Florida

Hazardous Materials
Field Operations Guide

(This page was intentionally left blank)

Preamble

The Florida State Emergency Response Commission (SERC) has developed the Florida Hazardous Materials Field Operations Guide (FOG) to provide guidance for management of hazardous material events.

The manual is designed to be a job aid for those in charge during a hazardous materials incident. The manual is not intended to override any federal, state and local laws or any local standard operating procedures.

Although this manual provides guidance for all levels of response, personnel should not exceed their level of training.

Florida Hazardous Materials
Field Operations Guide

Index

Section 1 Eight Step Process

Section 2 General Operations p. 35

Appx A Mission Specific Guidance

Appx B Forms

ICS 201 Incident Briefing ICS
202 Incident Objectives ICS
203 Org. Assignment List ICS
204 Assignment List
ICS 205 Incident Radio Com. Plan
ICS 206 Medical Plan
ICS 207 Organization Chart
ICS 214 Unit Log
ICS 215 Operational Planning
ICS 215a IAP Safety Analysis
ATF Evacuation Card
ATF Threat Checklist
Safe Standoff Distance Sheet
HazMat Tactical Work Sheet
Rehab Worksheet

1.1 Site Management

First Responder management of hazardous materials incident(s) may include: risk/benefit evaluation, hazard assessment, evacuations/isolation, notifications, and unit assignment as required.

General Methodology:

- Obtain information about the incident while responding
- Identify and request appropriate resources.
- Utilize the Emergency Response Guidebook (ERG) for initial guidance; notify all other responding units the guide number being referenced.
- Gather weather information
- Approach incident from an upwind/uphill side. Notify incoming units of traffic route(s) and staging location.
- Once on-scene Establish Command
- Conduct Size-up of the Situation
- Identify Life Safety Concerns
- Evaluate Risk – Benefit for Potential Rescue
    - Viability of Victims
    - Biological Indicators

- Symptomology

- Complete Hazard Risk Assessment
  - Occupancy Type
  - Form of Material Involved
    - Vapor Cloud Visible
    - Containers
      - Pressure/Non Pressure/Low Pressure
      - Composition and Size
    - Placards / Labels
    - Migration of Product
    - Evaluate Space
      - Inside
      - Outside
      - Topography
- Evacuation/ Extraction of victims
  - Ability to Effect Immediate Rescue
  - Consider Changing Atmosphere
  - Potential for relocation of Victims to Area of Safe Refuge
  - Evacuation verses Shelter-in-Place Strategies
    - If shelter-in-place is required, ensure proper notifications to citizens include guidance to:
      - Stay in identified location pending

additional direction
- Close all windows and doors
- Turn off HVAC systems
- Prepare for an immediate Evacuation Order

- Identify Staging Locations
- Ensure Responder Accountability
- Notify local/state authorities as appropriate
- Determine isolation and or evacuation distances based upon the ERG reference guides and/or agency standard operating procedures.
- Determine control zones; areas of safe refuge (for responders and victims), and decontamination reduction corridor
- Determine appropriate levels of PPE based upon mission and product(s)
- Identify areas of contamination
- Keep responders informed of actions and events

When Hazardous Materials Response Team arrives on scene:

- The Hazmat Team group leader shall identify themselves to the IC
- Establish a Hazmat Branch or Group

- Establish Staging area for the Hazmat Team
- Size-up situation and complete a hazard risk assessment
- Develop/refine a site-specific action plan based upon location, materials involved, weather conditions, resources, etc.
- Brief Team and ensure coordination of response goals, objectives and overall common effort.

Compromised Life Safety Present:

Hazmat Arrival

- Meet with Command / Establish Hazmat Branch or Group

- Perform rapid Hazmat Size-Up
  - Identify first responder activities / information
  - Identify Victim Location(s)
  - Conduct Risk / Benefit Evaluation
  - Complete Hazard Risk Assessment
    - See Section 1.2 “Identification” for additional guidance

- Develop Plan for Rescue in respect to Hazards and Brief Team

- Conduct Atmospheric Monitoring while line-of-site Rescue is attempted

- If indicated, attempt Line of Sight Rescue
  - Note: Line-of-site rescue refers to a situation in

which a clear visible path exists between an area of relative safety and a location in which significant hazard is present or suspected. The path should not involve any significant barrier to accomplishing rapid access and egress while a victim is relocated to an area of reduced risk. This strategy should never be confused with search and rescue; which entails the tactic of a methodical process of looking for potential victims that cannot be visibly located.

- Establish Emergency Decontamination (may be by first responders in an area designated by the Incident Commander)

No Life Safety Concern Present:

Hazmat Arrival

- Meet with Command / Establish Hazmat Branch or Group

- Perform Hazmat Size-Up
  - Identify first responder activities / information
  - Confirm absence of Life Safety Concerns
  - Conduct Risk / Benefit Evaluation
  - Complete Hazard Risk Assessment

- Conduct Atmospheric Monitoring to qualify or establish control zones

- Develop incident specific Site Safety Plan

- Identify specifics of Spill, Leak or Release
  - Confirm Products Involved
    - Consult Facility Representative

        - Consult Material Data Sheets
        - Environmental Monitoring
    - Assess Container or System
        - Type, Size, Condition, Position, Damage, Product Migration
        - Placards or Labels
        - Identify presence of remote valves

- Conduct Research on Product(s)
    - Accomplish plume modeling if indicated
    - Consider Environment Factors
        - Time of Day and Weather Conditions

- Refine Protective Actions strategy and complete appropriate notifications

- Assist Incident Commander (IC) in refining the Incident Action Plan (IAP) in respect to Site Safety Plan, Hazard Assessment and desired strategy/tactics to stabilize hazard(s).

- Develop Operational Hazmat Plan and coordinate with Operations Branch or Incident Commander (IC)

    - Options may include:
        - Reconnaissance mission with direction to stay out of product but ability to stabilize any hazard if it can be accomplished without getting into product
        - Entry mission to control a specific element or accomplish a valid task
        - Strategies to change environmental conditions to minimize or resolve atmospheric hazard should be explored prior to engaging in control measures in the absence of life safety issues.

        - Facilitation of pre-entry medical evaluations and mission briefing should precede any entry in chemical protective clothing (CPC).

- Direct placement and assembly of the Decontamination Corridor respective of product characteristics and number of personnel or victims
    - Emergency or Mass Decontamination strategies do not require containment of run-off as they are related to life safety.

- Ensure Rehab placement is in an area void of hazards (e.g. CO from apparatus exhaust)

- Accomplish Debriefing of personnel prior to termination of event
    - What was dealt with
    - Confirmation of zero Exposures
        - Contamination = ON YOU
        - Exposures = IN YOU
    - Signs and symptoms of potential exposure
    - Assurance all equipment and personnel were appropriately decontaminated

1.2 Identification

This procedure serves as a job aid for first responders to conduct identification and verification of a hazardous substance. The Hazmat Technician can use these steps to assist in the classification and/or identification of hazardous materials.

General Methodology:

- Initial Size-Up for identification includes:
  - Occupancy
  - Container Shapes
  - Placards and Labels
  - Shipping papers
  - Facility Documents/ Pre-Fire Plans
  - Senses

- In addition to the initial Size-Up, the following shall be used to identify materials having the following characteristics.
  - **Radioactivity:** With radiation survey meter, determine if the material presents ionizing radiation greater than identified background levels.
  - **Corrosives:** At the same time, assess the atmosphere for corrosive vapors by using a pH strip moistened with distilled water. Touch product with the pH

paper to determine if the material has corrosive characteristics.

- **Oxygen Concentration and Flammability**: If the material is a gas, liquid or potentially sublimating solid oxygen concentration should be checked in low-lying or enclosed areas along with the presence of combustible/flammable vapors.
- **PID/FID:** If the material is a gas, liquid or potentially sublimating solid a vapor analysis shall be performed using Photo-ionization Detector (PID) or combination Photo-ionization Detector/ Flame Ionization Detector (PID/FID). This will aid in identifying organic or inorganic material as well as provide quantitative analysis of concentration once the true identity of the materials is determined.

- **Additional Analysis Procedures:**
  - Depending upon potential risks or need to determine the material's actual identity, the following additional measures may be selected to provide further field analysis.

- **For vapors, gases and high vapor pressure liquid**s:
  - Gas Infrared Spectrometry using the Thermo Miran-Sapphire®; GAS ID or MS/GC
  - Colorimetric detector tube qualitative analysis procedures
  - APD 2000,LCD 3.2/3.3, ChemPro 100, Sabre 4000 or other IMS technology for potential chemical warfare agents or pepper spray
  - Haz-Mat Chemical Agent Detector (CAD), LP2c, LP4C or other flame spectrometry for chemical warfare agents
  - Consider obtaining 10mL liquid sample or 20 liter gas sample in a clean, un-used container for lab or support zone analysis

- **For solids and low vapor pressure liquids:**
  - M8 – M9 Chemical warfare agent detector paper
  - M256A1 Chemical warfare agent wet chemistry detection kit
  - Consider field biological agent immunoassay for substances with significant credibility or risk.
  - Solid or liquid Infrared Spectrometry of head space vapors

- Haz-Cat® wet chemistry qualitative analysis.
- Consider obtaining 10mL liquid or solid sample in a clean, unused sample container for lab or support zone analysis.

- **Documentation of Analysis**
  - The attached HAZARDOUS MATERIALS GROUP LEADER – TACTICAL WORKSHEET may be used to develop and document air monitoring strategy. If this form is used during an incident it shall become a part of the permanent report.
  - If air monitoring is conducted in conjunction with a law enforcement investigation (e.g. suspicious powder incident or other criminal investigation), all appropriate chain of custody, sample submission forms and sample container labels shall be completed per appropriate SOP or directives.

1.3 Hazard Risk Assessment

The Hazmat Branch or Group leader shall use these benchmarks to accomplish a thorough hazard risk assessment.

General Methodology:

- Confirm actions of First Responders
- Confirm information received by First Responders
- Determine the physical and chemical properties of the material involved and the status of the material.
- Evaluate the type and condition of container and the possible associated hazards
- Evaluate the environmental conditions
    - Weather
    - Topography
    - Incident location
    - Population
- Analyze exposure hazards
    - Evacuation/Isolation
    - Air monitoring
    - Plume models
- Evaluate capability of on-scene resources to manage incident based upon current
- Evaluate future resources based upon predicted outcomes

1.4 Resource Allocation

Assist Incident Commander with identifying resources required to notify and mitigate an incident.

Emergency Contact Methodology:

Activate local emergency response plan to include notifications which may include regional Haz Mat Team

- Notify State Watch Office and potentially one or more of the following:
    - For Radiological Emergencies contact Bureau of Radiation Control and DOH
    - For Military ordnance, notify the State Fire Marshall and the nearest Military Base.
    - For potential explosive materials contact FDLE, ATF and local Bomb Squad
    - For Industrial/transportation responses contact ChemTrec
    - For WMD responses notify FDLE and FBI
    - For Biological response assistance notify Department of Health
    - For propane and natural gas contact local gas distributor

- For coastal response contact National Response Center
- For poisonings and exposures contact Poison Control
- For railroad response contact: _____
- For air emergencies contact FAA

Local Emergency Contacts:

_____

_____

_____

_____

_____

_____

_____

_____

1.5 Selection and Use of Specialized Chemical Protective Ensembles

This information shall guide selection and use of various protective ensembles based upon the identified or anticipated hazards to be encountered during a hazardous materials emergency. It is the incident commander's responsibility to ensure appropriate procedures, such as those outlined in this guide are implemented using the input of a knowledgeable Safety Officer and HazMat Group Supervisor.

Specialized Chemical Protective Ensembles:

Chemical protective ensembles shall be selected based upon the hazards present in the work area; when selecting the ensemble, the following information shall be evaluated:

- Identity of the material involved (if known) and its associated hazards
- Physical state of the material (solid, liquid, gas)
- Potential routes of chemical exposure (inhalation, contact, absorption, etc.)
- Anticipated job function, proximity to and contact with the materials (incidental contact, repeated contact, immersion)
- If the airborne concentration of the material is known or anticipated to exist above published exposure limits or the Immediately Dangerous to Life and Health (IDLH) concentration
- Anticipated oxygen concentrations

- Other physical hazards that may exist (sharp metals, confined spaces, fire hazards, dangerous noise levels, etc.)
- Chemical compatibility of the protective garment based first upon manufacturer test data including ASTM chemical test battery.

Based upon the assessment of this information, the following table represents general considerations for ensemble selection:

Ensemble Description Using Performance-Based Standard(s)	**OSHA/EPA Level**
NFPA 1991, worn with NIOSH CBRN SCBA	A
NFPA 1994 Class 2 worn with NIOSH CBRN SCBA	A or B
NFPA 1994 Class 2 worn with NIOSH CBRN APR	C
NFPA 1994 Class 3 worn with NIOSH CBRN SCBA	B
NFPA 1994 Class 3 worn with NIOSH CBRN APR	C

Source: DMS Interagency Board

NFPA 1991 VAPOR PROTECTIVE (LEVEL A) Compliant for Thermal and Abrasion Resistance			
	Generally Used When	**Not to be used when**	**Chemical Protective Ensemble**
NFPA 1991 VAPOR PROTECTIVE (LEVEL A) Compliant for Thermal and Abrasion Resistance	ƒ Atmospheres with known or potential IDLH concentrations with skin route of exposure ƒ When contact, repeated splash or immersion in product that is dangerous to the skin is anticipated ƒ For entries into enclosed or poorly ventilated areas during releases of gases or high vapor pressure liquids (> 100mm/Hg) that are dangerous to the skin ƒ Unidentified, poorly ventilated atmospheres in which situations indicate a possibility of an IDLH environment and other engineering controls can not be used to reduce concentrations, ƒ Material has **flammable properties** and the presence of a flammable atmosphere cannot be controlled, or ƒ Scene hazards and work mission indicates **high potential for abrasion and/or puncture** and tears to the garment.	Engineering controls can be implemented that will reduce flammability and abrasion /tear hazards to acceptable levels **Note:** Due to the extreme limitations of movement, communications, vision and dexterity that are created by this level of protection, every effort should be made to reduce scene hazards through engineering controls and monitoring prior to implementation.	ƒ PP/SCBA ƒ NFPA 1991 Level A garment with appropriate flash protective layer ƒ Surgical gloves ƒ Inner chemical resistant gloves ƒ Outer chemical resistant gloves ƒ Outer puncture/tear resistant gloves. ƒ In-suit radio system ƒ Chemical resistant outer boots

VAPOR PROTECTIVE (LEVEL A) Non-NFPA 1991			
	Generally Used When	Not to be used when	Chemical Protective Ensemble
VAPOR PROTECTIVE (LEVEL A) Non-NFPA 1991	ƒ Atmospheres with known or potential IDLH concentrations with skin route of exposure, or ƒ When contact, repeated splash or immersion in product that is dangerous to the skin is anticipated (other than incidental contact), or ƒ For entries into enclosed or poorly ventilated areas during releases of gases or high vapor pressure liquids (> 100mm/Hg) that are dangerous to the skin, or ƒ Unidentified, poorly ventilated atmospheres in which situations indicate a possibility of an IDLH environment and other engineering controls cannot be used to reduce concentrations	**Flammable Environments** ƒ Use engineering controls to reduce flammability hazards, then ƒ Upgrade to NFPA 1991 compliant garment **High physical Cut and tear hazards** ƒ Upgrade to NFPA 1991 compliant garment **Low Temperatures** ƒ Low temperatures requiring additional thermal protection. Then Upgrade to NFPA 1991 Compliant Garment.	ƒ PP/SCBA ƒ Vapor Protective Garment ƒ Surgical gloves ƒ Inner chemical resistant gloves ƒ Outer chemical resistant gloves ƒ In-suit radio system ƒ Chemical resistant outer boots

Level "B" Protective Ensemble (Non-Encapsulating) (Solid or liquid contact, High respiratory protection)			
	Generally Used When	**Not to be used when**	**Chemical Protective Ensemble**
Level "B" Protective Ensemble (non-encapsulating) (Solid or liquid contact, High respiratory protection)	ƒ IDLH-Inhalation environment known or possible, and ƒ No IDLH Skin atmosphere present or likely (e.g. low vapor pressure liquids or high concentrations of water soluble/skin absorbable vapors/gases or, hydroscopic corrosive gases/vapors) ƒ Possible oxygen deficient atmosphere ƒ Direct contact with product that can injure the skin is limited only to an incidental splash. Repeated contact is unlikely ƒ Minimum level of protection for un-identified environment and will be used in conjunction with appropriate air monitoring procedures	ƒ Potential IDLH-Skin conditions exist ƒ When in enclosed or confined areas with spills of high vapor pressure liquids or gases that may be injurious to/or absorbed through the skin are possible ƒ When repeated contact or immersion in the product is likely. **Flammable Environments** ƒ Use engineering controls to reduce flammability hazards. Otherwise, additional thermal protective garments will be required.	ƒ PP/SCBA ƒ Liquid splash protective coverall garment **or,** ƒ Particulate contact protective coverall garment ƒ Surgical gloves ƒ Chemical resistant outer gloves ƒ In-suit radio system ƒ Chemical resistant outer boots

Level "B" Protective Ensemble (Encapsulating) (Solid or liquid contact, High respiratory protection)			
	Generally Used When	**Not to be used when**	**Chemical Protective Ensemble**
Level "B" Protective Ensemble (encapsulating) (Solid or liquid contact, High respiratory protection)	ƒ IDLH-Inhalation environment known or possible, and ƒ No IDLH Skin atmosphere present or likely ƒ Possible oxygen deficient atmosphere ƒ Direct contact with product that can injure the skin is limited only to an incidental splash. Repeated contact is unlikely ƒ Minimum level of protection for un-identified environment and will be used in conjunction with appropriate air monitoring procedures ƒ There is a need to reduce splash contact hazards and to protect SCBA or other protective equipment ƒ There is a desire to minimize extensive decon operations. ƒ There is a desire to reduce heat stress of personnel stand-by modes of operation (e.g. decon personnel).	ƒ Potential IDLH-Skin conditions exist ƒ When in enclosed or confined areas with spills of high vapor pressure liquids or gases that may be injurious to/or absorbed through the skin are possible ƒ When repeated contact or immersion in the product is likely. **Flammable Environments** ƒ Use engineering controls to reduce flammability hazards. Otherwise, additional thermal protective garments will be required.	ƒ PP/SCBA ƒ Encapsulating liquid splash protective garment ƒ Surgical gloves ƒ Chemical resistant outer gloves ƒ In-suit radio system ƒ Chemical resistant outer boots

Level "C" Protective Ensemble (Solid or liquid contact, Known Respiratory Hazards)			
	Generally Used When	**Not to be used when**	**Chemical Protective Ensemble**
Level "C" Protective Ensemble (Solid or liquid contact, Known Respiratory Hazards)	ƒ No IDLH environment known or possible, and ƒ Oxygen between 19.5 and 23.5% ƒ Identity of the material is known, and ƒ Airborne concentrations are known to be below IDLH concentrations and within the protection factor of the respirator to be used, and ƒ The appropriate respirator cartridge is available for the material, and ƒ Warning properties are sufficient to indicate that breakthrough has occurred ƒ No Flammability hazards are present	ƒ Any potential for IDLH either skin or inhalation is present ƒ When in enclosed or confined areas with spills of high vapor pressure liquids (>100 mm/Hg) or gases and air monitoring has not been performed to measure the potential exposure levels ƒ When repeated contact or immersion in the product is likely **Flammable Environments** ƒ Use engineering controls to reduce flammability hazards	ƒ Full Face Negative Pressure Air Purifying Respirator (APR) with a NIOSH assigned protection factor of 10:1 or Powered Air Purifying Respirator (PAPR) with a NIOSH assigned protection factor of not less than 50:1, and ƒ Used with either P100 particulate cartridge or, Organic Vapor/Acid Gas/P100, or contaminate specific filter which ever can be used for the environment to be encountered **and**, ƒ Liquid splash protective coverall garment of **or**, ƒ Particulate contact protective coverall garment of Dupont Tyvek® or Laminated Tyvek® **and,** ƒ Surgical gloves ƒ Chemical resistant outer gloves. ƒ Chemical resistant outer boots

PPE AND WMD

- **Radiological**
  - For radiological materials which are particles:
    - Respiratory protection prevents inhalation and ingestion
    - Particulate protective garments will enhance the ability to decontaminate
    - NFPA 1994 Class 4 ensembles with PAPR
    - If available, use radiation shielding suits with PAPR or appropriate contained breathing apparatus
- **Nerve agents**
  - Nerve agents are mostly low volatility liquids
  - Positive pressure SCBA is selected in IDLH environments
    In low vapor concentrations, NFPA 1994 Class 2 ensembles are indicated
- **Blister agents**
  - Blister agents also are low volatility liquids
  - Positive pressure SCBA is selected in IDLH environments
  - In low vapor concentrations, NFPA 1994 Class 2 ensembles are indicated
- **Biological agents**
  - Biological materials are particulates
  - Particulate respiratory protection
  - Particulate protective garment found in NFPA 1994 Class 4

1.6 Response Objectives

Hazardous Materials Technicians shall develop an tactical action plan based upon hazard risk assessment that is cohesive with the incident commanders incident action plan (IAP).

Methodology:

- Based upon initial size-up and hazard risk assessment identify the strategic goals
  - Life Safety/Rescue
  - Protective Actions
    - Isolation/Evacuation
    - Establish proper level of PPE
    - Establish Decontamination Corridors for both responders and civilians
  - Containment
    - Spill control
    - Leak control
    - Fire control
  - Recovery
    - Environmental clean-up
    - Equipment clean-up
  - Termination
    - Cost Recovery
    - Debriefing
    - After-action review

1.7 Decontamination

Safety of personnel throughout a hazardous materials incident is imperative and will be stressed in all areas of this section. The degree of DECON needed can range from no DECON to the complete DECON of all personnel and equipment; depending on the nature of the incident, contamination levels and the situation involved.

GENERAL CONSIDERATIONS

- Emergency DECON may be required by initial personnel. This may be accomplished by using a hose line off an engine/pumper. After life safety issues have been addressed then environmental/ property contamination would be evaluated.
- Before beginning DECON, the HazMat Group Supervisor must decide how much DECON is necessary and to what extent will be done at the incident. The need for additional resources with a capability to perform an advanced level of DECON should be evaluated. This decision will be based upon factors including, but not limited to:
    - Physical state of the contaminant (solid, liquid, gas)
    - Solubility of the contaminant (Water and other solvents)
    - Person or equipment's proximity to the contaminant and likelihood of contamination

DECONTAMINATION PLAN

STATION 1: TOOL AND EQUIPMENT DROP

EQUIPMENT: Secure and dry area with bucket or small trap to place equipment.
CONSIDERATIONS: Must be dry to protect electronic equipment.
OPERATIONS: Stage reusable equipment in secure area.

STATION 2: OUTER GLOVE & BOOT COVER REMOVAL (or Wash)

EQUIPMENT: Stool for sitting and lined trash bucket
CONSIDERATIONS: If outer work gloves and boot covers are not worn, this station may be used as a glove/boot wash.
OPERATIONS: Sit on stool and remove boot covers and outer work gloves and place in trash can.

STATION 3: GROSS WASH

EQUIPMENT: Shower wand with retention system; hand pump and recovery drum recommended.
CONSIDERATIONS: All run-off must be retained for proper treatment or disposal.
OPERATIONS: Step into shower and flush thoroughly with water from head downward paying particular attention to folds.

STATION 4: PRIMARY WASH/RINSE

EQUIPMENT: Pool or basin, 5 to 10 gallons of DECON solution and scrub brushes.
CONSIDERATIONS: DECON solution should be material specific, most commonly a liquid emulsifier (i.e. mild dishwashing solution).
OPERATIONS: Step into retention area on elevated pad. Assistant washes and rinses garment from head to toe paying particular attention to suit folds.

STATION 5: FINAL WASH/RINSE

EQUIPMENT: Pool or basin, supply hose and water wand, hand pump and recovery drum may be required to control run-off.
CONSIDERATIONS: Wash, rinse and scrub solution and contaminants from garment. This station may not be necessary depending upon material involved and effectiveness of previous stations.
OPERATIONS: Step into retention area. Assistant washes and flushes garment from head to toe. As responder steps out of retention area, rinse soles of feet.

Evaluation of effectiveness with applicable detection equipment should occur.

STATION 6: GARMENT REMOVAL (or Tank Change)

EQUIPMENT: Stool for sitting, lined drums, and secure dry area to place garment.

CONSIDERATIONS: If subject is wearing level "B" garment under air pack, the pack would have to be removed but the wearer must remain on air.

OPERATIONS: Sit on stool, remove boots then garment while minimizing contact with the outside of the garment. Leave inner-most surgical gloves on and remain "on-air".

STATION 7: OFF AIR STATION

EQUIPMENT: Clean dry area suitable for placement of air packs for further cleaning.

CONSIDERATIONS: Should be at least 10 feet from the garment removal station.

OPERATIONS: Come off air, remove air pack and place in secure area. LOG OFF AIR TIME. Leave face piece in place and step to cold zone.

STATION 8: INNER GLOVE AND FACE PIECE REMOVAL

EQUIPMENT: Small lined waste container and face-piece disinfection solution.

CONSIDERATIONS: Remove gloves first.

OPERATIONS: Remove inner-most ~~surgical~~ medical (language change) gloves and dispose. Rinse face- piece with disinfecting solution.

Decontaminated personnel should proceed to the MEDICAL/REHAB area for evaluation.

STATION 9: MEDICAL EVALUATION AND REHAB

CONSIDERATIONS: Assess vitals and need for personal hygiene shower, fluid intake.

In the event of a medical emergency in the Exclusion Zone, refer to "Decontamination during Medical emergencies for Entry Workers.

1.8 Termination

Termination procedures at a hazardous materials incident consists of documenting safety procedures, site operations, hazards encountered, lessons learned, potential transfer of command to an allied response partner and/or making sure follow-up activities are conducted.

Termination activities are divided into three phases:

Prior to the three phases the following must take place:

- Decontaminate all personnel and equipment
- Put unit back into serviceable condition
- Confirm with Incident Commander
- Obtain appropriate environmental approval for cleanup

1. Incident debriefing - The debriefing will be conducted at the incident during the termination stage.

- Personnel will be informed of the signs and symptoms of exposure from hazardous materials at the incident and what to do if they experience them after leaving the scene.
- Identify equipment damage and items needing immediate attention.
- Review the hazmat incident

- Summarize the activities performed by the Hazardous Materials Response Team
- Identify any unsafe acts and any damaged equipment.
- Identify any follow-up activities required.
- Identify the person responsible for the preparation of the follow-up report and documentation.

2. Post-Incident Analysis - The post incident analysis is scheduled as soon as practical and is for the purpose of reviewing the incident to establish a clear picture of the events that took place during the incident and provide information for future incidents. The following guidelines are adhered to when conducting the post incident analysis:

- Reconstruct the incident to establish clear picture of events that took place.
- Identify items or procedures that can be improved upon.
- Document safety procedures, site operations, hazards faced, and lessons learned

3. Critique - The critique can be combined with the post incident analysis or done separately. Information obtained in the critique can improve performance by pinpointing weaknesses and assuring personnel that they will be corrected. The following should be addressed in the critique:

- Was the proper PPE utilized?
- Did the HazMat Team use the appropriate equipment?

- Were the correct procedures used?
- Were steps taken to minimize contamination?
- Was each responder and piece of equipment properly decontaminated?
- If disposal containers were used, were they used properly then marked and labeled correctly?
- Identify what worked, what didn't work and what needs to change.
- Do not assign blame

Additional Requirements:

1. A report should be prepared for dissemination to personnel to improve performance and safety
2.
3. Identify any corrective actions that will be needed for future events.

If exposures were identified, then make sure proper paperwork and follow-up are done.

2.0 General Operations

The following is a checklist applicable to all ICS personnel:

- Receive assignment from your agency, including:
  - Job assignment, e.g., Haz Mat/Strike Team designation, overhead position, etc. resource order number and incident number, reporting location, reporting time, travel instructions.
  - E-Plan review for facility and related hazards information.
  - Command Post Contact information.
  - Any special communications instructions, e.g., travel frequency.

- Upon arrival at the incident, check in at designated Check-in location, Check-in may be found at:
  - Incident Command Post.
  - Base or camps.
  - Staging Areas.
    - If you are instructed to report directly to a line assignment, check in with the Division/Group Supervisor.

- Receive briefing from immediate supervisor.

- Acquire work materials.

- Supervisors shall maintain accountability of their assigned personnel as to their exact location(s), personal safety, and welfare at all times, especially when working in or around incident operations.

- Organize and brief subordinates.

- Know your assigned frequency(s) for your area of responsibility and ensure that communication equipment is operating properly.

- Use clear text and ICS terminology (no codes) in all radio communications. All radio communications to the Incident Communications Center will be addressed: "(Incident Name) Communications" e.g., "Webb Communications."

- Complete all ICS forms, checklists and reports required of the assigned position and send through supervisor to Documentation Unit.

- Respond to demobilization orders and brief subordinates regarding demobilization.

UNIT LEADER RESPONSIBILITIES:

The following check list is applicable to Unit Leaders.

- Participate in incident planning meetings, as required.

- Determine current status of unit activities.
- Confirm dispatch and estimated time of arrival of staff and supplies.
- Assign specific duties to staff; supervise staff.
- Develop and implement accountability, safety and security measures for personnel and resources.
- Supervise demobilization of unit, including storage of supplies.
- Provide Supply Unit Leader with a list of supplies to be replenished.
- Maintain Unit/activity Log (ICS Form 214).

The Hazardous Materials Group Supervisor reports to the Operations Section Chief.

The Hazardous Materials Group Supervisor is responsible:

- Implementation of the phases of the Incident Action Plan dealing with the Hazardous Materials Group operations.
- Assignment of resources within the Hazardous Materials Group, reporting on the progress of control operations and the status of resources within the Group.

- Directs the overall operations of the Hazardous Materials Group.
- Ensure the development of Control zones and Access Control Points and the placement of appropriate control lines.
- Evaluate and recommend public protection action options to the Operations Chief or Branch Director (if activated).
- Ensure that current weather data and future weather predictions are obtained.
- Ensure a review of E-Plan has been conducted.
- Establish environmental monitoring of the hazard site for contaminants.
- Ensure that a Site Safety and Control Plan (ICS Form 208-HM) is developed and implemented.
- Conduct safety meetings with the Hazardous Materials Group.
- Participate in the development of the Incident Action Plan.
- Ensure that recommended safe operational procedures are followed.
- Ensure that the proper Personal Protective
- Equipment is selected and used.

- Ensure appropriate medical team is available.
- Ensure that the appropriate agencies are notified through the Incident Commander.
- Maintain Unit/Activity Log (ICS Form 214).

The Entry Team Leader:

Responsible for the overall entry operations of assigned personnel within the Exclusion Zone (Hot Zone)

- Review Safety Plan (ICS 208-HM)
- Supervise entry operations.
- Recommend actions to mitigate the situation within the Exclusion Zone.
- Carry out actions, as directed by the Hazardous Materials Group Supervisor, to mitigate the hazardous materials release or threatened release.
- Maintain communications and coordinate operations with the Decontamination Leader.
- Maintain communications and coordinate operations with the Site Access Control Leader and the Safe Refuge Area Manager (if activated).

- Maintain communications and coordinate operations with Technical Specialist or Hazardous Materials Reference.
- Maintain control of the movement of people and equipment within the Exclusion Zone, including contaminated victims.
- Direct rescue operations, as needed, in the Exclusion Zone.
- Maintain Unit/activity Log (ICS Form 214).

Decontamination Leader:
reports to the Hazardous Materials Group Supervisor.

The Decontamination Leader is responsible for:

- Operations of the decontamination element, providing decontamination as required by the Incident Action Plan.
- Establish the Contamination Reduction Corridor(s).
- Identify contaminated people and equipment.
- Identify appropriate decon technique and/or solutions
- Identify post decon screening (technology)

- Supervise the operations of the decontamination element in the process of decontaminating people and equipment.
- Maintain control of movement of people and equipment within the Contamination Reduction Zone.
- Maintain communications and coordinate operations with the Entry Team Leader.
- Maintain communications and coordinate operations with the Site Access Control Leader and the Safe Refuge Area Manager (if activated).
- Coordinate the transfer of contaminated patients requiring medical attention (after decontamination) to the Medical Group.
- Coordinate handling, storage, transfer and disposal of contaminants within the Contamination Reduction Zone.
- Coordinate efforts with Law Enforcement if deemed to be potential crime scene for evidence preservation.
- Consideration for those people with Special Needs.
- Consideration for pets and service animal needs.
- Maintain Unit/Activity Log (ICS Form 214).

Site Access Control Leader:
reports to the Hazardous Materials Group Supervisor.

The Site Access Control Leader is responsible for the control of the movement of all people and equipment through appropriate access routes at the hazard site and ensures that contaminants are controlled and records are maintained.

- Organize and supervise assigned personnel to control access to the hazard site.
- Oversee the placement of the Exclusion Control Line and the Contamination Control Line.
- Ensure that appropriate action is taken to prevent the spread of contamination.
- Establish the Safe Refuge Area within the Contamination Reduction Zone. Appoint a Safe Refuge Area Manager (as needed).
- Ensure that injured or exposed individuals are decontaminated prior to departure from the hazard site.
- Maintain site access control log/accountability.
- Coordinate with the Medical Group for proper tracking of all individuals.

- Coordinate efforts with Law Enforcement if deemed to be potential crime scene.
- Maintain observations of any changes in climatic conditions or other circumstances external to the hazard site.
- Maintain communications and coordinate operations with the Entry Team Leader.
- Maintain communications and coordinate operations with the Decontamination Leader.
- Maintain Unit/activity Log (ICS Form 214).

Assistant Safety Officer-Hazardous Materials: coordinates safety related activities directly relating to the Hazardous Materials Group operations as mandated by 29 CFR part 1910.120 and applicable State and local laws.

This position advises the Hazardous Materials Group Supervisor (or Hazardous Materials Branch Director) on all aspects of health and safety and has the authority to stop or prevent unsafe acts. It is mandatory that an Assistant Safety Officer-Hazardous Materials be appointed at all hazardous materials incidents. In a multi-activity incident the Assistant Safety Officer-Hazardous Materials does not act as the Safety Officer for the overall incident.

- □ Obtain briefing from the Hazardous Materials Group Supervisor.

- □ Coordinate with Decon Officer to certify the Decontamination Corridor.

- □ Participate in the preparation of, and implement the Site Safety and Control Plan (ICS Form 208-HM)

- □ Advise the Hazardous Materials Group Supervisor (or Hazardous Materials Branch Director) of deviations from the Site Safety and Control Plan (ICS Form 208-HM) or any dangerous situations.

- □ Has the authority to alter, suspend, or terminate any activity that may be judged to be unsafe and must communicate that intent or action to the Hazardous Materials Group Supervisor.

- □ Ensure the protection of the Hazardous Materials Group personnel from physical, environmental, and chemical hazards/exposures.

- □ Ensure the provision of required emergency medical services for assigned personnel and coordinate with the Medical Unit Leader.

- □ Ensure that medical related records for the Hazardous Materials Group personnel are maintained.

- □ Maintain Unit/Activity Log (ICS Form 214).

Technical Specialist – Hazardous Materials Reference

reports to the Hazardous Materials Group supervisor (or Hazardous Materials Branch Director if activated).

This position provides technical information and assistance to the Hazardous Materials Group using various reference sources such as computer databases, E-Plan, technical journals, CHEMTREC, and phone contact with facility representatives.

The Technical Specialist-Hazardous Materials Reference may provide product identification using hazardous categorization tests and/or any other means of identifying unknown materials.

- Obtain briefing from the Planning Section Chief.
- Provide technical support to the Hazardous Materials Group Supervisor.
- Maintain communications and coordinate operations with the Entry Team Leader.
- Coordinate with Entry Team and Decon Team Leaders for a risk based response.
- Provide and interpret environmental monitoring information.

- Provide analysis of hazardous material sample.
- Determine personal protective equipment compatibility to hazardous material.
- Provide technical information of the incident for documentation
- Provide technical information management with public and private agencies i.e.: Poison Control Center, CHEMTREC, State Department of Food and Agriculture, National Response Team.
- Assist Planning Section with projecting the potential environmental effects of the release.
- Maintain Unit/Activity Log (ICS Form 214).

Safe Refuge Area Manager reports to the Site Access Control Leader and coordinates with the Decontamination Leader and the Entry Leader.

- The Safe Refuge Area Manager is responsible for evaluating and prioritizing victims for treatment, collecting information from the victims, and preventing the spread of contamination by these victims.
- If there is a need for the Safe Refuge Area Manager to enter the Contamination Reduction Zone in order to fulfill assigned responsibilities then the appropriate Personal Protective Equipment shall be worn.

- Establish the Safe Refuge Area within the Contamination Reduction Zone adjacent to the Contamination Reduction Corridor and the Exclusion Control Line.

- Coordinate with technical specialist on issues concerning proper handling of potentially contaminated victims/responders including short and long term care, e.g. food, medications.

- Monitor the hazardous materials release to ensure that the Safe Refuge Area is not subject to exposure.

- Assist the Site Access Control Leader by ensuring the victims are evaluated for contamination.

- Manage the Safe Refuge Area for the holding and evaluation of victims who may have information about the incident, or if suspected of having contamination.

- Maintain communications with the Entry Leader to coordinate the movement of victims from the Refuge Area(s) in the Exclusion Zone to the Safe Refuge Area.

- Maintain communications with the Decontamination Leader to coordinate the movement of victims from the Safe Refuge

Area into the Contamination Reduction Corridor, if needed.

- Maintain Unit/Activity Log (ICS Form 214).

Medical Group Supervisor:
reports to the Operations Section Chief.

The Medical Group Supervisor is responsible for the implementation of the phases of the Incident Action Plan dealing with the all-medical Group operations for protection, monitoring, treatment of the entry teams and coordination of appropriate medical treatment of contaminated patients with Local Emergency Medical Services and Hospital Providers.

The Medical Group Supervisor is responsible for:

- Assigning of resources within the Hazardous Material Team Medical Group, reporting on the progress of control operations and the status of resources within the Group.

- Direct the overall operations of the Medical Group assigned to the Hazardous Material Team and additional medical areas if requested by local EMS.

- Ensure the development of Medical Control zones and Medical Control Points of monitoring and the placement of appropriate assets and resources.

- Evaluate and recommend entry team and public medical monitoring and treatment options to the Operations Chief or Branch Director (if activated).
- Ensure that the appropriate State typed Medical Team is in place for the entry and Hazardous Material Personnel protection and treatment.
- Ensure coordination with local Emergency Medical Service providers through command has been accomplished.
- Establish medical monitoring of the hazard site.
- Ensure that a Medical Control Plan is developed and implemented.
- Conduct medical update meetings with appropriate Group Supervisors.
- Participate in the development of the Incident Action Plan.
- Ensure that recommended medical operational procedures are followed.
- Ensure that the proper Personal Protective Equipment is selected and used in Medical treatment areas.
- Ensure appropriate medical information is available and provided to area Hospitals and responders through Incident Command.

- Ensure appropriate confidential medical information on team members is provided to appropriate Hazardous Material Team Agency post incident.

- Ensure that the appropriate State and Federal Health agencies are notified through the Incident Commander.

- Maintain Unit/Activity Log (ICS Form 214).

Medical Surveillance Team Leader:

Reports to the Medical Group Supervisor and coordinates with the Site Access Control Leader and coordinates with the Decontamination Leader and the Entry Team Leader.

- Review Safety Plan (ICS 208-HM)

- Supervise all aspects of medical monitoring both pre and post entry of entry teams.

- Supervise and coordinate with the local or assigned State Type medical asset assigned to treat entry team in event of emergency.

- Recommend medical actions to mitigate the situation within the Hot Zone.

- Carry out actions, as directed by the Medical Group Supervisor, to protect, monitor and treat hazardous materials team members.

- Maintain communications and coordinate operations with the Decontamination Leader and the Entry Leader.

- Maintain control of the medical needs of people and equipment within the Exclusion and Entry Zones, including contaminated team members and support personnel.

- Direct medical treatment operations, as needed, in the Exclusion Zone.

- Document all medical information on each entry team or hazardous material member evaluated or treated is maintained and given to the Medical Group Supervisor post incident.

- Maintain Unit/activity Log (ICS Form 214).

2.1 911 Intake Procedures

- □ Name of Business/Responsible Party
  - Phone
  - Address
  - License Plate
- □ DOT Shipper Number
- □ Primary POC
- □ Type of Occupancy
- □ Name of the hazardous material
- □ Type of situation
  - Leak
  - Spill
  - Fire
- □ Estimated amount of product released
- □ Number of potentially contaminated individuals
- □ Evacuation in progress
- □ Seriousness of injuries/exposure
- □ Preplans of incident (E-Plan)
- □ Contact information of caller

The dispatcher shall:

1. Notify appropriate units for response
2. Notify local authorities about the incident
3. Make other appropriate notifications
4. Refer to E-Plan and other references for additional information

2.2 Hazardous Materials Incident Timeline

Dispatch:

- Call intake information
- Appropriate resources dispatched
- Check E-Plan if available

First Responder Arrival:

- Size up / Hazard Assessment
- Establish Command / Unified Command
- Identify safety officer
- Rescue
- PPE
- Emergency Decontamination
- Establish isolation zone
- Public Protection
- Recognition
- Notification / Resource Request (medical)
- Patient triage and care
- Situation report to responding units

No Life Safety

Check E-Plan en-route

Hazmat Arrival

- Meet with Command / Establish Hazmat Group / Branch
- Confirm first responder activities / information
- Hazmat Size-up
- Confirm Notifications
- Assess isolation zones
- Weather monitoring
- Determine Hazmat operations area
- Hazmat Staging
- Develop Incident Action Plan
- Assess Capabilities
- Develop site specific safety plan
- Research
- Decon set-up
- Pre-entry medical evaluation (ToxMedic)
- Pre-entry safety briefing
- Monitoring / identification
- Suit up
- Entry / Recon
- Decontamination
- Rehab / Hazmat Medical Monitoring / Debriefing

Entry to be made within 45 minutes allowing for a 30-minute work time (based on a 60 min bottle).

Compromised Life Safety

Check E-Plan en-route

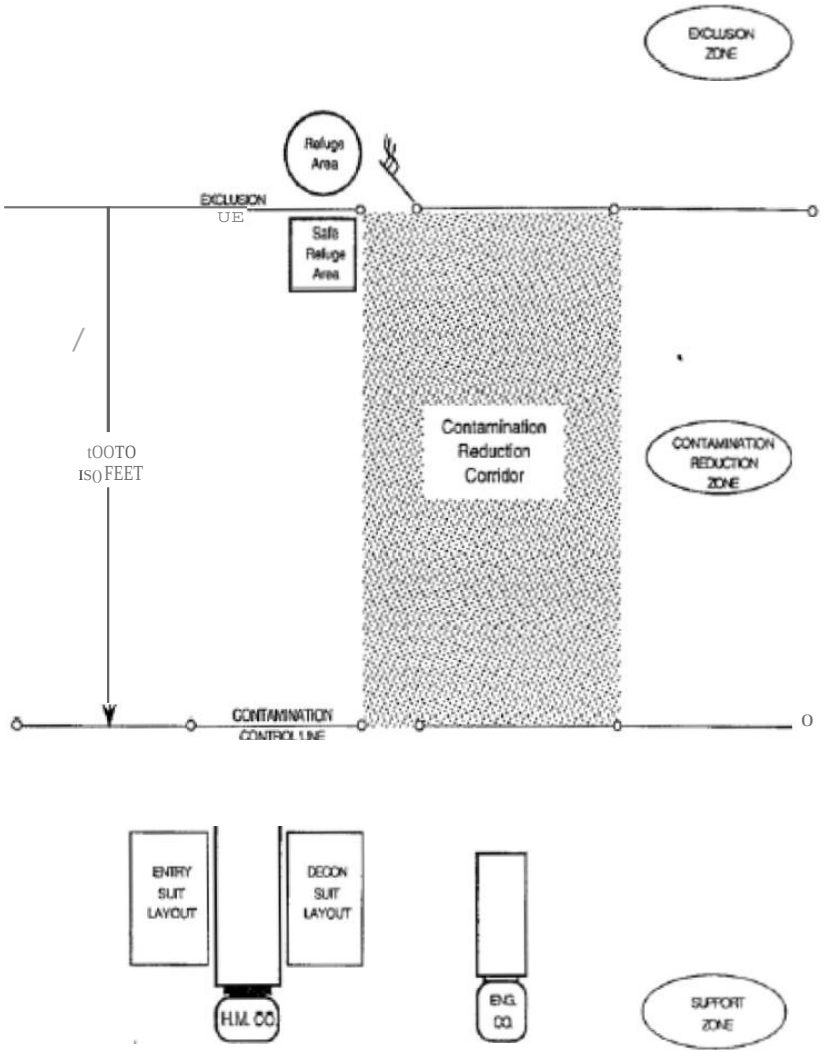
Hazmat Arrival

- Meet with Command / Establish Hazmat Group / Branch
- Confirm first responder activities / information / Hazmat Size-up
- Develop Incident Action Plan / Site Specific Safety Plan
- Pre-entry safety briefing / Suit up
- Entry / Environmental Monitoring
- Rescue
- Emergency Decontamination (established by first responders)

From time of arrival when there are viable patients needing rescue, first entry will begin within 20 minutes and terminate in 50 minutes total operation time, allowing for 30 minute working time (this time is based on a 60 min. bottle

2.3 Control Zones

CONTROL ZONE LAYOUT



Appx A
Mission Specific Guidance

Appx A 1 EMERGENCIES INVOLVING CORROSIVES

1. Identify the material(s) involved and determine what if anything it would be reactive with. Refer to **1.2 Identification** for unidentified potentially hazardous materials.

2. Keep non-essential personnel away. This includes non-essential emergency service personnel.

3. Establish control zones.

4. Select and wear the proper respiratory protection and chemical protective clothing.

5. Stay upwind and keep out of low areas.

6. Avoid exposure to smoke, fumes, vapors, dusts, or direct contact. Highly toxic fumes are often present.

7. Ventilate confined areas before entering. Consider the use of compatible foam to suppress corrosive vapors.

8. Consider the need for additional resources and equipment; i.e. diking material, absorbents/adsorbents, over-pack containers, liquid transfer equipment, private clean-up contractors, etc.

9. The State Watch Office should be notified of any incident within the State that:
   - exceeds an RQ
   - poses special problems or difficulties
   - affects soil, or requires source removal actions
   - affects waterways or drinking water wells

10. Determine and implement appropriate decontamination procedures for personnel and equipment. Make sure decontamination procedures are set up and ready prior to beginning any control operations.

11. Consult CHEMTREC for product information and assistance.

SPILL OR LEAK

1. Avoid contact with the spilled material. Make sure the proper PPE is used for the hazards involved. Respiratory protective equipment should be protected against the possibility of exposure to corrosive vapors.

2. Extinguish all sources of ignition in the vicinity. Corrosives can react with metals to generate highly flammable hydrogen gas.

3. Contact with water may cause the generation of large quantities of vapors and heat. Check compatibility of absorbent materials and spill control materials prior to using. Dilution of the material with water should only be considered after determining the ratio required to achieve a safe pH range, realizing it still may have other hazardous properties such as toxicity.

4. Do not get water inside container(s). Explosive reactions can take place.

5. Do not permit the run-off to enter storm, sewer, or water systems.

6. Keep combustibles (wood, paper, oil, etc.) away from spilled material.

7. If it can be done safely, attempt to close valves, plug, or otherwise reduce or stop the amount of leakage. Check compatibility of plugging materials prior to using them.

8. Dig trenches or build dikes ahead of the flow to contain the spill for later disposal or recovery.

9. Powder spills can be covered with a plastic sheet or tarp to minimize spreading.

10. Do not attempt neutralization without consulting with the manufacturer, distributor, or other reliable source. Refer to Neutralization SOG.

11. Consider use of foam equipment to spread vapor suppression material and/or neutralization agents on to spills.

FIRE CONDITIONS

1. Many corrosive chemicals react violently with water, liberating heat and toxic gases.

2. If it can be done safely with appropriate PPE, move undamaged containers away from the fire area.
3. Do not get water inside containers.

4. Use water to cool containers that are exposed to flames until well after the fire is out.

Appx A 2 INCIDENTS INVOLVING EXPLOSIVES

This procedure is not intended to address WMD incidents*

I. Methodology

A. Hazardous Material Teams should respond to credible bomb threats, suspicious devices, drug labs, post explosion and operate with an E.O.D unit as the Haz Mat/EOD Group.

B. *Haz Mat Teams should be dispatched by type of incident and relevant information:*

1. Credible Bomb Threat

2. Credible Suspicious Item, Package, Explosive Device (Description)

C. The operational considerations are listed by priority.

1. Public safety
2. The safety of all FIRE RESCUE, LAW ENFORCEMENT, EOD and other responders
3. The protection and preservation of public and private property
4. The collection and preservation of evidence
5. The convenience for the public/restoration of services

D. FIRE RESCUE HAZ. MAT. Personnel will NOT routinely conduct searches of a building; however, they may be utilized at the discretion of Command.

II. GENERAL SAFETY

A. Haz Mat/ EOD Group will establish a safety and operational plan.

B. It is necessary to realize that someone's real target may be public safety personnel.

C. Always consider the possibility of secondary hazards, such as an explosive device or persons (suicide bomber), that may have been put in place to harm First Responders.

D. Personnel must consider that ALL potential devices could contain radiological, chemical, nuclear, and/or biological agents.

E. ***No human life will be risked or put in jeopardy for the purpose of securing or preserving evidence or property.***

F. During the EOD operation, radios and phones should be used to monitor radio traffic and to communicate/transmit only for an emergency situation.

G. Haz Mat. Personnel SHALL wear full protective gear, including SCBA, during operations established by Haz Mat/EOD Group

III. POLICY

A. When approaching the scene, slow down to assess and observe the surroundings for suspicious activities, items, and/or persons. Hazardous Material /EOD Units will stage a minimum of 300 feet from the hazards. Remember to visually check for possible secondary devices (hazards) where personnel are staged. *If the device is a pipe bomb, increase distance to 1000 feet. This distance may be modified at the discretion of Command and/or the on-scene Bomb Technicians. (See attached Stand-off chart)*

B. If possible, Group personnel should remain upwind and protected by hard cover.

C. Do not stage Units in the "line of sight' of the hazards

D. When able, stage Units in a departing direction of travel, away from the hazards.

SUSPICIOUS PACKAGE /DEVISE IN POSSESSION

I. INTRODUCTION

A. This procedure will establish Haz. Mat/EOD operating guidelines when dealing with a credible suspicious package/device or identified explosive device and no explosion or detonation has been reported.

II. PROCEDURE

A. Haz Mat/ EOD Group will establish a safety and operational plan.

B. The Bomb Technician shall determine the most appropriate method of disposal of any Suspicious Package or Explosive device.

C. Haz Mat Team will:

1. Set up meters and equipment for Bomb Squad. (Ludlum Rad in basket, Multi-Rae, PID, HRM, APD 2000 for post screening/decon, hand cart).

a. Assist the Bomb Technician with suiting up.

b. Assist the Bomb Technician with evaluating the threat and assess the environment. Assume that all devices may have harmful chemical, biological and radiation agents added.

2. Assemble the following equipment at RIT staging area (Rescue Rope Bag, Rescue Sled, SCBAs, Kevlar Vest and Helmet)

a. Possibly pre-position behind hardened object for rapid recovery of Technician.

b. Maintain visual contact with the Bomb Technician during the Render Safe Procedure (RSP), if possible.

c. Provide Rescue/Recovery as needed.

B. Rescue

1. Stage the Rescue with the Haz Mat/EOD Group.

2. Park the Rescue in an area that will provide for an unobstructed departure.

3. Do not “bunker out' in protective gear, EMS only.

4. Treat and transport EOD Group personnel as needed.

5. Provide hydration and medical monitoring for the EOD Group.

POST BLAST (CONFIRMED **OFD/OPD)**

1. INTRODUCTION

A. This procedure will establish Haz Mat/EOD operating guidelines when a Device in Possession has detonated/exploded.

B. A Post Blast incident may occur with many possible components, including:

1. Improvised Explosive Device(s)
2. Incendiary Device(s)
3. Explosive(s)
4. Explosive Chemica1(s)
5. Shock Sensitive Material(s)
6. Pyrotechnics
7. Abandoned/Deteriorated Explosive(s)
8. Ammunition

C. A Post Blast incident may involve two potential scenarios;

1. An explosion occurring with No Previous FIRE RESCUE or LAW ENFORCEMENT Response

2. An explosion occurring while Bomb Squad is actively working a Confirmed "Device in Possession". If an explosion occurs with FIRE RESCUE on the scene, all Units will relocate outside of the blast area and establish a 1000' perimeter.

2. PROCEDURES

A. Haz Mat/ EOD Group will establish and follow a safety and operational plan with consideration of locating at 1,000 ft. from blast site.

B. Haz Mat/EOD will address the primary concern of additional explosive devices and evaluating the threat and assess the potential hazardous material environment minimizing risk to rescuers and victims concerning harmful chemical, biological and radiation agents added.

C. Assist in Rescue of EOD personnel and individuals in Hot Zone as requested by Command.

c. Analyze the situation to determine the additional threat level.

1) What does the area or building look like?

2) What size is the blast damage?

3) Any visible components/explosive?

4) Any additional items (secondary device)?

5) Exact location of the blast site?

6) Any additional hazards present (chemicals, petroleum, etc.)?

D. Haz Mat/EOD will remain on scene until relieved by command. The Haz Mat/EOD group will assist in the collection and preservation of evidence and rendering the scene safe.

Appx A 3 Radiological Emergency

This procedure is not intended to address WMD radiological incidents*

1. While en-route, report incident to the State Watch Office. Request a call back from the Department of Health Bureau of Radiation Control.

2. Approach the scene from upwind; minimize personal exposure by utilizing shielding when possible. Consult RAD experts and monitoring equipment for safe distance from suspected source.

3. Begin documentation – assign specific person to be responsible for documentation.

4. Don Personal Protective Equipment (minimum – hooded jump suit, positive pressure SCBA, gloves and chemical boots). Wear surgical-type disposable gloves.

5. Assign each person a dosimeter – zero dosimeter, record time, don dosimeter.

6. Prepare radiological detection equipment – establish background level.

7. Obtain as much information about radiological source as possible before approaching it. Use placards, labels and other sources of information.

8. Make sure zones are established – use survey meter to establish. Establish

Exclusion Zone at the 1-2 mR/hr level above normal background for a full 360 degrees. Designate with physical barrier.

9. Set up contamination survey area and decon area. This will be the warm zone.

10. Make any immediate rescue of victims as required. Consider all personnel that were in radiation hot zone to be contaminated until monitoring proves otherwise, if radioactive material was released or spilled. (Advise the local hospital to prepare for possible radioactive contaminated patients). The maximum exposure for personnel is 25 rem for lifesaving activities. (Florida Bureau of Radioactive Control, 2015)
    10a. Medical triage should be conducted based on traditional medical considerations. Do not withhold lifesaving medical treatment or transport due to potential or actual radiological contamination. Only when the individual is medically stable should decontamination and treatment for radiation exposure begin.

11. Avoid exposure to smoke, fumes, vapors, dust, or direct contact.

12. Verify downwind evacuation.

13. Do not touch damaged containers or contact any spilled material.

14. Identify physical and chemical form of radioactive material.

15. Identify radiological characteristics and hazards of radioactive material.

Additional Requirements:

If exposures were identified, make sure proper paperwork and follow-up are completed.

Keep all personnel that may have been exposed/contaminated in the warm zone until evaluated and/or decontaminated.

The maximum exposure for personnel is 25 rem for lifesaving activities.

NO ONE SHOULD ENTER THE RADIATION AREA EXCEPT TO MAKE A RESCUE

Label	Radiation at surface of package
Radioactive I	**None to 0.5 mR/hr**
Radioactive II	**1mR/hr**
Radioactive III	**10 mR/hr**

Sole Use Vehicle	At the vehicle surface
Radioactive LSA	**200 mR/hr**

TO AVOID UNNECESSARY RADIATION EXPOSURE, RELY ON THESE KEY ELEMENTS:

TIME **– The rule is: Keep contact time with packages short. Handle packages of radioactive material without delay when moving them. Do not do time-consuming tasks near packages.**

DISTANCE **– The rule is: Avoid staying close to packages unnecessarily.**

SHIELDING **- CAN BE USED IN SOME CASES TO REDUCE OR MINIMIZE EXPOSURE**

Appx A 4 Hazardous Materials Tanker Vehicle Incidents including Rollover

1. Confirm scene management
   - Proper positioning of vehicles
   - Hazard Control zones secured
   - Identify emergency escape route
   - Know emergency evacuation signal
   - Never allow righting of low pressure tanker without first off-loading the contents of the tank.
   - Always ensure correct bonding and grounding is done prior to any off-loading of a flammable or combustible product. Ground damaged tanker first then bond damaged tanker to recovery tanker, (see grounding chart).
2. Confirm identity of hazardous material
   Be aware of mixed loads
   - If flammable/combustible liquid
     - Monitor downwind, low lying areas
     - Secure all potential ignition sources
3. Use SCBA and appropriate PPE when entering hot zone
4. Identify the owner of the tanker truck, and try to determine contact information.
5. Contact the State Watch Office and report the incident: include owner information if known, and request assistance from the Department of Environmental Protection.
6. Emergency response contactors are often required at these types of incidents.
7. Contact CHEMTREC & NRC.

Rollover - No Leaks

- Determine amount of product present.
- Do not upright any tank until the product has been off-loaded (Note: This does not apply to high pressure gas tanker vehicles).
- Secure area and eliminate any potential ignition sources including disconnecting the battery system. Do not turn off any electrical switches on the vehicle without eliminating the possibility of a static spark being generated.
- If cables from the battery must be removed to eliminate ignition source, an inert environment should be created around it to reduce spark production and ignition of any vapors.
- Have police stop all traffic in the vicinity and evacuate up to 1,000 feet away or as determined by testing and technical guidance. (ERG can be used for initial distance determination.)
- Check for flammable vapors with flammable gas detectors, take necessary measures to suppress or eliminate vapors. All spilled fuel should be covered with foam.
- Make sure all emergency shut-off valves have activated. Secure any hatch covers, piping covers, and vents.
- Make sure the tank and cab is stable, chock as needed. Do not separate the cab from the trailer. Do not rely on trailer support legs to hold up the trailer with product in it.

Consider possible need for air bags.

- Dike area and direct flow if present to containment area, Block all drains, etc.
- Request transfer equipment for product off-loading. Make sure the proper pumps are available.
- To prevent the build-up of static electricity, bond and ground containers and equipment before product transfer begins.
- Any power tools used to cut or drill must not generate a spark or excessive heat, hose-lines can be used for cooling.
- Determine the best way to off-load tank; by drilling the tank, using the loading valves/pipes, use vapor recovery lines, or a dome using a funnel.
- Supervision of scene shall be maintained while wreckers upright the tanker and cab.
- Empty tanks can still present a fire vapor hazard.

Rollover - Leaking:

- In addition to all procedures for a non-leaking tank the following should be done.
- In addition to selecting the appropriate PPE a harness retrieval system should be considered for personnel that have to enter spills to control leaks.
- Prevent spilled product from entering sewers and waterways, request additional assistance to provide diking and directing the flow of product.

- Make sure sufficient hose-lines with appropriate agent (water or foam) are in place prior to making entry for leak control.
- Stabilize tank vehicle using cribbing or other means.
- Leaks from the bottom of tanks that cannot be readily stopped may be reduced by introducing water into the tank after careful consideration and if it's not contraindicated.

Be aware of overhead power lines

Bonding:

Drive two ground rods uphill and upwind of the incident. (The full tanker/drum will be bonded to one ground rod; the empty tanker/drum will be bonded to the other.) Then make connections in the following order:

1. Connect a bonding cable to the tanker/drum to be pumped out, then to the ground rod.

2. Connect a bonding cable to the tanker/drum to be filled, then to the other ground rod.

3. Connect a bonding cable between the two tankers/drums.

4. Ground the pump (connect to one of the ground rods) or bond it to the tanker/drum being emptied (since the tanker/drum is already grounded).

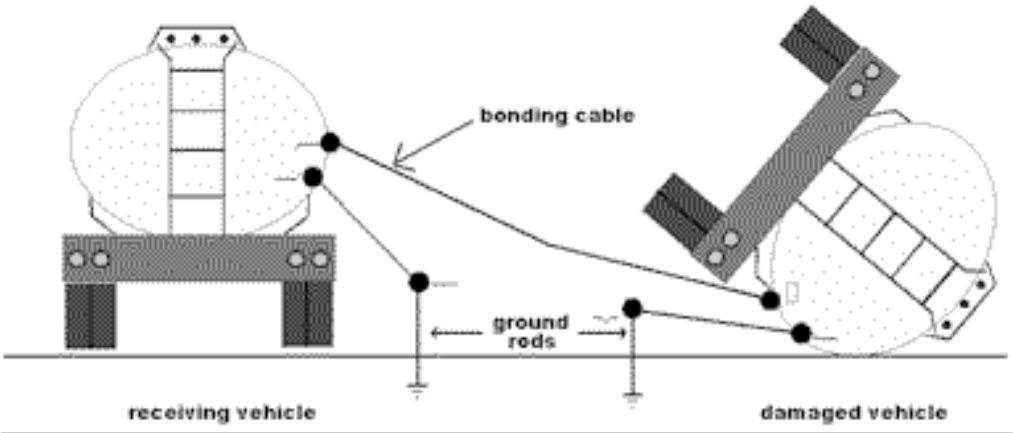
5. Bond any other equipment (hoses, air drills, etc.) to the tanker/drum being

emptied. Connections should always be made to the tanker/drum first, then to the equipment.

Note: As connections are made, check them with an ohmmeter to ensure there is ~~zero~~ resistance.

- 2014 edition of NFPA 77 now recommends that a resistance of less than 1000 ohms (1kohm) is acceptable for a temporary emergency-grounding field at a hazmat scene. The text from NFPA 77 says:
  - 7.4.1.3.1.1 In field-based situations such as HAZMAT hazardous response operations or flammable/combustible materials spill control and transfer, it might be necessary to establish a temporary or emergency grounding system in a remote location in order to dissipate static charges. In such situations, various types of conductive grounding electrodes can be used, such as rods, plates, and wires, which are sometimes used in combination to increase surface area contact with the earth. If the purpose of the temporary grounding system is to dissipate static electricity, a total resistance of up to 1 kohm (1000 ohms) in the ground path to earth is considered adequate. This can be measured using standard ground resistance testing instruments and is realistically and quickly achievable in most types of terrain and weather conditions.

(NFPA 77, 7.4.1.3.1.1)



Disconnecting:

1. After the transfer is complete, break the bond between the two tankers/drums by disconnecting at the full tanker/drum first, then at the tanker/drum that is now empty (the empty tanker/drum is now the more dangerous).

2. Disconnect the pump ground or bond, then disconnect all extraneous equipment (make sure the connection at the equipment is disconnected first, then the connection at the tanker/drum).

3. If applicable, roll the damaged tanker onto its wheels.

4. Remove the ground rod connections last.

Off-loading of flammable liquids should be undertaken only by properly trained personnel with the ability to monitor for O2 and LEL

Additional Requirements:

If entry into spilled product is required to effect a rescue or to control a leak, extra caution must be taken as to selecting PPE keeping in mind that break-through times are not based on direct immersion of PPE into a product.

Appx A 5 Non-WMD Biomedical or Biological Waste Emergency

Definitions:

Biomedical waste – means any solid or liquid waste which may present a threat of infection to humans. The term includes, but is not limited to, non-liquid human tissue and body parts; laboratory and veterinary waste which may contain human-disease-causing agents; discarded disposable sharps; human blood, and human blood products and body fluids; and other biomedical materials which represent significant risk of infection to persons. The term does not include human remains disposed of by persons licensed under chapter 470, Florida Statutes (F.S.).

Biological waste – means solid waste that causes or has the capability of causing disease or infection and may include but is not limited to: biomedical waste, diseased or dead animals, and other wastes capable of transmitting pathogens to humans or animals. The term does not include human remains disposed of by persons licensed under chapter 470, F.S.

Methodology:

1. **Isolate the area and set up control zones if not already established.**

Unauthorized disposal of biological or biomedical wastes may violate State Statutes, section 402.727 F.S.; discovery should be referred to local law enforcement

2. **Contact the State Watch Office, and request a call back from the Department of Health**
   Each county has a Biohazard Coordinator that can respond to an incident. The Biohazard Coordinator can help with a determination as to the amount of biological waste and who will dispose of it. Biohazard coordinators can remove small amounts of bio-medical waste from the site. If a large amount of material is present, the Department of Environmental Protection can assist with making arrangements for a contractor to dispose of the bio-waste.
   a. Provide the following information to the State Watch Office.
      - Location: to include address, be specific (i.e. in bag, in box, in dumpster, etc.).
      - Approximate amount, example: 1 bag, 2 bags, large bag, small bag, etc.
      - The identity of spiller or owner of biomedical waste if known.
      - If material has entered a storm drain or sewer system.
3. **Set up decontamination procedures**
   a. Use a freshly mixed 10% or stronger bleach/water solution unless advised otherwise by CDC or the Health Department.

4. **Clean-up of biomedical waste**
   Confined to the following types of incidents (generally not handled by a HazMat Team):

   a. Transportation accidents involving DOT labeled/placarded etiological agents.
   b. Any situation where a HazMat Team is requested to handle blood or other body fluids that would expose the public or personnel to them. Example: roadway, sidewalk, ground, etc.
   c. Use of universal precautions is usually adequate unless the material is DOT placarded as Division 6.2 or labeled as an infectious substance, requiring a level 'A' or 'B' PPE for entry with puncture proof boots.

5. **Clean up procedure if spilled material:**
   a. Pour bleach (undiluted) directly onto biomedical waste. Keep material contained.
   b. Place enough absorbent material on the bleach and bio-waste to make it a dry solid.
   c. Scoop or sweep up the dry bio-waste and place into a 'red' bio-waste plastic bag and seal bag.
   d. Decontaminate any tools used with a bleach solution and rinse with water.
   e. County Health Departments may be contacted for technical assistance and possibly disposal (if small amounts).

Another disposal option is a local hospital, or even disposal with paramedics' biomedical wastes. If the amount is beyond the capabilities of local government, and the Health ~~Unit~~ Department advises that it is biomedical, then contact the DEP for assistance.

6. **Transportation Container Emergencies** –
Incidents that involve materials labeled, placarded, or marked as biohazards or medical-waste. This type of incident is treated as a hazardous materials incident.

    a. Locate upwind/uphill/upstream and recon site from a distance,
    b. Identify product/substance – use manifest, shipping papers, type of container packaging and container markings,
    c. Make sure scene is secure,
    d. Wear appropriate PPE.
    e. Identify anyone that was in contact with product,
    f. Notify:
        - State Watch Office
        - Department of Health

7. **Leaking Container**

    a. Cover with a sheet or other porous material,
    b. Pour bleach over sheet and keep damp with solution. Can use garden type sprayer with bleach solution to spray immediate surrounding area,

c. Place dike, sock boom, or spill pillows around area to contain run-off.
d. Wait for disposal instructions from one of the above contacts.

Appendix A 6 Container Emergencies Flaring of Liquefied Petroleum Gases (LPG)

Used to achieve three basic objectives:

- Reduce the pressure inside of a cargo tank.
- Dispose of vapors remaining inside of the tank After liquid has been transferred.
- Burn off liquid when other transfer methods are not possible.

It is also an alternative to expedite recovery operations and when other product transfer operations are not available or not possible.

1. **Identify Exclusion Zone if not already done and secure area.**
    a. The Exclusion Zone will include the area of radiant heat exposure
    b. All items and structures exposed to radiant heat must be protected
    c. Hose streams must be of sufficient size to adequately dissipate the radiant heat.
    d. Caution - Large volumes of water can cause flooding and movement of containers.
    e. Only personnel essential to the operation should be in Hot Zone.

2. **Determine what the problem is:**
    a. Fire
    b. Leak
    c. Container failure / damage

3. **Verify contents of container.**
    a. Determine whether it is safe to conduct flaring operation.
    b. Identify exposures
    c. Area free of combustible vapors.
    d. Overhead power lines removed or de-energized.
    e. Leaking containers are usually flared in place

4. **Specific site safety considerations which should be addressed during this phase of the incident include:**
    a. Ensure that backup crew is in place
    b. A minimum of two 1 ¾" hose-lines is a recommendation.
    c. Personnel should know the emergency evacuation signal and the escape route.
    d. Continuously monitor the hazard area with flammable gas monitors.
    e. Maintain hazard control zones throughout the flaring operation and enforce personnel protective equipment Requirements.
    f. Frequent relief and rotation of personnel should be considered
    g. Remember flaring of liquid product produces much greater radiant heat than gas.

FLARING RATES FOR 1-INCH DIAMETER HOSE

Flow Rates for 1 Inch Diameter Hose				
Propane Temperature in F°	Flow Rate Gallons/Hour	Flow Rate Pounds/Hour	Flow Rate BTU/Hour	Time to Empty 30,000 Gallons/Hours
0	169	710	15435277	177.5
10	215	903	19636595	139.5
20	258	1084	23563914	116.3
30	312	1310	28495896	96.2
40	364	1529	33245212	82.4
50	420	1764	38359860	71.4
60	501	2104	45757833	59.9
70	541	2272	49411153	55.5
80	701	2944	64024433	42.8
90	775	3255	70783075	38.7
100	825	3465	75349725	36.4
110	957	4019	87405681	31.3

Appx A 7 TOXIC MATERIALS, POISONS, AND PESTICIDES

1. Identify the material(s) involved (refer to **1.2 Identification** for unidentified potentially hazardous materials).

2. Keep non-essential people away. (This includes non-essential emergency service personnel.)

3. Establish control zones. (Isolate area and deny entry / 330 ft min. distance for unknown)

4. Wear positive pressure SCBA and appropriate full protective clothing (refer to **1.5 PPE** for appropriate protective clothing). Due to construction and materials used for firefighter turnout clothing, the clothing may actually absorb and hold the pesticide or poison if contact with the smoke, fumes, vapors, dust, or material occur. (Bag and decon according to manufactures recommendation).

5. Stay upwind and keep out of low areas. Avoid exposure to smoke, fumes, vapors, dust, or direct contact.

6. Determine signs and symptoms of exposure and advise all personnel operating at the site. Some symptoms may not become present for up to 48 hours following exposure.

7. Ventilate confined areas, entry not advised unless risk/ benefit for life saving actions. (Use air monitor device to establish LEL).

8. If the spilled material has entered a storm drain or waterway, consideration should be given to diking ahead of the flow. (Fish kills are often associated with pesticide releases into water bodies)

9. Determine and implement appropriate decontamination procedures for personnel and equipment.

10. Flush any contacted material from skin immediately.

11. Remove and isolate any contaminated clothing and equipment at the site and avoid spreading contamination to non-contaminated areas.

12. Report the spill to the State Watch Office and request a call back from the Department of Environmental Protection.

13. Consult CHEMTREC (800) 424-9300 for product information and assistance, or product label / Safety Data Sheets as well as Poison Control

FIRE CONDITIONS:

1. Consider protecting exposures and allowing the fire to burn. This may create less of a hazard to people and the environment, especially if run-off cannot be confined.

2. For fires, use appropriate extinguishing agent.

3. Considering withholding extinguishment of fire unless the flow can be stopped.

4. If sufficient water is available, use water spray to cool containers exposed to the fire.

5. Dike fire control water for later analysis and/or disposal.

SPILL OR LEAK:

1. For liquid pesticide spills, extinguish or eliminate all sources of ignition in the vicinity. Use combustible gas detectors to determine the boundary of the flammable vapors if the pesticide is flammable. The absence of a reading on a CGI does NOT indicate the absence of a toxic atmosphere.

2. Do not allow vehicles or other sources of ignition in the area as long a spill or leak is active.

3. If it can be done safely, attempt to close valves, plugs, or otherwise reduce the amount of leakage.

4. Water spray can be used to absorb water miscible vapors, and water spray or explosion proof fan can be used to disperse vapors. Do not get water inside containers. Run-off must be contained for later analysis and possible disposal.

5. Keep material out of storm, sewer, and water systems.

6. Dig trenches or build dikes ahead of the flow to confine the spill for later disposal or recovery.

7. Powder spills can be covered with an explosion proof sheet or tarp to minimize spreading.

8. Environmental cleanups are often required at spill sites.

Appx A 8 Drums and Abandoned Containers Emergency

Drums and containers not leaking:

1. All unmarked drums and abandoned containers should be considered as containing hazardous materials until proven otherwise.
2. Drums and abandoned containers can be under pressure.
3. Always use appropriate protective gear when working with unknown drums or containers.
4. Try to obtain as much information as possible about container from people in the area or from person who made notification.
5. Examine the drum or container from a distance using binoculars prior to approaching. Check for labels, markings, bungs, relief devices, seals, plugs, leakage, deterioration of container, and bulging. Also note any visible vapors, stresses vegetation or dead wildlife.
6. Secure the area and place visible barriers or markings to establish zones.
7. Establish decontamination sector prior to entry.
8. Initial monitoring should concentrate on checking for the presence of radioactivity, flammable vapors, elevated oxygen, and corrosive vapors. If radioactive follow **Appx A 3 Radiological.**
9. If initial monitoring does not give any indications, determine if further testing or examination is needed. Use of thermal imaging camera may be helpful in evaluating

drum/container. Temperature differences on the surface of the container can provide clues to the amount and type of content.

10. Drums and abandoned containers should only be handled if necessary. Contents should be classified or characterized prior to moving a drum/container. Most chemicals can be classified or characterized with testing. Drums that appear to be under pressure should be opened by remote means.
11. All Lab Packs should be considered to be explosive or shock-sensitive until proven otherwise.

Leaking drums and abandoned containers:

1. If possible raise any leaking hole in drum above the level of liquid in container.
2. Make sure any material to be used to patch, plug or stop a leak is compatible with the product in the drum.
3. Patched or plugged drums should be placed inside a recovery drum. Absorbent pads should be placed with the drum when over-packed to collect any leaking material.
4. If placing drum inside a metal recovery drum consider bagging the drum first.
5. Properly mark the recovery drum for transport and disposal.
6. Decide whether referral will be done or further action such as testing of contents and movement of container.
7. Location of the container, its contents, and if leaking will determine whether it needs to be

moved. This also determines if it can be over-packed or not.

8. If sampling and field testing is done then the container should be marked as to the main hazard identified. Use non-sparking bung opener and tools to open container.
9. If a container is leaking, then repositioning, patching, plugging, and over-packing can be used. Transferring the product from the leaking container can also be used to control leak. Make sure pump for transfer is designed for and compatible with the product.

Additional Requirements:

No container should be left on scene unless it has been determined it is safe to leave it and that it has been secured against tampering. If it remains on scene, then it should be secured until picked up or transferred to another agency. (refer to DEP guidelines)

If a drum or container was found to be leaking, then ground samples should be taken unless the drum/container was on a non-permeable surface.

Always notify the State Watch Office and request a call back from the Department of Environmental Protection. The DEP Office of Emergency Response can provide technical guidance or further assistance as needed.

Appx A 9 GAS CYLINDER AND CONTAINER EMERGENCIES

General Precautions for Pressurized Gases (compressed, liquefied, cryogenic)

1. Stay upwind and out of low area
2. Identify the type of leak
3. Identify the contents
4. Monitor and ventilate enclosed spaces prior to entry
5. Consider the multiple hazards of gases
6. Use PPSCBA, APRs may only be used if **no** IDLH atmosphere has been identified
7. Stay out of the path of pressure relief devices
8. Cylinders or containers that contain highly toxic gases do not have pressure relief devices
9. When applicable reduce pressure on cylinders/containers by reducing cylinder/container temperature
10. Eliminate all ignition sources when applicable
11. Shut off cylinders/containers remotely when possible
12. Use air monitors to determine the hazards and the affected area (be aware that oxygen deficient atmosphere can affect LEL readings)
13. Seek technical assistance/advice prior to closing system valves (it could create other problems)
14. Close valves on individual cylinders
15. Plumes may be dispersed or absorbed using water streams or hydraulic ventilation (run-off will be contaminated)
16. **Do not** put water on cylinders/containers that have an ambient temperature below the temperature of the water being used (this will warm the cylinder/container causing an

increase in leakage)

17. Avoid the release stream (the pressure may be sufficient to damage PPE)
18. Be aware that gas releases can create oxygen deficient atmospheres, particularly when liquefied compressed gases and cryogenic liquefied gases are concerned
19. When working with flammables isolate cylinder/container by bonding and grounding all cylinders/containers prior to transferring product

.

Liquefied Compressed Gas and Cryogenic Liquid Emergency

1. Liquefied compressed gases and cryogenic liquefied gases have high expansion ratios and can rapidly reach IDLH levels
2. Liquefied compressed gases and cryogenics can cause freeze injuries and PPE damage or failure on contact.
3. Do not put water streams on pools of liquefied gases or cryogenics
4. Position cylinders/containers to avoid liquid leaks
5. Liquefied oxygen (LOX) can cause petroleum based products to ignite or become shock sensitive on contact
6. Frostbite or freeze injuries can result from working with liquefied gases; specialized PPE is required for safe handling of cryogenics.

Abandoned Cylinders:

1. Treat all abandoned cylinders as unknowns until the contents are known
2. If the cylinders are determined to be welding cylinders, most are rented from a vender.
3. The vendor contact information is usually stamped on the surface of the cylinder.
4. Report abandoned cylinders to the State Watch Office, and request a call back from the Department of Environmental Protection.

Appx A 10 Field Sampling for Tar Balls

Since the USCG is the lead agency on all tar ball incidents, immediately report the discovery to the National Response Center at 800-424-8802.

The following sampling protocols were developed to address the need to fingerprint tar balls that wash up onto Florida shorelines. These protocols were obtained from guidance documents found at the United States Coast Guard Marine Safety Laboratory Website. For significant incidents spanning large geographic areas, coordinate with the oversight agency (USCG, NOAA, DEP, etc.) to ensure compliance with the field sampling plan.

Required Equipment for Sampling Tar Ball(s)

- 4oz/250 ml pre-cleaned sampling jars
- Sterile tongue depressors
- Latex/nitrile sampling gloves
- Para film
- Cardboard mailing tubes
- Jar labels
- Waterproof marker
    - Handheld GPS

Tar Ball Selection

Sample locations will be based on the following factors.

- Area of impacted shoreline.
- Number of tar balls.
- Size of tar balls.
- Select a tar ball that is representative of

the overall characteristics of the impacted area.

If a large area of shoreline is impacted by tar balls, measure the total area and collect a sample from the center (length X width).

Sample Collection

The following procedures should be used during the collection of the samples. Split samples may be required if requested by the RP or the USCG.

- Glove changes are required between collections of each sample including the **Reference Sample.**

  The reference sample needs to be a clean sand sample representing the original beach condition, use a clean tongue depressor place the sample only into a clean 4oz/250 ml jar.
- If the selected tar ball is large enough, use a sterile tongue depressor to divide the sample area into equal parts.
- Scoop one of the equal parts or the entire tar ball (depending on the size) into the 4 oz/250 ml glass jar.
- Secure the sample by completely wrapping Para film around the perimeter of the jar lid.
- Place adhesive label on jar, fill out required information.
- If split samples are required, repeat process with remaining portion of divided sample.

Sample Handling

- Samples should be stored in a cool, dark place to minimize any degradation of the sample due to sunlight or heat.

- 4oz glass jars should be secured in the cardboard mailing tubes (two per tube)
- The samples may be placed in coolers – ***DO NOT ICE SAMPLES***

Chain of Custody Form

- Complete all information on Chain of Custody Form.
- Include Latitude and Longitude coordinates in notes for each sample
- USCG samples and Responsible Party samples should be on separate Chain of Custody Forms.
- When taking split samples, Sample ID should include notation that designates the USCG samples and Responsible Party samples. To maintain consistency, add an "A" at the end of the sample ID for USCG samples and add a "B" for the responsible party.

Shipping of Samples

- Samples should be shipped in a DOT compliant cardboard box or a cooler and that the shipper needs to be trained and certified in accordance with IATA rules.

Transfer of Samples

- The USCG/Responsible Party should receive the sample(s) in a timely manner, situation dependent.
- Maintain Chain of Custody.

Appx A 11 Marine Response

Update in Progress

Appx A 12 Foam Operations – Formulas for Fire Fighting Foams

Methodology:

1. Identify Hot Zone if not already done and secure area.
    a. The Hot Zone will include the area of radiant heat exposure
    b. All items and structures exposed to radiant heat must be protected
    c. Hose streams must be of sufficient size.
    d. Caution - Large volumes of water can cause flooding and movement of containers.
    e. Only personnel essential to the operation should be in Hot Zone.
2. Verify contents of container.
    a. Determine whether it is safe to conduct foam operation.
    b. Identify exposures
    c. Monitor area for combustible vapors.
    d. Overhead power lines removed or de-energized.
3. Specific site safety considerations, which should be addressed during this phase of the incident include:
    a. Ensure that backup crew in place.
    b. Personnel should know the emergency evacuation signal and the escape route.
    c. Continuously monitor the hazard area with flammable gas monitors.
    d. Maintain hazard control zones throughout the foaming operation and enforce personnel protective equipment requirements.
    e. Frequent relief and rotation of personnel should be considered

4. From a safe distance determine the integrity of the involved container.

   Remember to have the proper amount of foam on scene before operations begin. Be sure that an adequate water supply is established.

   CAUTION: Do not mix different brands of foam unless appliances are rinsed out. This will prevent gelling.

5. Dispose of firefighting foams and foamed firefighting water in accordance with the appropriate Material Safety Data Sheets (MSDS). Exceptions should be limited only to life threatening situations.

FOAM APPLICATION METHODS

Bank
Rain on
Roll off

TROUBLE SHOOTING POOR FOAM PRODUCTION

Wrong pump pressure
Kinks in the hose
Nozzle and educator not compatible
Foam appliance clogged
Constant opening and closing of the nozzle

FOAM CALCULATIONS

AREA X Critical Application Rate **(CAR) X** Eduction Rate **(ER) X 15 minutes = Foam Concentrate Needed**

Area = surface area exposed

Length X Width of spill
Radius X Radius X 3.14 (circle spill)

CAR = minimum flow of finished foam per square foot (NFPA 11) **Hydrocarbons = 0.1 gpm/sq ft**

Polar Solvents = 0.2 gpm/sq ft

ER = Class B foams need to be educated at a certain rate (refer to manufacture for correct percent)

3% = 0.03
6% = 0.06

Sufficient high-expansion foam concentrate and water shall be provided to permit continuous operation of the entire system for 25 minutes or to generate four times the submergence volume, whichever is less, but in no case less than enough for 15 minutes of full operation.
NPFA 11 (8.123.96.1)

Foam Formulas:

AREAxCARxERx15=Foam Concentrate Needed

Simplified Foam Formula

Hydrocarbons = AREA/20
Polar Solvents = AREA/5

Examples:

Hydrocarbon (3%)

20x20 X 0.1 X 0.03 X 15 = 18 gal
or

20x20 / 20 = 20 gal

Polar Solvents (6%)

20x3.14 X 0.2 X 0.06 X 15 = 11.304 gal
or
20x3.14 / 5 = 12.56 gal

ICS Form 201

INCIDENT BRIEFING	1. Incident Name	2. Date Prepared	3. Time Prepared
4. Map Sketch			
ICS 201 Page 1 of 4	**5. Prepared by (Name and Position)**		

6. Summary of Current Actions	
ICS 201	Page 2

7. Current Organization	
ICS 201	Page 3

8. Resources Summary				
Resources Ordered	**Resource Identification**	**ETA**	**On Scene**	**Location/Assignment**

ICS Form 202

INCIDENT OBJECTIVES	1. INCIDENT NAME	2. DATE	3. TIME

4. OPERATIONAL PERIOD (DATE/TIME)

5. GENERAL CONTROL OBJECTIVES FOR THE INCIDENT (INCLUDE ALTERNATIVES)

6. WEATHER FORECAST FOR OPERATIONAL PERIOD

7. GENERAL SAFETY MESSAGE

8. Attachments (☑ if attached)

☐ Organization List (ICS 203)	☐ Medical Plan (ICS 206)	☐ Current Weather
☐ Assignment List (ICS 204)	☐ Incident Map	☐
☐ Communications Plan (ICS 205)	☐ Traffic Plan	☐

9. PREPARED BY (PLANNING SECTION CHIEF)	10. APPROVED BY (INCIDENT COMMANDER)

Organization Assignment List, ICS Form 203

ORGANIZATION ASSIGMENT LIST

1. INCIDENT NAME	2. DATE PREPARED	3. TIME PREPARED

POSITION NAME

4. OPERATIONAL PERIOD (DATE/TIME)

5. INCIDENT COMMAND AND STAFF

INCIDENT COMMANDER	
DEPUTY	
SAFETY OFFICER	
INFORMATION OFFICER	
LIAISON OFFICER	

6. AGENCY REPRESENTATIVES

AGENCY	NAME

7. PLANNING SECTION

CHIEF	
DEPUTY	
RESOURCES UNIT	
SITUATION UNIT	
DOCUMENTATION UNIT	
DEMOBILIZATION UNIT	
TECHNICAL SPECIALISTS	

8. LOGISTICS SECTION

CHIEF	
DEPUTY	

a. SUPPORT BRANCH

DIRECTOR	
SUPPLY UNIT	
FACILITIES UNIT	
GROUND SUPPORT UNIT	

b. SERVICE BRANCH

DIRECTOR	
COMMUNICATIONS UNIT	
MEDICAL UNIT/REHAB	
FOOD UNIT	

9. OPERATIONS SECTION

CHIEF		
DEPUTY		
a. BRANCH I- DIVISION/GROUPS		
BRANCH DIRECTOR		
DEPUTY		
DIVISION/GROUP		
DIVISION/ GROUP		
DIVISION/ GROUP		
DIVISION/GROUP		
DIVISION /GROUP		
b. BRANCH II- DIVISIONS/GROUPS		
BRANCH DIRECTOR		
DEPUTY		
DIVISION/GROUP		
DIVISION/GROUP		
DIVISION/GROUP		
DIVISION/GROUP		
c. BRANCH III- DIVISIONS/GROUPS		
BRANCH DIRECTOR		
DEPUTY		
DIVISION/GROUP		
DIVISION/GROUP		
DIVISION/GROUP		

d. AIR OPERATIONS BRANCH

AIR OPERATIONS BR. DIR.	
AIR TACTICAL GROUP SUP.	
AIR SUPPORT GROUP SUP.	
HELICOPTER COORDINATOR	
AIR TANKER/FIXED WING CRD.	

10. FINANCE/ADMINISTRATION SECTION

CHIEF	
DEPUTY	
TIME UNIT	
PROCUREMENT UNIT	
COMPENSATION/CLAIMS UNIT	
COST UNIT	

PREPARED BY (RESOURCES UNIT)

Assignment List, ICS Form 204

1. BRANCH	2. DIVISION/GROUP	**ASSIGNMENT LIST**
3. INCIDENT NAME	4. OPERATIONAL PERIOD DATE _____ TIME _____	

5. OPERATIONAL PERSONNEL

OPERATIONS CHIEF		DIVISION/GROUP SUPERVISOR	
BRANCH DIRECTOR		AIR TACTICAL GROUP SUPERVISOR	

6. RESOURCES ASSIGNED TO THIS PERIOD

STRIKE TEAM/TASK FORCE/ RESOURCE DESIGNATOR	EMT	LEADER	NUMBER PERSONS	TRANS. NEEDED	PICKUP PT./TIME	DROP OFF PT./TIME

7. CONTROL OPERATIONS

8. SPECIAL INSTRUCTIONS

9. DIVISION/GROUP COMMUNICATIONS SUMMARY

FUNCTION		FREQ.	SYSTEM	CHAN.	FUNCTION		FREQ.	SYSTEM	CHAN.
COMMAND	LOCAL				SUPPORT	LOCAL			
	REPEAT					REPEAT			
DIV./GROUP TACTICAL					GROUND TO AIR				

PREPARED BY (RESOURCE UNIT LEADER)	APPROVED BY (PLANNING SECT. CH.)	DATE	TIME

Incident Communications Plan, ICS Form 205

INCIDENT RADIO COMMUNICATIONS PLAN	1. Incident Name	2. Date/Time Prepared	3. Operational Period Date/Time

4. Basic Radio Channel Utilization

System/Cache	Channel	Function	Frequency/Tone	Assignment	Remarks

5. Prepared by (Communications Unit)

MEDICAL PLAN	1. Incident Name	2. Date Prepared	3. Time Prepared	4. Operational Period

5. Incident Medical Aid Station

Medical Aid Stations	Location	Paramedics Yes	Paramedics No

6. Transportation

A. Ambulance Services

Name	Address	Phone	Paramedics Yes	Paramedics No

B. Incident Ambulances

Name	Location	Paramedics Yes	Paramedics No

7. Hospitals

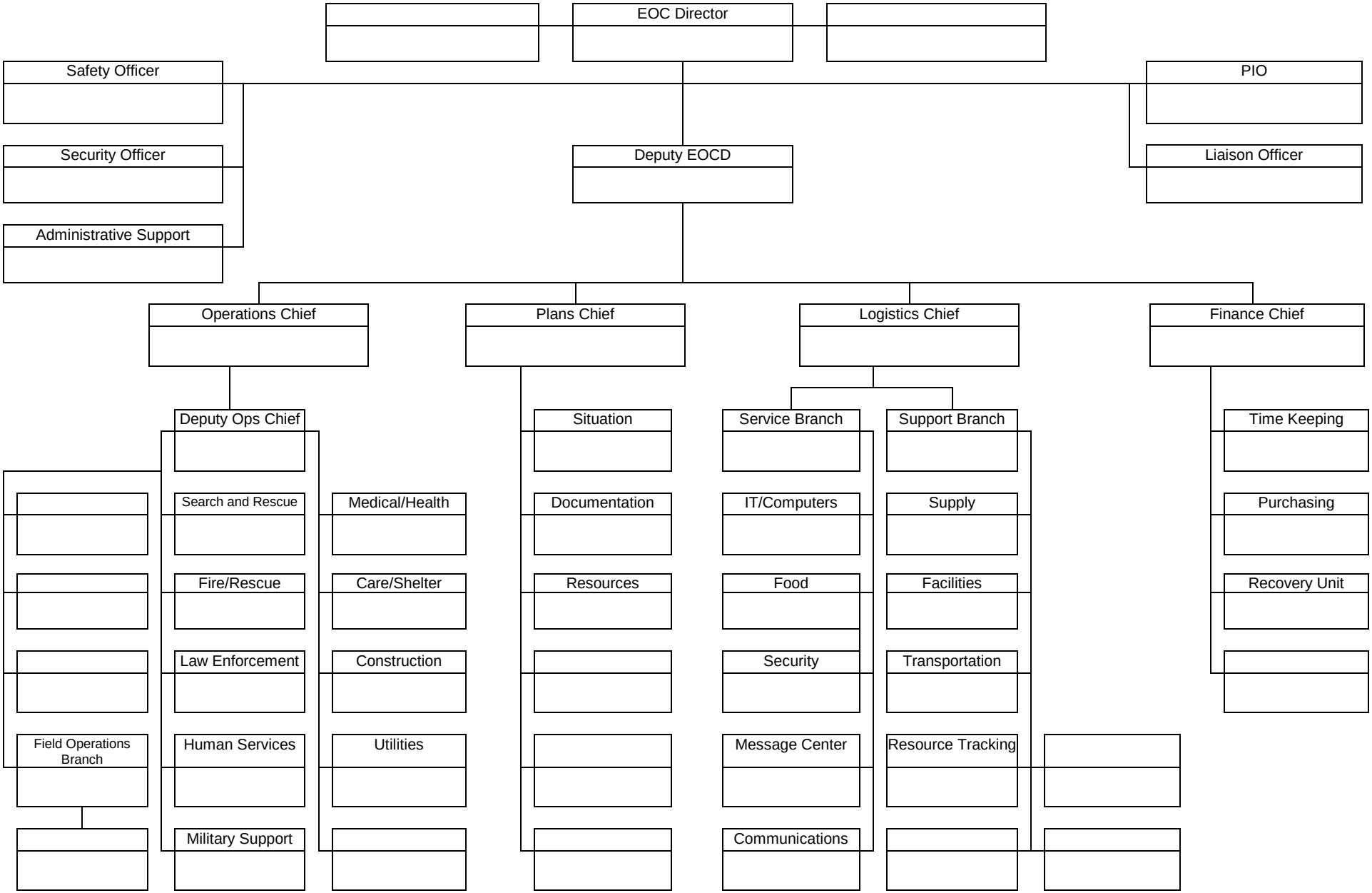
Name	Address	Travel Time Air	Travel Time Ground	Phone	Helipad Yes	Helipad No	Burn Center Yes	Burn Center No

8. Medical Emergency Procedures

Prepared by (Medical Unit Leader)	10. Reviewed by (Safety Officer)

Incident Organization Chart **ICS 207**

Incident Name:	Date Prepared:	Time Prepared:
Operational Period:	Operational Period Date/Time: From:	To:



Prepared By: (Name/Title)	**Approved by EOC Director:**

UNIT LOG	1. Incident Name	2. Date Prepared	3. Time Prepared
4. Unit Name/Designators	5. Unit Leader (Name and Position)		6. Operational Period

7. Personnel Roster Assigned

Name	ICS Position	Home Base

8. Activity Log

Time	Major Events

9. Prepared by (Name and Position)

ICS Form 215

OPERATIONAL PLANNING WORKSHEET	1. Incident Name	2. Date Prepared Time Prepared	3. Operational Period (Date/Time)

4. Division/Group or Other Location	5. Work Assignments		Resource by Type (Show Strike Team as ST)														6. Reporting Location	7. Requested Arrival Time
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
		Req																		
		Have																		
		Need																		
		Req																		
		Have																		
		Need																		
		Req																		
		Have																		
		Need																		
9. Total Resources - Single		Req																		
		Have																		
		Need																		
Total Resources - Strike Teams		Req																	Prepared by (Name and Position)	
		Have																		
		Need																		

Incident Action Plan Safety & Risk Analysis Form, ICS 215A

INCIDENT ACTION PLAN SAFETY ANALYSIS	1. Incident Name							2. Date	3. Time
Division or Group	**Potential Hazards**							**Mitigations (e.g., PPE, buddy system, escape routes)**	
	Type of Hazard:	**Type of Hazard:**	**Type of Hazard:**	**Type of Hazard:**	**Type of Hazard:**	**Type of Hazard:**	**Type of Hazard:**	**Type of Hazard:**	
Prepared by (Name and Position)									

U.S. Department of Justice
Bureau of Alcohol, Tobacco, Firearms and Explosives

Vehicle Bomb Explosion Hazard and Evacuation Distance Tables

IF YOU SUSPECT UNLAWFUL POSSESSION
OR USE OF EXPLOSIVES OR BOMBS
CALL 1-888-ATF-BOMB OR YOUR LOCAL
ATF OFFICE FOR ASSISTANCE

- **Minimum evacuation distance is the range at which a life-threatening injury from blast or fragment hazards is unlikely. However, non-life-threatening injury or temporary hearing loss may occur.**
- **Hazard ranges are based on open, level terrain.**
- **Minimum evacuation distance may be less when explosion is confined within a structure.**
- **Falling glass hazard range is dependent on line-of-sight from explosion source to window. Hazard is from falling shards of broken glass.**
- **Metric equivalent values are mathematically calculated.**
- **Explosion confined within a structure may cause structural collapse or building debris hazards.**
- **Additional hazards include vehicle debris.**

This information was developed with data from the Dipole Might vehicle bomb research program conducted by ATF, with technical assistance from the U.S. Army Corps of Engineers. Goals for Dipole Might include creating a computerized database and protocol for investigating large-scale vehicle bombs. Dipole Might is sponsored by the Technical Support Working Group (TSWG). TSWG is the research and development arm of the National Security Council interagency working group on counterterrorism.

ATF Information 5400.1
Revised January 2004

ATF	Vehicle Description	Maximum Explosives Capacity	Lethal Air Blast Range	Minimum Evacuation Distance	Falling Glass Hazard
	Compact Sedan	500 Pounds 227 Kilos *(In Trunk)*	100 Feet 30 Meters	1,500 Feet 457 Meters	1,250 Feet 381 Meters
	Full Size Sedan	1,000 Pounds 455 Kilos *(In Trunk)*	125 Feet 38 Meters	1,750 Feet 534 Meters	1,750 Feet 534 Meters
	Passenger Van or Cargo Van	4,000 Pounds 1,818 Kilos	200 Feet 61 Meters	2,750 Feet 838 Meters	2,750 Feet 838 Meters
	Small Box Van *(14 Ft Box)*	10,000 Pounds 4,545 Kilos	300 Feet 91 Meters	3,750 Feet 1,143 Meters	3,750 Feet 1,143 Meters
	Box Van or Water/Fuel Truck	30,000 Pounds 13,636 Kilos	450 Feet 137 Meters	6,500 Feet 1,982 Meters	6,500 Feet 1,982 Meters
	Semi-Trailer	60,000 Pounds 27,273 Kilos	600 Feet 183 Meters	7,000 Feet 2,134 Meters	7,000 Feet 2,134 Meters

Department of the Treasury
Bureau of Alcohol, Tobacco & Firearms
BOMB THREAT CHECKLIST

1. **When is the bomb going to explode?**
2. **Where is the bomb right now?**
3. **What does the bomb look like?**
4. **What kind of bomb is it?**
5. **What will cause the bomb to explode?**
6. **Did you place the bomb?**
7. **Why?**
8. **What is address?**
9. **What is your name?**

EXACT WORDING OF BOMB THREAT:

_____

_____

_____

_____

_____

Sex of caller: _____ **Race:** _____

Age: _____ **Length of call:** _____

Telephone number at which call is received: _____

Time call received: _____

Date call received: _____

CALLER'S VOICE

- ☐ **Calm**
- ☐ **Nasal**
- ☐ **Soft**
- ☐ **Angry**
- ☐ **Stutter**
- ☐ **Loud**
- ☐ **Excited**
- ☐ **Lisp**
- ☐ **Laughter**
- ☐ **Slow**
- ☐ **Rasp**
- ☐ **Crying**
- ☐ **Rapid**
- ☐ **Deep**
- ☐ **Normal**
- ☐ **Distinct**
- ☐ **Slurred**
- ☐ **Whispered**
- ☐ **Ragged**
- ☐ **Clearing Throat**
- ☐ **Deep Breathing**
- ☐ **Cracking Voice**
- ☐ **Disguised**
- ☐ **Accent**
- ☐ **Familiar** ***(If voice is familiar, who did it sound like?)*** _____

BACKGROUND SOUNDS:

- ☒ **Street noises**
- ☐ **Factory machinery**
- ☐ **Voices**
- ☐ **Crockery**
- ☐ **Animal noises**
- ☐ **Clear**
- ☐ **PA System**
- ☐ **Static**
- ☐ **Music**
- ☐ **House noises**
- ☐ **Long distance**
- ☐ **Local**
- ☐ **Motor**
- ☐ **Office machinery**
- ☐ **Booth**
- ☐ **Other** ***(Please specify)***

_____

BOMB THREAT LANGUAGE:

- ☐ **Well spoken (education)**
- ☐ **Incoherent**
- ☐ **Foul**
- ☐ **Message read by threat maker**
- ☐ **Taped**
- ☐ **Irrational**

REMARKS: _____

_____

Your name:

_____

Your position:

_____

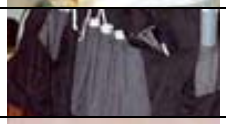
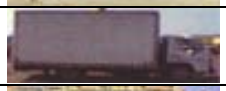
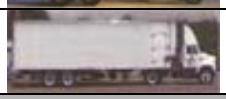
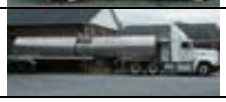
Your telephone number:

_____

Date checklist completed: _____

ATF F 1613.1 (Formerly ATF F 1730.1) (6-97)

Improvised Explosive Device (IED) Safe Standoff Distance Cheat Sheet

	Threat Description		Explosives Mass[1] (TNT equivalent)	Building Evacuation Distance[2]	Outdoor Evacuation Distance[3]
High Explosives (TNT Equivalent)		Pipe Bomb	5 lbs 2.3 kg	70 ft 21 m	850 ft 259 m
		Suicide Belt	10 lbs 4.5 kg	90 ft 27 m	1,080 ft 330 m
		Suicide Vest	20 lbs 9 kg	110 ft 34 m	1,360 ft 415 m
		Briefcase/Suitcase Bomb	50 lbs 23 kg	150 ft 46 m	1,850 ft 564 m
		Compact Sedan	500 lbs 227 kg	320 ft 98 m	1,500 ft 457 m
		Sedan	1,000 lbs 454 kg	400 ft 122 m	1,750 ft 534 m
		Passenger/Cargo Van	4,000 lbs 1,814 kg	640 ft 195 m	2,750 ft 838 m
		Small Moving Van/ Delivery Truck	10,000 lbs 4,536 kg	860 ft 263 m	3,750 ft 1,143 m
		Moving Van/Water Truck	30,000 lbs 13,608 kg	1,240 ft 375 m	6,500 ft 1,982 m
		Semitrailer	60,000 lbs 27,216 kg	1,570 ft 475 m	7,000 ft 2,134 m
	Threat Description		**LPG Mass/Volume[1]**	**Fireball Diameter[4]**	**Safe Distance[5]**
Liquefied Petroleum Gas (LPG - Butane or Propane)		Small LPG Tank	20 lbs/5 gal 9 kg/19 l	40 ft 12 m	160 ft 48 m
		Large LPG Tank	100 lbs/25 gal 45 kg/95 l	69 ft 21 m	276 ft 84 m
		Commercial/Residential LPG Tank	2,000 lbs/500 gal 907 kg/1,893 l	184 ft 56 m	736 ft 224 m
		Small LPG Truck	8,000 lbs/2,000 gal 3,630 kg/7,570 l	292 ft 89 m	1,168 ft 356 m
		Semitanker LPG	40,000 lbs/10,000 gal 18,144 kg/37,850 l	499 ft 152 m	1,996 ft 608 m

[1] Based on the maximum amount of material that could reasonably fit into a container or vehicle. Variations possible.
[2] Governed by the ability of an unreinforced building to withstand severe damage or collapse.
[3] Governed by the greater of fragment throw distance or glass breakage/falling glass hazard distance. These distances can be reduced for personnel wearing ballistic protection. Note that the pipe bomb, suicide belt/vest, and briefcase/suitcase bomb are assumed to have a fragmentation characteristic that requires greater standoff distances than an equal amount of explosives in a vehicle.
[4] Assuming efficient mixing of the flammable gas with ambient air.
[5] Determined by U.S. firefighting practices wherein safe distances are approximately 4 times the flame height. Note that an LPG tank filled with high explosives would require a significantly greater standoff distance than if it were filled with LPG.

HAZARDOUS MATERIALS GROUP LEADER TACTICAL WORKSHEET

RECOGNITION / IDENTIFICATION

Incident Description: _____
_____
_____

Material	Quantity	Hazard Class	Container Status

ISOLATION & PROTECTION

ISOLATION / PROTECTIVE ACTION DISTANCES (Initial)

Guide Page # ____ Isolation Distance: _____ Protective Distance: _____
Comments: _____

ISOLATION / PROTECTIVE ACTION DISTANCES (Revised)

Basis of Revision: _____
Distances, boundaries & action _____
_____

PROTECTION

Protective ensembles shall be selected based upon recommendations of Science Group and approved by safety.

☐ Minimum level of protection PP/SCBA and FF/Protective Clothing until monitoring

Location / Mission	Respiratory	Dermal	Accessories

NOTIFICATION

Science / Communications personnel must complete and fax (or call in) the field information to the State Warning Point

Agency	Numbers	Agency	Numbers
State Warning Point ☐ Time _____	Voice: 800-320-0519 Fax: 850-488-7841	County HazWaste	Off: DC:
Florida DEP ☐ Time _____	State Warning Point	Other _____ ☐ Time _____	
Coast Guard ☐ Time _____	State Warning Point	Other _____ ☐ Time _____	

HAZARDOUS MATERIALS GROUP LEADER TACTICAL WORKSHEET

SPILL CONTROL

SPILL CONTROL MEASURES

Gas/Air	Liquid/Surface	Liquid/Water	Solid Surface
□ Monitor □ Ventilate □ Disperse □ Dissolve □ _____	□ Blanket □ Suppress □ Dike □ Divert □ Retain □ Neutralization □ Degradation □ Disinfection □ _____	□ Dam □ Underflow □ Overflow □ Filter □ Boom □ Absorbent □ Diversion □ Retain □ Collect □ _____	□ Cover □ Moisten □ Neutralization □ Degradation □ Disinfection □ _____

LEAK CONTROL

OFFENSIVE CONTROL MEASURES

(Assess all offensive actions for associated hazards and risk/benefit
Consider: Exposure, contamination, mechanical hazards, static, etc.…)

Tactic	Associated Hazards

FIRE CONTROL

Agent Selection

□ Class B Foam □ Dry Chemical □ Purple "K" (Potassium Bicarb)
□ Metal-X □ Carbon Dioxide □ Liquid Nitrogen (Argon or Helium)
□ Dry Sand □ Moist Sand □ Other: _____
□ Combination Agents _____ and _____

Foam Calculation

Foam Application Rate: 0.10 gpm/sq.ft. to 0.16 gpm/sq.ft.
Foam Induction Rate: 3% (0.03) Hydrocarbons and 6% (0.06)Polar Solvents

$$\frac{\text{Sq.ft.}}{\text{Sq.ft}} \times \frac{\text{Application Rate}}{\text{Application Rate}} = \frac{\text{Finished Foam (gpm)}}{\text{Finished Foam (gpm)}} \times \frac{\text{Induction Rate}}{\text{Induction Rate}} = \frac{\text{Gallons Conc. per minute}}{\text{Gallons Conc. per minute}} \times \frac{30}{\text{mins}} = \frac{\text{Gal conc. needed}}{\text{Gal conc. needed}}$$

RECOVERY & TERMINATION

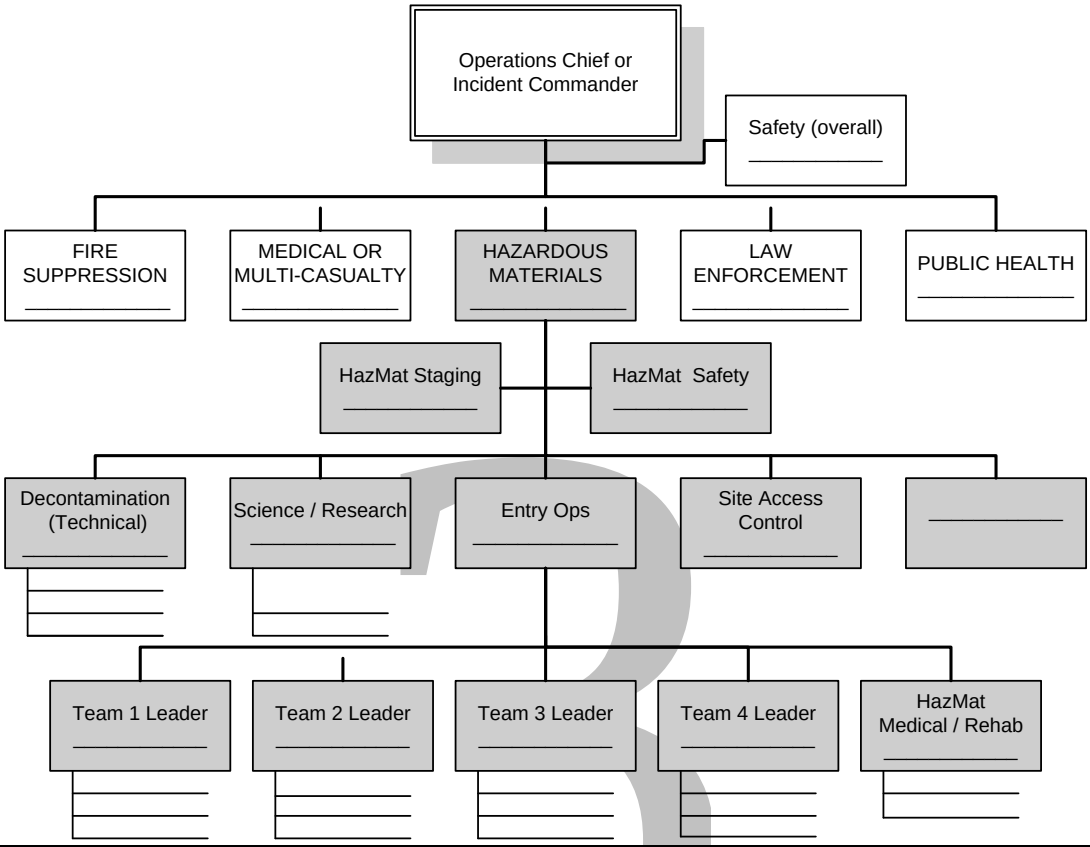
	Document all Actions as Applicable
Contractor Release	□ No IDLH environment □ Sufficient personnel □ Sufficient equipment □ Safety and Health Plan for Personnel □ DEP/HazWaste Oversight Comments:
Onscene Debriefing	□ Hazard Communication Briefing □ Medical Point of Contact □ Documentation Requirements (__111's, __214's) □ Other issues:
Cost Recovery	□ Document Manhours □ Identify expendable materials
PIA	□ Tailboard PIA □ Scheduled PIA □ Training Div. Involvment

HAZARDOUS MATERIALS GROUP LEADER TACTICAL WORKSHEET

INCIDENT COMMAND STRUCTURE AND COMMUNICATIONS

Communication Assignments

HazMat Group to Command:	System _____	Channel(Talk Group) _____
Within the HazMat Group:	System _____	Channel(Talk Group) _____
Entry Ops to Entry Team:	System _____	Channel(Talk Group) _____
HazMat Group Reachback:	System _____	Channel(Talk Group) _____
Other: _____	System _____	Channel(Talk Group) _____



INCIDENT SITE PLAN

HAZARDOUS MATERIALS GROUP LEADER TACTICAL WORKSHEET

ENTRY CHECK-LISTS AND APPROVALS

EVALUATION ITEMS	ENTRY 1	ENTRY 2	ENTRY 3	ENTRY 4
Objectives Established				
Hazard Risk Assessment	□	□	□	□
PPE Selected	□	□	□	□
Decontamination Established	□	□	□	□
Medical / Rehab Available	□	□	□	□
Equipment Readied	□	□	□	□
Safety Plan Developed	□	□	□	□
Radio Check With Entry Team	□	□	□	□
Time	_____hrs	_____hrs	_____hrs	_____hrs
FINAL GO / NO-GO				
Entry	□ Go	□ Go	□ Go	□ Go
Medical	□ Go	□ Go	□ Go	□ Go
Decontamination	□ Go	□ Go	□ Go	□ Go
Site Access Control	□ Go	□ Go	□ Go	□ Go
Science / Research	□ Go	□ Go	□ Go	□ Go
Safety	□ Go	□ Go	□ Go	□ Go
Command “Permission for Entry”	□ Granted	□ Granted	□ Granted	□ Granted
Entry Approved	_____hrs	_____hrs	_____hrs	_____hrs

OPERATIONAL NOTES

Time	Major actions, occurrences or findings

Incident Rehab Worksheet

INCIDENT LOCATION: _____ INCIDENT NUMBER: _____ DATE: _____

Name												
Assigned Unit												
Initial Evaluation Time												
Blood Pressure												
Pulse Rate												
Respirations												
Temperature **[tympanic] [core] [oral]** Circle												
SpO2 Level												
SpCO Level**												
SpMet Level**												
Injuries	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N
C/O illness	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N
FF Hydrated?	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N
Treatment Given*	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N
2nd Eval. Time (10 minutes from initial)												
Blood Pressure												
Pulse Rate												
Respirations												
Tympanic Temp.												
SpO2 Level												
SpCO Level**												
SpMet Level**												
3rd Eval. Time (20 minutes from initial)												
Blood Pressure												
Pulse Rate												
Respirations												
Tympanic Temp.												
SpO2 Level												
SpCO Level**												
SpMet Level**												
Return to Work Time												
[Initials of IC refusing recommendations]												

*If Medical Tx given see Patient Care Report
**If Equipment Available

Symptoms Requiring Transport to ER
Chest Pain
SOB
Dizziness
Altered Mental Status
Nausea

Parameters that must be met to be released
Temperature: Between 98.6° and 100.6°F
Heart Rate: <100bpm
Respiratory Rate: Between 12-20/min
Blood Pressure: Systolic <160 and Diastolic <100
Pulse Oximetry (SpO2): >91% on room air
CO Levels (SpCO): <10% of baseline
(parameters established by NFPA 1584)
Any signs or symptoms outside these parameters shall be sent to Treatment Area

*****NO PERSON SHOULD BE RELEASED FROM REHAB UNTIL CLEARED BY THE REHAB OFFICER**

* As Incident Commander I am overriding the recommendations made by the Rehab Officer by initialling above and take full responsibility of my actions by signing here: _____ print: _____

Rehab Officer: (Print) _____ (Signature) _____ Page ___ of ___