	OFFICE OF STATE FIRE MARSHAL *REGIONAL HAZARDOUS MATERIAL EMERGENCY RESPONSE TEAMS* **STANDARD OPERATING GUIDELINES**	**Number: T-007** **Adoption Date: October 27, 1993** **Review/Revision Date:** April 5, 2005

OSFM Approved: Signature on file at OSFM Date_____ Nancy J. Orr, State Fire Marshal	Signature on file at OSFM Date_____ Susan J. Otjen, Operations Manager

SUBJECT: **Reconnaissance Procedures**

OBJECTIVE: **To Describe the Procedures to Be Used by the Reconnaissance Team to Perform Reconnaissance at Hazardous Materials Incidents.**

I. SCOPE

This guideline establishes procedures for reconnaissance at hazardous materials incidents by State Hazardous Materials Emergency Response Teams (HMERTs).

II. OFF-SITE RECONNAISSANCE

Initial observations and monitoring: At responses in which the hazards are largely unknown, Off-Site Recon is performed to make visual observations to gather available and important information without exposing individuals to hazard zones.

A. The Recon Team consists of a minimum of two team personnel. They have the responsibility to approach from up-wind, up-hill, and with operating air monitoring equipment. They scan the scene with binoculars and verbally announce any observations. The relay of Recon information should begin with Resource and the Group Supervisor/Team Leader monitoring radio transmissions of the Recon team during off-site recon.

1. The elements of off-site reconnaissance include:

   a. Object/product of concern
   b. Labels and placards
   c. Action or reaction of products
   d. Street and road layout
   e. Wind direction and speed
   f. Structures
   g. Drains, curbs and gutters
   h. Waterways and wetlands
   i. Terrain and grades
   j. Overhead obstructions

k. Victim/body location & condition
l. Locations of any established control zones.

2. Monitoring for hazardous conditions is to be initiated as part of off-site reconnaissance to ensure Recon team avoids entry into a hazard zone. This monitoring assists in the establishment of proper control zone boundaries.

   a. Monitoring ambient air for:
      1. Lower Explosion Limits (LEL)
      2. Oxygen deficiency (O2)
      3. Carbon Monoxide (CO)
      4. Other expected conditions
   b. Radiological

3. The Recon team develops a sketch of the incident scene and should include as many of the above elements as available. Also note:

   a. Placards, labels, markings on containers
   b. Markings on transportation vehicles
   c. Product name
   d. UN or STCC number
   e. Types and numbers of containers, buildings or dump sites
   f. Leaching and/or runoff
   g. Biological indicators:
      Dead vegetation, animals, fish or insects
   h. Unusual odors and other conditions
   i. Locations for point of entry, decon corridor, emergency exits, medical triage, etc.

4. Conduct interviews as needed.

5. Collect any other available information that may indicate or characterize on-site conditions.

6. The Recon team relays all information gathered to the HazMat Group Supervisor/Team Leader and Resource. Group Supervisor/Team Leader and other team members review information obtained through off-site reconnaissance, incident briefing with IC and first responders and develop the Team Action Plan.

III. ON-SITE RECONNAISSANCE

When off-site reconnaissance does not provide complete information necessary to develop viable Mitigation Objectives, on-site reconnaissance may be necessary.

On-site recon is performed in the Hot Zone and necessitates the establishment of a "Team Action Plan" including Safety Objectives, medical monitoring, monitoring for hazardous conditions, proper PPE, Entry/Back-up , Decon, etc.

On-site Recon allows for the collection of more specific information such as:

a. Types of containers and impoundment
b. Numbers and quantities of materials
c. Types of materials
d. Condition of containers
e. Condition of pipes or storage containment
f. State of various disrepair
g. Physical condition of the materials
    1. Solids, liquids, gases, etc.
    2. Color, turbidity
    3. Behavior - foaming or corroding
    4. Evidence of reactivity
    5. Leaks or discharges from containers, tanks, plumbing, ponds, vehicles, etc.
h. Specific needs for mitigation efforts.
    1. Tools
    2. Supplies