURCES
- ___ SEABOARD COASTLINE RAILROAD
- ___ O.H.M. MATERIALS CLEAN-UP
- ___ AIR PRODUCTS
- ___ CHEM CON
- ___ TEXGAS
- ___ U.S. DEPARTMENT OF AGRICULTURE / HORTICULTURE LAB
- ___ LOCKHEED MARTIN

COMMAND



Hazardous Materials Incident Action Checklist

FORM 500.01 C





Hazardous Materials Safety Officer Data Sheet

FORM 500.01 D

DATE _____ INCIDENT NUMBER _____

WEATHER CONDITIONS _____

Wind Speed _____ Temperature _____ Humidity _____

PRODUCT INFORMATION _____

NIOSH _____

UN _____

ERG _____

Chemical Name _____

Chemical Formula _____

Commercial Name _____

Suit Compatibility _____

Suit Type Used _____

Additional Comments:

SAFETY OFFICER



Hazardous Materials Incident Cost Worksheet

FORM 500.01 E

DATE _____ INCIDENT NUMBER _____

LOCATION _____

TYPE OF INCIDENT _____

INCIDENT COMMANDER _____ SHIFT _____

FIRE - RESCUE MATERIALS USED: ESTIMATED COST

- | | |
|-----------------------------------|----------|
| 1. Foam _____ Gallons | \$ _____ |
| 2. Absorbent Materials | \$ _____ |
| 3. Sand _____ Yards | \$ _____ |
| 4. Overpack Drums _____ | \$ _____ |
| 5. Absorbent Booms _____ | \$ _____ |
| 6. Disposable Suits _____ | \$ _____ |
| 7. Respiratory Equipment | \$ _____ |
| 8. Testing/Monitoring Equipment | \$ _____ |
| 9. Other Disposable Items / List: | \$ _____ |

Apparatus / Personnel Costs (Per City Fee Schedule)

	Units	Each	Cost
Incident Commander	_____	_____	\$ _____
Engine Companies	_____	_____	\$ _____
Truck Companies	_____	_____	\$ _____
Rescue Companies	_____	_____	\$ _____
Hazardous Materials Unit	_____	_____	\$ _____

OUTSIDE VENDORS (RECOVERY / CLEAN-UP / DISPOSAL)

\$ _____

TOTAL RECOVERABLE COSTS

\$ _____

FINANCE



Hazardous Materials Decontamination Plan of Action

FORM 500.01 F

DECON Officer _____

1. Location of DECON Operations

2. Size of DECON Operations / Personnel / Equipment ETC.

3. Potential chemicals involved in DECON process

4. Specific solutions and procedures required for DECON process

5. Testing Process used to test effectiveness of DECON process

6. Level of protective clothing required for DECON personnel

7. Process for disposing of RUNOFF / CONTAMINATED EQUIPMENT

DECON



Entry Member Medical Status Form

FORM 500.01 G

Incident Location: _____ Incident Number: _____

Chemical(s): _____ DOT#(s): _____

Team Member:

A: _____ B: _____ C: _____ D: _____

ENTRANCE	A	B	C	D
Blood Pressure				
Pulse Rate				
Respirations				
Weight				
Oximetry				
EKG 3L 12L				
Hydration cc				
Temperature				

EXIT (one minute)	A	B	C	D
Blood Pressure				
Pulse Rate				
Respirations				
Weight				
Oximetry				
EKG 3L 12L				
Hydration cc				
Temperature				

EXIT (five minutes)	A	B	C	D
Blood Pressure				
Pulse Rate				
Respirations				
Weight				
Oximetry				
EKG 3L 12L				
Hydration cc				
Temperature				

REHAB



Entry Member Medical Status Assessment Form

FORM 500.01 H

Physical Status Exclusion Factors

- General Sensorium : A/O x4 -----
- Serial 3s to 27 -----
- Finger to Nose -----
- Diastolic below 100mmHg -----
- Pulse of Less than 100 -----
- Respirations of Less than 24 -----
- Oximetry greater than 94% -----
- EKG = NSR -----
- Temperature between 97 and 99.5 -----

Exclusion Factors MUST be Checked at FIVE minutes after EXIT.

The above are norms . . . Assessments that do not meet this criteria must be evaluated.

Name - _____