

ANNEX H: HEALTH, SAFETY, AND TRAINING

Personnel involved in oil spill response activities must comply with all applicable worker health and safety laws and regulations. The primary federal AND state regulations are the Occupational Safety and Health Administration (OSHA) standards for hazardous waste operations and emergency response found in 29 CFR 1910.120 and 8 AAC 10.010, respectively. These rules regulate the safety and health of employees involved in cleanup operations at uncontrolled hazardous waste sites being cleaned up under government mandate and in certain hazardous waste treatment, storage, and disposal operations conducted under the Resource Conservation and Recovery Act of 1976 (RCRA). The regulations also apply to both emergency response and post-emergency cleanup of hazardous substance spills. The definition of hazardous substance used in these regulations is much broader than the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), encompassing all CERCLA hazardous substances, RCRA hazardous waste, and all Department of Transportation (DOT) hazardous materials listed in 49 CFR Part 172. Thus, most oils and oil spill responses are covered by these regulations. The rules cover employee protection during initial site characterization and analysis, monitoring activities, material handling activities, training, and emergency response.

OSHA classifies an area impacted by oil as an uncontrolled hazardous waste site. However, the regulations do not automatically apply to an oil spill cleanup. There must be an operation that involves employee exposure or the reasonable possibility for employee exposure to safety or health hazards. A typical beach cleanup worker collecting tarballs of weathered oil or deploying sorbents to collect sheen may not be exposed to a safety or health risk. The role of the site safety and health supervisor is to assess the site, determine the safety and health hazards present, and determine if OSHA regulations apply. If an OSHA field compliance officer is on scene, he or she should be consulted to determine the applicability of OSHA regulation. Disputes should be referred to the Department of Labor representative on the Alaska Regional Response Team (RRT). The individual making the site characterization should communicate the hazards associated with the spill and provide recommendations for the protection of workers' safety and health through a site safety plan. The responsibility for the health and safety of personnel supporting a pollution response mission rests with the On-Scene Coordinator (OSC).

In an oil spill response where OSHA regulations apply, the OSC must ensure that paragraphs (b) through (o) and paragraph (q) of 29 CFR 1910.120 are complied with. Of most concern are the training requirements for response personnel. Personnel who are routinely involved in pollution response should complete a 40-hour course meeting the OSHA training in paragraph (e) of 29 CFR 1910.120. Training records should reflect that OSHA requirements have been satisfied. Contractors are responsible for certifying the training of their employees. OSHA has recognized the need to remove oil from the environment and has empowered the OSHA representative to the RRT to reduce the training requirement to a minimum of 4 hours for responders engaged in post-emergency response operations. An example of a post-emergency response effort is shoreline cleanup operations. The reduced training applies to all Coast Guard and other government personnel and to the private sector. This information may be found in OSHA Instruction CPL 2-2.51. The level of training required depends on the potential for exposure. Workers required to use respirators must have 40 hours of off-site training. The OSHA field compliance officer should be contacted to ascertain the worker training requirements and develop an implementation plan to minimize the hazards of exposure to workers involved in cleanup operations. State requirements that are more restrictive will preempt federal requirements. See Appendix II for training guidelines.

The following website provides an excellent OSHA publication entitled **Training Marine Oil Spill Response Workers Under OSHA's Hazardous Waste Operations and Emergency Response Standard**. The document provides specific training requirements for spill responders during both the Emergency Response phase as well as the Post-Emergency Response Cleanup phase.

<http://www.osha.gov/Publications/3172/3172.html>

Within the State of Alaska, hospital decontamination stations have been established at a few hospitals. Field decontamination is critical prior to transporting injured workers to a medical facility.

Appendix I provides a Standard Site Safety Plan for Emergency/Post-Emergency Phase Coastal Oil Spills developed by the US Coast Guard. The plan is generic in nature and must be expanded to provide specific safety procedures for each incident.

Appendix II provides the Training Guidelines for Local Emergency Planning Committees. The State Emergency Response Commission (SERC) Training Committee developed this document to provide guidance for planners, responders, and managers of responses to hazardous materials emergencies.

APPENDIX I – STANDARD SITE SAFETY PLAN

STANDARD SITE SAFETY PLAN FOR EMERGENCY/POST-EMERGENCY PHASE COASTAL OIL SPILLS (4/93)

A. SITE DESCRIPTION

Site generally referred to as: _____

Location: _____

Surrounding population: ___ industrial, ___ residential,
___ rural, ___ unpopulated, ___ other: _____

Topography: ___ rocky, ___ sandy/gravel beach, ___ cliffs, ___ marshes, ___ docks,
___ other: _____

Primary Hazards:

- ___ Chemical Exposure
- ___ Fire/Explosion
- ___ Oxygen Deficiency
- ___ Confined/Enclosed Space Entry
- ___ Ionizing Radiation
- ___ Biological Hazards
- ___ Safety Hazards
- ___ Heat Stress
- ___ Cold Exposure
- ___ Noise
- ___ Other: _____

Pathways for hazardous substance dispersion: _____

___ *Pathways have been noted on the site safety map provided as Attachment* ____.

See procedures for handling drums, containers, and spill containment, provided as Attachments _____.

B. WORK PLAN AND ENTRY OBJECTIVES

1. Work Plan: All work shall be conducted in accordance with procedures established during pre-entry briefings and attached work plans. *A work plan is provided as Attachment* .

2. Entry Objectives: Daily objectives may include site surveys, mechanical cleaning, oil recovery, booming, dispersant application, wildlife rehabilitation/hazing, and related activities. Detailed objectives shall be developed daily, and shall be described during the pre-entry safety briefing.

C. SITE ORGANIZATION

1. Definitions:

OSC: The On-Scene Coordinator (OSC) is the pre-designated Federal, State, Local, or Responsible Party official responsible for incident management in accordance with the Unified Plan. The OSC's designated rep serves as the on-site supervisor for response personnel.

SSHO: The Site Safety and Health Officer (SSHO), often referred to simply as the Site Safety Officer, is the single individual responsible for developing and implementing the OSC's site-specific site safety and health plan.

SSHP: Site Safety and Health Supervisor(s) (SSHP) is a mandatory position under 29 CFR 1910.120. The SSHP, often referred to simply as the Site Safety Supervisor, is the individual(s) in the field responsible for enforcing the SSHO's site-specific site safety and health plan. An SSHP must be on-site at all times while the SSHO may be with the OSC or at other locations.

2. Positions:

<u>function</u>	<u>name and phone (if appropriate)</u>
FOSC:	_____
SOSC:	_____
LOSC:	_____
RPOSC:	_____
Incident Commander:	_____
OSC's On-Site rep/supervisor:	_____
FOSC Rep:	_____
SOSC Rep:	_____
LOSC Rep:	_____
RPOSC Rep:	_____
Site Safety and Health Officer:	_____
Site Safety & Health Supervisor(s):	<i>See the posted organization on-site/workplan/briefing log.</i>
Public Affairs Officer:	_____
Scientific Support Coord:	_____
National Pollution Fund Center Case Officer:	_____
BOA Contract Supervisor:	_____

Other Federal/State/Local reps:

RP's representative: _____

RP's On-Site rep: _____

RP's On-Site Contract Supervisor: _____

RP's Safety & Health Officer: _____

RP's Safety & Health Supervisor: _____

Other R.P. reps: _____

D. SITE CONTROL

1. Anyone entering or departing a Work Area shall report to the site supervisor or designated representative.

2. No person shall enter a site without subscribing to this or another appropriate Site Safety and Health plan.

3. The buddy system is mandatory for everyone on site.

4. Training:

- a. In general, all personnel on-site shall be trained adequately to perform their assigned tasks safely. The general training level requirement is technician level and/or routine site worker (40 hrs and 3 days on-the-job training minimum) except as noted below.

JOB DESCRIPTION:

TRAINING LEVEL:

_____	_____
_____	_____
_____	_____

_____ *Guidelines for assessment of training/qualification requirements has been provided as Attachment _____.*

- b. All personnel entering the site shall be fully informed about applicable hazards and procedures on site. See section L. below for on-site informational briefings program.

5. Site Boundaries: Control boundaries have been established in the site safety map below according to the following guidelines:

- a. The HOT ZONE, or EXCLUSION ZONE, is the area where contamination or product hazards are expected.
- b. The WARM ZONE, or CONTAMINATION REDUCTION ZONE, is a transition area between the HOT ZONE and the COLD ZONE. It is the area where DECONTAMINATION is conducted for personnel and equipment leaving the HOT ZONE.

c. The COLD ZONE, or SUPPORT ZONE, is an area adjacent to the WARM ZONE that is intended to remain safe and as free of contamination as possible.

6. Site Safety Map: The site safety map includes the location of items such as: zone boundaries, decontamination station, washing, toilet/hygiene facilities, first aid equipment, fire extinguishers, command posts, equipment staging/storage, eating/rest areas, animal rehab/hazing stations, and locations of identified hazards.

____ *A Site Safety Map is provided as Attachment* ____.

7. Decontamination: Field decontamination of injured workers is essential prior to transport to a medical facility. Hospital decontamination stations have not been established within the State of Alaska to support patients contaminated during oil or hazardous substance response operations.

E. HAZARD EVALUATION:

1. Chemical Hazards: Check appropriate category of oil, attach generic information sheet, and attach specific MSDS when available. Check all applicable below:

____ Oil containing benzene and/or other high vapor pressure chemicals.

____ *Hazard information is provided as Attachment* ____.

____ Oil that does not contain benzene and/or other high vapor pressure chemicals.

____ *Hazard information is provided as Attachment* ____.

____ Hydrogen sulfide (from sour crude oil or anaerobic decay of organic materials).

____ *Hazard information is provided as Attachment* ____.

____ Dispersant applications.

____ *Hazard information is provided as Attachment* ____.

____ Bioremediation application.

____ *Hazard information is provided as Attachment* ____.

2. Exposure/Risk Assessment Monitoring For Chemical and Physical Hazards: The following monitoring shall be conducted with monitoring equipment calibrated and maintained in accordance with the manufacturer's instructions (electronic equipment shall be calibrated before each day's use).

<u>MONITOR</u>	<u>FREQUENCY</u>
____ Combustible gas	____ continuous, ____ hourly, ____ daily, ____ <i>Other:</i> _____
____ Oxygen	____ continuous, ____ hourly, ____ daily, ____ <i>Other:</i> _____
____ H2S dosimeter	____ continuous, ____ hourly, ____ daily, ____ <i>Other:</i> _____
____ H2S meter	____ continuous, ____ hourly, ____ daily, ____ <i>Other:</i> _____
____ HNU	____ continuous, ____ hourly, ____ daily, ____ <i>Other:</i> _____
____ OVA	____ continuous, ____ hourly, ____ daily, ____ <i>Other:</i> _____
____ WBGT	____ continuous, ____ hourly, ____ daily, ____ <i>Other:</i> _____
____ Noise	____ continuous, ____ hourly, ____ daily, ____ <i>Other:</i> _____
____ Organic Vapor	____ continuous, ____ hourly, ____ daily, ____ <i>Other:</i> _____
____ <i>Other:</i> _____	____ continuous, ____ hourly, ____ daily, ____ <i>Other:</i> _____

3. Additional Hazards: Additional hazards may be encountered on site, and these along with any other applicable hazards found during the site survey must be marked on the attached maps.

F. GENERAL SAFE WORK PRACTICES. The following safe work practices shall be adhered to while on site. Please check those that are appropriate and add any additional ones:

___BUDDY SYSTEM. The buddy system shall be observed inside the Work Area (EXCLUSION and CONTAMINATION REDUCTION ZONES). Personnel must work within sight of their assigned partner at all times. A partner shall be assigned by the site safety supervisor as personnel check in. Personnel shall use whistles to indicate that they need assistance in areas where they may be obscured from supervisors (e.g. high grass, boulders, or warehouse areas) as noted on the Project Map.

___OCCUPATIONAL MEDICAL MONITORING. Personnel shall be enrolled in an occupational medical monitoring program in accordance with 29 CFR 1910.120.

___FIRES. Each restriction zone and associated contamination reduction zone shall have at least one each of the following:

- a fully charged Class A fire extinguisher for ordinary fires,
- a fully charged Class B fire extinguisher for liquid fires, and
- a hand held fog horn to alert personnel.

The above items shall be maintained in a readily accessible location, clearly labeled in red, and with the location noted on the project map. An ABC or AB fire extinguisher can be substituted for an A or B fire extinguisher.

___LIGHTING. Fixed or portable lighting shall be maintained for dark areas or work after sunset to ensure that sufficient illumination is provided. (See TABLE H-120.1 of 29 CFR 1910.120(m) for Minimum Illumination Intensities.)

___SLIPPERY ROCKS AND SURFACES. All personnel in the work area shall wear chemical resistant safety boots with steel toe/shank and textured bottoms (neoprene is a common material that is fairly resistant to many oils). Boat operators may substitute clean deck shoes with textured soles kept free of oil on cloth/leather uppers.

___SLIP-TRIP-FALL HAZARDS. In addition to proper footwear, personnel will be briefed to be wary of tripping hazards. Safety belts and lifelines will also be worn when working at heights. Proper safety precautions will be taken when working with ladders.

___WORK NEAR WATER. All personnel working in boats, on docks, or generally within 10 feet of water deeper than 3 feet, shall wear Coast Guard approved personal flotation devices (PFDs) or work vests.

___HEAT STRESS. The site safety and health supervisor shall generally be guided by the ACGIH guidelines in determining work/rest periods. Fluids shall be available at all times and encouraged during rest periods.

___Further guidelines are provided as Attachment: _____.

___COLD STRESS. The site safety and health supervisor shall generally be guided by the ACGIH guidelines in determining work/rest periods. Workers shall be provided with adequate warm clothing, rest opportunities, exposure protection, warm and/or sweet fluids shall also be available during rest periods. For prolonged water temperatures below 59 degrees F, or a combined water and air temperature less than 120 degrees F, exposure suits shall be worn by personnel working/traveling in small boats, and immersion suits shall be available for vessel operations other than small boats.

___Further guidelines are provided as Attachment: _____.

___HIGH NOISE LEVELS. Hearing protection shall be used in high noise areas (exceeding 84 dBA--generally where noise levels require personnel to raise their voices to be heard) designated by the site safety supervisor.

___ELECTRICAL HAZARDS. Electrical hazards are designated on the site map, and shall be marked with suitable placards, barricades, or warning tape as necessary.

___TRAP HAZARDS. Open manholes, pits, trenches, or similar hazards are noted on the site map. The site safety supervisor shall ensure that these locations are periodically checked during the day.

___MUD. Dangerous mud flats posing a trap hazard shall be designated on the site safety map as areas off limits to personnel. Mark these locations with banner tape, barricades, or other marking equipment.

___CARBON MONOXIDE. Equipment operators shall ensure that personnel do not linger or work near exhaust pipes.

___UV LIGHT EXPOSURE. Sunscreens of protection factor 15 (or greater), and UV tinted safety glasses shall be made available for response personnel as needed.

___HELICOPTER OPERATIONS. Pilots shall provide safety briefing for all passengers. Helicopter procedures are provided as attachment:_____.

___MOTOR VEHICLES. Drivers shall maintain a safe speed at all times, and shall not be allowed to operate vehicles in a reckless manner.

___A vehicle safety briefing is provided as attachment_____.

___ALL TERRAIN VEHICLES (ATVs). Drivers shall maintain a safe speed at all times, and shall not be allowed to operate vehicles in a reckless manner. ATV drivers shall not operate ATVs outside of areas and lanes specified by the site safety supervisor.

___DRUM HANDLING AND SPILL CONTAINMENT.

- Drums and containers must be handled in accordance with 29 CFR 1910.120. Containers must be labeled and constructed in accordance with EPA (40 CFR 264-265, and 300), and DOT (49 CFR 171-178) regulations.
- Temporary holding/staging areas for drums and containers containing waste materials shall be constructed to contain spillage, run-off, or accidental releases of materials.
- Manual lifting and handling of drums and containers shall be kept to a minimum. To the extent possible, mechanical devices, drum slings or other mechanical assisting devices designed for that purpose shall be used.

___*Safe-lifting procedures are provided as Attachment_____.*

___*Drum-handling procedures are provided as Attachment_____.*

___CONFINED SPACES. Confined spaces will not normally be entered by response personnel during oil spill response operations. If a confined space must be entered or hotwork conducted on a confined space, a specific confined space entry work plan and confined space work authorization checklist will be developed for that operation.

___*A confined space work plan is provided as Attachment_____.*

___*A confined space work authorization checklist is provided as Attachment_____.*

___POISONOUS/INFECTIOUS INSECTS, BITES, STINGS, PLANTS.

___ Bee Stings (also hornet or wasp bites)

- ___ Animal Bites (infection hazard, and/or rabies from some common sources such as: foxes, bats, dogs, cats, and cows).
- ___ Marine Stings and Punctures (jellyfish, man-o-war, anemones, corals, hydras, urchins, cone shells, stingrays, and spiny fish)
- ___ Poisonous Plants (poison ivy, oak, or sumac)

General Prevention:

___ During morning safety briefings, provide information on the location of hazards and how to deal with problems.

___ Personnel should be provided with

___ long sleeved clothing

___ insect repellent

___ Personnel should inspect each other for signs of infected bites during breaks when working in designated areas.

___ Personnel with allergies to bee stings or insect bites may suffer a medical emergency if bitten. Supervisors on site should be prepared to deal with these medical emergencies.

___ Personnel with severe allergies must work in areas away from known/suspected hazards.

___ Personnel with allergies to bee stings or other insect bites should notify their supervisors AND the site safety supervisor when reporting on this site.

___ *Personnel shall be briefed on procedures in accordance with the guidelines provided as Attachment: _____.*

___ **BEAR SAFETY/USE OF FIREARMS.** Confrontation with bears exhibiting aggressive behavior can be life-threatening for employees engaged in field work at remote sites. State regulations allow taking of bears in defense of life after other measures fail. Personal safety is the foremost consideration in bear encounters, but all reasonable alternative methods of deterring an aggressive bear shall be employed. These include retreat, noise making, chemical repellents, and detonation of flares, if feasible.

Proper training of personnel should cover the following at a minimum:

- Avoiding bear encounters.
- Interpreting bear behaviors.
- Handling, maintaining and using non-lethal repellents.
- Handling, maintaining and using firearms.
- Requirements of the State Defense of Life and Property Regulations.

___ *Bear safety/firearms handling procedures are provided as Attachment _____.*

The Alaska Department of Environmental Conservation has also developed a document entitled "Bear Safety/Firearms Program Guidance" for ADEC personnel.

G. PERSONAL PROTECTIVE EQUIPMENT (PPE).

1. Levels of Protection:

- **Level A:** Should be worn when the highest level of respiratory, skin, and eye protection is needed.
- **Level B:** Should be worn when the highest level of respiratory protection is needed, but a lesser level of skin protection.
- **Level C:** Should be worn when the criteria for using air-purifying respirators are met.
- **Level D:** Should be worn only as a work uniform and not on any site with respiratory or skin hazards. It provides no protection against chemical hazards.

____ See the PPE ensemble descriptions provided as Attachment ____.

2. The following PPE ensembles shall be used while on site:

<u>Location:</u>	<u>Task:</u>	<u>Level (circle):</u>
GENERAL	Monitors/supervisors	A B C D
	Shoreline cleanup crew	A B C D
	Vacuum truck crews	A B C D
	High pressure wash crew	A B C D
	Abrasive cleaning crew	A B C D
	Hot water wash crew	A B C D
	Boat drivers	A B C D
	Boat crews	A B C D
	Skimmer crews	A B C D
	Boom crews	A B C D
	Sampling teams	A B C D
	Survey teams	A B C D
	Product pumping	A B C D
	Dispersants crews	A B C D
	Bioremediation crews	A B C D
	Bird/mammal capture	A B C D
	Bird/mammal hazing	A B C D
	Bird/mammal transport	A B C D
	_____	A B C D
	_____	A B C D
_____	A B C D	
_____	A B C D	
COLD ZONE	Response personnel	A B C D
	Visitors:	A B C D
	_____	A B C D
	_____	A B C D
	_____	A B C D

H. DECONTAMINATION PROCEDURES

Contaminated personnel and personnel entering contaminated areas shall be decontaminated in accordance with the instructions of the site safety and health supervisor.

____ See the Decontamination Guidelines and Layout provided as Attachments ____.

I. SANITATION & PERSONAL HYGIENE

Potable water, non-potable water, toilets and personal hygiene facilities shall be readily available.

____ For further information see Attachment ____.

J. EMERGENCY PROCEDURES

1. General: In all cases when an onsite emergency occurs, immediate notification will be made via the quickest means available. Personnel shall not reenter the work area or restart work until:

- ❖ the condition resulting in the emergency has been investigated by supervisory personnel, and has been corrected;
- ❖ hazards have been reassessed; and
- ❖ site personnel have been briefed on any changes in the operation and site safety plan.

____ Hospitals listed under communications section have been contacted (chemical emergency hospital agrees to take patients from site).

____ Fire departments listed under communications section have been contacted.

____ Ambulance services listed under communications section have been contacted (note those which will take chemical emergencies).

____ ATSDR has been notified of site operations.

____ Police forces listed under communications section have been notified.

2. Emergency Medical Procedures:

- ❖ Contact designated EMT (see the posted organization/work plan).
- ❖ Do not attempt to move seriously injured personnel, call for an ambulance to come to the injured person.
- ❖ For bites, stings, or poisonous animals/plants follow the procedures provided in Attachment ____.
- ❖ The closest hospital for regular emergencies is:

(see K. Communications, below, for phone number)

- ❖ The closest hospital for chemical exposure emergencies is:

(see K. Communications, below, for phone number)

Contact ATSDR (404) 639-0615 (24 hr) for chemical incidents.

3. Emergency Fire Procedures:

- ❖ DO NOT attempt to fight fires unless it is a small fire. A small fire is generally considered to be a fire in the early stages of development that can readily be extinguished in a few minutes time with personnel and equipment in the immediate area.
- ❖ DO NOT take extraordinary measures to fight fires.
- ❖ YOU MUST sound the appropriate fire signal if fire cannot be put out quickly.
- ❖ Alert nearby personnel to call fire department.
- ❖ Notify supervisor.
- ❖ When the fire alarm is sounded, personnel shall immediately leave the work area WITH THEIR ASSIGNED BUDDY and proceed to the pre-designated assembly point using the designated evacuation route (see evacuation routes and assembly point below).
- ❖ The Site Supervisor OR the Fire Department shall ensure that the fire is extinguished and a temporary fire watch has been posted BEFORE restarting work.

4. Evacuation:

EVACUATION & FIRE SIGNAL(S):

PRIMARY EVACUATION ROUTE:

SECONDARY EVACUATION ROUTE:

ASSEMBLY POINT:

K. COMMUNICATIONS.

1. General signals:

- __ THUMBS UP: I'm OK / I agree.
- __ THUMBS DOWN: Don't agree.
- __ HANDS ACROSS THROAT: Out of air/trouble breathing
- __ GRAB HAND/ARM: Come with me
- __ HANDS ON HEAD: I need assistance
- __ BOTH HANDS ON WAIST: Leave area immediately

2. Radio communications:

Working:

freq: _____, chnl: _____ (_VHF _UHF _CB _____OTHER)

Emergency:

freq: _____, chnl: _____ (_VHF _UHF _CB _____OTHER)

freq: _____, chnl: _____ (_VHF _UHF _CB _____OTHER)

3. Phone communications:

On-Scene Coordinator:

(_____) _____ (_voice _fax _cell _pager _home)

(_____) _____ (_voice _fax _cell _pager _home)

Incident Commander:

(_____) _____ (_voice _fax _cell _pager _home)

(_____) _____ (_voice _fax _cell _pager _home)

Site Safety and Health Officer:

(_____) _____ (_voice _fax _cell _pager _home)

(_____) _____ (_voice _fax _cell _pager _home)

Agency for Toxic Substance and Disease Registry (ATSDR)

(404) 639-0615 (24 hr) (voice) ext 0655 (fax)

Case officer: _____

ATSDR can provide emergency medical and toxicological information, assist in determining procedures for potential chemical overexposures, and can provide on scene assistance for certain chemical emergencies.

Police:

(_____) _____ (_voice _fax _cell _pager _home)

Fire:

(_____) _____ (_voice _fax _cell _pager _home)

Ambulance/EMT/Hospital:

(_____) _____ (_voice _fax _cell _pager _home)

(_____) _____ (_voice _fax _cell _pager _home)

OTHER NUMBERS:

(_____) _____ (_voice _fax _cell _pager _home)

L. SITE SAFETY BRIEFINGS/MEETINGS.

1. Initial Briefing: All personnel, employees, contractors, and subcontractors shall be provided with an initial site safety briefing to communicate the nature, level and degree of hazards expected on site and to present the emergency response plan.

2. Shift & Other Briefings: Personnel will also receive regular briefings before and after each shift, before making a LEVEL A/B hot zone entry, and when significant changes are made in the work procedures or safety plans. These site safety meetings/briefings shall be held by the Site Supervisor. At a minimum these meetings will describe the work to be accomplished, discuss safety procedure changes, and note any items that need to be passed to other crews. General safety training topics should also be covered based on points raised in previous meetings and the site safety plan attachments.

_____ *A briefing log is provided as Attachment: _____.*

M. THE SITE SAFETY OFFICER.

The Site Safety Officer for this incident is:

_____.

The responsibilities of the SITE SAFETY OFFICER include (but are not limited to):

- coordination of all safety and health concerns for the entire work site;
- keeping this plan current; and
- liaison with site safety officers from other organizations.

N. AUTHORIZATIONS:

SITE SAFETY OFFICER:

DATE: _____

ON SCENE COORDINATOR:

DATE: _____

APPENDIX II – TRAINING GUIDELINES

**STATE EMERGENCY RESPONSE COMMISSION {SERC}
TRAINING COMMITTEE**

**TRAINING GUIDELINES FOR
LOCAL EMERGENCY PLANNING COMMITTEES**

*for
Planners/Responders/Managers of Responses
To Hazardous Materials Emergencies*

**Based Upon State and Federal Occupational Health and Safety Administration's
"Hazardous Waste Operations And Emergency Response" {HAZWOPER}
and NFPA Standards as adopted by the SERC for Guidance**

June 1993

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2 {6/93}

I. INTRODUCTION

“What is the training matrix?”

In June of 1991, a subcommittee of the State Emergency Response Commission (SERC) Training Committee was appointed to develop “a matrix and a flow chart outlining the ideal training levels to be obtained by persons that may be involved in hazardous materials releases. The subcommittee agreed that training specifics are difficult to determine until a hazards analysis is completed and the hazardous material that may be involved in an incident is identified. A generic response must be planned in the interim.”

The subcommittee developed an interim document which was adopted by the SERC and distributed to the Local Emergency Planning Committees (LEPCs) in June of 1992. This final training matrix is the result of incorporating the most recent developments in worker safety standards to produce as current and comprehensive a guideline as feasible. Clearly, the need remains to update the matrix when amendments, interpretations or additions to the relevant worker safety regulations occur. The SERC Training Committee’s main focus is to provide technical training support to the LEPCs in their planning and response activities.

II. SCOPE AND APPLICATION OF RELEVANT STANDARDS

“Upon what is this training matrix based?”

The matrix is not intended as a “stand alone” guidance document. It is based upon and should be used with the Occupational Health and Safety Administration (OSHA) regulations entitled “Hazardous Waste Operations and Emergency Response” (HAZWOPER). HAZWOPER is published at the federal level by the U.S. Department of Labor in Title 29 of the Code of Federal Regulations (CFR), section 1910.120, and in the State of Alaska by the Alaska Department of Labor as 8 Alaska Administrative Code (AAC) 61.010, Subchapter 10.

Because the State of Alaska has the option to modify the code to be more restrictive, the most current edition of the Alaska Department of Labor HAZWOPER is the prevailing standard. It should be emphasized that the HAZWOPER code is a worker safety standard administered, interpreted and enforced by the Department of Labor. Their Labor Standards and Safety, Consultation and Training personnel have been instrumental in the development and review of this document.

HAZWOPER was written in response to a congressional mandate in the Superfund Amendment and Reauthorization (SARA) legislation directing the U.S. Department of Labor to produce a worker safety code for protection of hazardous waste site workers and emergency responders. Cited in the non-mandatory appendices of the HAZWOPER code are National Fire Protection Association (NFPA) documents known as the National Fire Codes. These numbered standards provided crucial guidance to the developers of the HAZWOPER regulations.

Consistent with this practice, the SERC Training Committee recommended and the SERC adopted policy regarding NFPA standards. Presently, two NFPA standards regarding safe response to hazardous materials emergencies are recognized by the SERC as training consultation and guidance documents for the LEPCs: “Standard for Professional Competence of Responders to Hazardous Materials Incidents”, NFPA 472 and “Competencies for Emergency Medical Service Personnel Responding to Hazardous Materials Incidents”, NFPA 473.

The circumstances of a release or threatened release of oil or other hazardous substances may not always fall within the scope and application of the HAZWOPER standard, and other worker safety regulations may apply in lieu of or in addition to the requirements described in this training guide. Section V provides a list of other regulations.

A suggested example is the medical facility emergency department clinical staff who may receive patients contaminated at a spill of hazardous materials, but who do not respond to the incident site to administer treatment. Training to address risks associated with their job duties would be defined by the Hazard Communication standard, not HAZWOPER.

“Who will use this training matrix?”

The SERC Training Committee serves to offer assistance, consultation and guidance to LEPCs in their community emergency planning process. The worker safety regulations are complex, technical in nature and could vary in relevance from community to community according to local hazards analysis. This training matrix has been developed as a resource for Alaska’s LEPCs as they develop training plans for those personnel assigned responsibilities in the community emergency operations plan.

“How is the training matrix used?”

A key aspect of the HAZWOPER code is its presentation as a performance-based standard. This provides the flexibility needed to accommodate anticipated safety needs of specific employee categories. Actual hourly requirements for training may differ enormously from one job classification to another. For example, a hazardous materials team member will need more training time to establish his/her skill level for the competencies need to safely perform work than the dispatcher who sends the member to an emergency.

In applying the matrix, the first task is an understanding of the job duties of the worker being evaluated. A step-by-step examination of the actions expected of a worker in an emergency response and the degree of risk anticipated from hazardous chemicals and health hazards resulting from those actions is needed. For instance, a municipal law enforcement traffic officer in an industrialized urban area may face hazardous materials emergency risks substantially different from those anticipated by a Village Public Safety Officer.

The HAZWOPER code also places great emphasis on the employer’s facility-specific or site-specific emergency response plan. Local hazards and emergency planning on a community basis are addressed by the intent and language of this worker safety document.

“What employees and situations are covered by the matrix?”

Users of this guidance document are cautioned to carefully examine the “Scope and Application” and “Definitions” sections of the HAZWOPER standard which define those individuals and operations covered by the regulations. They include:

- *Cleanup operations at uncontrolled hazardous waste sites, whether voluntary or as the result of corrective government actions
- *Treatment, storage and disposal facilities for hazardous wastes
- *Emergency response operations for releases or threatened releases of hazardous substances

HAZWOPER applies to participants in the response or cleanup of a spill if the operations involve any reasonable possibility that these individuals will be exposed to risks from chemical health hazards. Other occupational safety and health standards as published by the Department of Labor also apply. When there is a conflict or overlap in the standards, the more protective provision prevails.

Groups whose training needs are not specifically addressed by the HAZWOPER are the planners and managers, particularly at a local level. The matrix recommends a wide range of training for these groups. Superfund Amendment and Reauthorization Act (SARA) law makes recommendations toward the content and focus of training. The Federal Emergency Management Agency has designed modularized training easily adaptable to community needs. Clearly, local government has a need to define its role in protection of its citizens and will likely participate in the LEPC planning process at some level. The local government manager's ability to participate effectively in all phases – planning through post emergency – of a hazardous materials response depends upon the scope and depth of training.

It must be emphasized that the training matrix is general in nature and is offered as guidance only. The diversity of circumstances and contingencies presented by the planning process and training requirements warrant consultation and technical assistance from the state agency which administers the HAZWOPER code.

“Who should be contacted with questions about the training matrix?”

Every effort has been made to clarify and simplify the intent and content of the training requirements mandated by the HAZWOPER standard. LEPCs are invited to contact the SERC Training Committee Chair, Kayle Foster, Alaska Department of Environmental Conservation, 428-7086, with any questions or concerns regarding this training guidance matrix.

The Alaska Department of Labor, Labor Standards and Safety, Consultation and Training, 269-4955, can assist with questions on HAZWOPER and other occupational health and safety regulations.

III. ABBREVIATION & ACRONYM KEY FOR MATRIX, DEFINITIONS and GLOSSARY

IPO - “Hazmat: Introduction for Public Officials”, Federal Emergency Management Agency (FEMA) training

HMCP - “Hazardous Materials Contingency Planning”, FEMA training

Emerg Plan - Emergency Planning

As required in HAZWOPER Subsection q, “Emergency Response to Hazardous Substance Releases”:

Emerg Response - Emergency Response

FRA - First Responder Awareness. {those likely to discover a hazardous substance release, but who will take no action other than notification}, hours dependent upon expected risks related to specific job duties, no minimum number. Training or experience sufficient to demonstrate certain competencies.

FRO - First Responder Operations, {those who respond to hazardous substance releases/potential releases to protect life, environment and property in a defensive fashion}, 8 hours minimum, plus employer-certified competencies.

HMT - Hazardous Materials Technician {those who respond to hazardous substance releases/potential releases for the purpose of stopping the release}, 24 hours minimum, plus employer-certified competencies.

HMS - Hazardous Materials Specialist, {those who respond with and provide support to Hazardous Materials Technicians and whose duties require a more direct or specific knowledge of the substance(s) to be contained}, 24 hours minimum, plus employer-certified competencies.

ICS - Incident Command System, training specific to employer’s emergency response plan, based upon the management model described in the HAZWOPER compliance guidelines.

IC - On-Scene Incident Commander, {individual who assumes control of incident scene beyond First Responder Awareness}, 24 hours minimum, plus employer-certified competencies.

REF - Annual refresher training, no minimum hourly requirement

As required in HAZWOPER subsection e, “Hazardous Waste Operations”, and subsection q – II, “Post-emergency Response Operations”:

Haz Waste

Ops -	Hazardous Waste Operations
4 OSC -	4 hour {Aged Crude} Oil Spill Cleanup Worker training
24 + 1 -	Hazardous Waste Site Occasional Worker, requires 24 hours classroom training, 1 day supervised field training [works at hazardous waste/cleanup site or in Post Emergency phase of an incident in area with unlikely risk of exposure]
40 + 3 -	Hazardous Waste Site General Worker, requires 40 hours classroom training, 3 days supervised field training [works at hazardous waste/cleanup site or in Post Emergency phase of an incident in area with actual or potential exposure to hazardous substances and health hazards]
SUPV -	Management and Supervisor Training, 8 hours for those who supervise employees engaged in hazardous waster operations
REF -	Refresher training required on annual basis, 8 hour minimum

As required in HAZWOPER subsection p. “Treatment, Storage and Disposal Facilities”:

TSD -	Treatment, Storage and Disposal Facility
24 -	Treatment, Storage and Disposal Facility Worker training, 24 hours
ER -	Treatment, Storage and Disposal Facility Worker on site emergency training, hours as needed to address job duties
REF -	Refresher training required on annual basis, 8 hour minimum

DEFINITIONS

From HAZWOPER:

emergency: “Emergency response” or “responding to emergencies” means a coordinated response effort by employees from outside the immediate release area or by other designated responders (i.e., mutual aid groups, local fire departments, etc.) to an occurrence which results, or is likely to result, in and uncontrolled release of hazardous substance, which could result in a potential safety or health hazard, (i.e., fire, explosion or chemical exposure).

Defensive Team Leader, Defensive Team Personnel: Those emergency responders trained to the First Responder Operations level, who respond for the purpose of protecting life, the environment and property without actually trying to stop the release. Their function is to contain the release from a safe distance, keep it from spreading and prevent exposures.

Hazmat Team Leader, Hazmat Team Personnel: An organized group of employees designated by the employer who are expected to perform work to handle and control actual or potential leaks or spills of hazardous substances requiring possible close approach to the substance.

Post emergency response operations: Point of an incident where the leak or release has been stopped. If it is then determined that it is necessary to remove hazardous substances, health hazards and contaminated materials, worker safety training requirements change substantially and federal and state hazardous waste regulations may apply.

From state and federal regulations, SERC Policy 90-1, NFPA standards:

aeromedical evacuation services: Appropriately staffed medical evacuation services, critical care air ambulance services, and specialty aeromedical transport teams which transport emergency patients via fixed or rotary wing aircraft and which may transport medical personnel to the emergency scene.

Airport Manager: A person who is directly responsible for the operation of an airport and its facilities.

applicable facility: Per section 302, SARA Title III, a facility is subject to the requirements of the law if a substance on the Extremely Hazardous Substance list is present in an amount exceeding the threshold planning quantity established for each substance or has been designated for regulation by SERC or local ordinance.

Broadcast and Print Media: A person who is employed by newspaper, radio or television news facilities.

Elected State and Local Officials: Any public official chosen by a vote of the people among candidates properly registered to fill a public office.

Emergency Dispatcher: An individual responsible for dispatching appropriate emergency personnel and apparatus to the scene of a potential or actual release of a hazardous substance.

Emergency Management: The local duly appointed government representative responsible for planning and/or management of emergency or disaster operations.

EMS-ALS: A trained and certified medical professional (i.e., Emergency Medical Technician II or III, Mobile Intensive Care Paramedic), who is legally authorized to provide advanced life support (ALS) such as administration of medications, advanced airway care and cardiac defibrillation.

EMS-BLS: An individual, such as Emergency Trauma Technician or Emergency Medical Technician I, who is trained to care for the ill and injured using those basic life support (BLS) skills such as cardiac pulmonary resuscitation, administration of oxygen, splinting, etc. which do not require authorization from a physician.

EMS Coordinator: An active emergency medical services responder who is responsible for coordinating EMS activities such as training, certification or licensing, quality improvement and on-scene patient care.

Emergency Department (ED) Admissions: Administrative personnel whose function is to register and process patients for emergency treatment.

Emergency Department Ancillary Staff: Personnel who provide clinical support service to ED clinical staff for patient care, i.e., x-ray, lab, etc.

Emergency Department Support Staff: Personnel who provide non-clinical support to ED, i.e., housekeeping, security, etc.

Emergency Department Clinical Staff: Personnel who provide direct medical patient care in accordance with facility guidelines and procedures, i.e., physician's assistant, registered nurse, licensed practical nurse, etc.

Emergency Department Physician: Physician or other specialist who may render medical care to a contaminated patient of a hazardous material spill.

Emergency Department Triage: Emergency room staff responsible for receiving patients requiring emergency treatment who will determine which service is initially required and with what priority.

Harbor Master: A person responsible for the operation of a harbor and its facilities.

Law Enforcement: A person who is an official member of the local or state law enforcement agency.

LEPC: Local Emergency Planning Committee as defined in Alaska Statutes 46.13.080.

LEPD: Local Emergency Planning District as defined in Alaska Statutes 46.13.060.

Medical Facility Administration: A person responsible for establishing policy, maintaining quality patient care and providing for institutional management and planning.

Private Environmental: A person representing a local, state, national or international public interest group associated with protecting the environment from oil and other hazardous substances impacts.

Public-at-Large: A private citizen who is not a member of any of the other LEPC categories. The intent is to represent the broader public interest rather than any special interest group.

Public Environmental: A person representing a local, state or federal public agency with the regulatory responsibility for protecting the environment from oil and hazardous substances impacts.

Public Works: A person who works with and maintains the public infrastructure, e.g., roads, utilities, landfills, etc.

School Administrator: A person responsible for maintaining school policies and a quality learning environment for the students attending the educational facility.

School Maintenance: A person responsible for maintaining the physical plant and school physical environment.

SERC: State Emergency Response Commission as defined in Alaska Statutes 46.13.10 through .40.

IV. TRAINING GUIDE MATRIX

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SERC Training Committee															
Training Matrix Guidance Documents for LEPCs															
Based on: Alaska Department of Labor – Occupational Safety and Health Administration 8 AAC Chapter 61.010, Subchapter 10															
Categories of Training	Emerg Plan		Emergency Response						Haz Waste Ops				TSD		REF
	IPO	HMCP	1RA	1RO	HMT	HMS	ICS	IC	4 OSC	24+1	40+3	SUPV	24	ER	
Categories of Personnel															
Planning Group															
LEPC Member	O	R	R	O	O	O	R	O	O	O	O	O	O	O	R
Community Emergency Coordinator	O	R	R	O	O	O	R	O	O	O	O	O	O	O	R
Facility Emergency Coordinator	O	R	R	O	O	O	R	O	O	O	O	O	O	O	R
Broadcast and Print Media	R	O	R	O	O	O	R	O	O	O	O	O	O	O	R
Elected State & Local Officials	R	R	R	O	O	O	R	O	O	O	O	O	O	O	R
Public Environmental	R	R	R	R	R	O	R	R	O	O	O	O	O	O	R
Public at Large	R	R	R	O	O	O	R	O	O	O	O	O	O	O	R
Private Environmental	R	R	R	R	O	O	R	O	R	O	O	O	O	O	R
Public Health Director	O	R	R	O	O	O	R	O	O	O	O	O	O	O	R
Emergency Manager	R	R	R	R	O	O	R	R	O	O	O	O	O	O	R
Public Works Director	R	R	R	R	O	O	O	R	OO	O	O	O	O	O	R
Public Works Personnel	O	O	R	R	O	O	O	O	O	O	O	O	O	O	R
School Administrator	O	R	O	O	O	O	O	O	O	O	O	O	O	O	R
School Maintenance	O	O	O	O	O	O	O	O	O	O	O	O	O	O	R
Airport Manager	O	R	R	R	O	O	O	R	O	O	O	O	O	O	R
Harbor Master FED OSH	O	R	M	M	O	O	O	R	O	O	O	O	O	O	M
M = MANDATORY (PER REGULATION) R = RECOMMENDED (BY STANDARDS/POLICY) O = OPTIONAL															

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Categories of Training	Emerg Plan		Emergency Response						Haz Waste Ops				TSD		REF
	IPO	HMCP	1RA	1RO	HMT	HMS	ICS	IC	4 OSC	24+1	40+3	SUPV	24	ER	
Categories of Personnel															
Emergency Response Operations:															
Emergency Dispatcher	O	O	M	R	O	O	R	O	O	O	O	O	O	O	M
Fire Chief	R	R	M	M	O	O	M	M	O	O	O	O	O	O	M
Firefighter	O	O	M	M	O	O	R	O	O	O	O	O	O	O	M
Law Enforcement Chief	R	R	M	R	O	O	M	M	O	O	O	O	O	O	M
Law Enforcement Officer	O	O	M	R	O	O	M	O	O	O	O	O	O	O	M
Defensive Team Leader	O	R	M	M	O	O	M	M	O	O	O	O	O	O	M
Defensive Team Personnel	O	O	M	M	O	O	R	O	O	O	O	O	O	O	M
Hazmat Team Leader	O	R	M	M	M	O	M	R	R	O	O	O	O	O	M
Hazmat Team Personnel	O	O	M	M	M	O	M	O	O	O	O	O	O	O	M
M = MANDATORY (PER REGULATION) R = RECOMMENDED (BY STANDARDS/POLICY) O = OPTIONAL															

<p style="text-align: center;">SERC Training Committee</p> <p style="text-align: center;">Training Matrix Guidance Documents for LEPCs</p> <p style="text-align: center;">Based on: Alaska Department of Labor – Occupational Safety and Health Administration 8 AAC Chapter 61.010, Subchapter 10</p>															
Categories of Training	Emerg Plan		Emergency Response						Haz Waste Ops				TSD		REF
	IPO	HMCP	1RA	1RO	HMT	HMS	ICS	IC	4 OSC	24+1	40+3	SUPV	24	ER	
Categories of Personnel															
EMS Providers:															
EMS – BLS	O	O	M	R	O	O	R	O	O	O	O	O	O	O	M
EMS – ALS	O	O	M	R	O	O	R	O	O	O	O	O	O	O	M
EMS Coordinator	O	R	M	R	O	O	R	R	O	O	O	O	O	O	M
Medical Facility Administration	R	R	O	O	O	O	R	O	O	O	O	O	O	O	O
Medical Facility Emergency Manager	O	R	O	O	O	O	R	O	O	O	O	O	O	O	O
Emergency Department Admissions	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
Emergency Department Triage	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
Emergency Department Physician	R	O	O	O	O	O	O	O	O	O	O	O	O	O	O
Emergency Department Clinical Staff	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
Emergency Dept Support Services	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
Emergency Dept Ancillary Services	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
Aeromedical Evacuation Services	O	O	M	R	O	O	O	O	O	O	O	O	O	O	M
<p>M = MANDATORY (PER REGULATION) R = RECOMMENDED (BY STANDARDS/POLICY) O = OPTIONAL</p>															

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Categories of Training	Emerg Plan		Emergency Response						Haz Waste Ops				TSD		REF
	IPO	HMCP	1RA	1RO	HMT	HMS	ICS	IC	4 OSC	24+1	40+3	SUPV	24	ER	
Categories of Personnel															
Clean-up Operations:															
Cleanup Team Supervisor	O	R	O	O	O	O	R	O	M	M	M	M	O	O	M
Cleanup Team Personnel	O	O	O	O	O	O	R	O	M	M	M	O	O	O	M
TSD Facility Personnel	O	O	O	O	O	O	R	O	O	O	O	O	M	R	M
TSD Facility Supervisor	R	O	O	O	O	O	R	O	O	O	O	O	M	M	M
Oil Spill Worker (below high tide-FED)	O	O	O	O	O	O	O	O	M	O	O	O	O	O	M
Oil Spill Worker (above high tide-AK)	O	O	O	O	O	O	O	O	O*	M*	O	O	O	O	M
<p>* = The Commissioner of the AK Department of Labor has the authority to adjust the number of training hours required for (weathered crude) oil spill clean-up workers.</p> <p>M = MANDATORY (PER REGULATION) R = RECOMMENDED (BY STANDARDS/POLICY) O = OPTIONAL</p>															

V. LIST OF REGULATIONS AND STANDARDS

ALASKA OCCUPATIONAL SAFETY AND HEALTH PUBLICATIONS

Available through:

Alaska Department of Labor, Occupational Safety and Health Administration

P.O. Box 107022/3201 Eagle Street, Suite 305

Anchorage, Alaska 99510-7022

800-770-4950/907-269-4955

or your local office of the Alaska Department of Labor

<u>Subchapter/Article</u>	<u>Code Book</u>
01.	General Safety Code (3 volumes)
02.	Occupational and Industrial Structures
03.001	Electrical Code
04.01	Occupational Health and Environmental Control
04.0110	OHEC/Asbestos
04.02	Toxic and Hazardous Substances Codes
04.0301	1,2 Dibromo-3-Chloropropane
04.0302	Inorganic Arsenic
04.0303	Acrylonitrile
04.0304	Lead Code
04.0305	Ethylene Oxide
04.0306	Benzene
04.0307	Formaldehyde
04.0308	Hazardous Chemicals in Laboratories
05.	Construction Code (2 volumes)
05.045	Asbestos (Construction)
06.	Commercial Diving Operations Code
07.01	Logging Code
07.02	Sawmill Code
07.03	Pulp, Paper, and Paperboard Mills
08.	Petroleum Code
09.	Explosives Code
10.	Hazardous Waste Operations and Emergency Response
11.	Laundry Machinery and Operations Code
12.	Bakery Equipment Code
13.	Textiles Code
14.	Agriculture Code
15.	Hazard Communication Code
16.	Grain Handling Facilities
17.	Bloodborne Pathogens (HIV, HIB)
19.	Process Safety Management

Publications:

Alaska Statutes
Alaska Administrative Code
Recordkeeping Requirements
Construction and General Industry Safety and Health Standards Digest
The Manager's Handbook
Free Confidential Consulting Service (several pamphlets on various subjects)
Variances from Occupational Safety and Health Standards
Rights and Responsibilities of Employees Under the Alaska OSH Act of 1973
Explosive Handler's Certificate of Fitness
Designated Toxic and Hazardous Substances
A Short Guide to the Alaska Occupational Health and Safety Act
Physical Agent Data Sheets: Noise, Heat Stress, Cold Stress, Hand/Arm Vibration, Lasers,
Ultra-Violet Radiation, Microwave/Radio Frequency Radiation, Ionizing Radiation

The following Alaska Statutes may be found in the referenced government offices, or the local public library.

Alaska Department of Environmental Conservation

<u>Title</u>	<u>Name</u>
46.04	Oil and Hazardous Substance Pollution Control
46.08	Oil and Hazardous Substance Releases
46.09	Hazardous Substance Release Control
46.13	Alaska State Emergency Response Commission

Alaska Department of Military and Veterans Affairs
26.20 Civil Defense
26.23 Alaska Disaster Act

Alaska Department of Public Safety/Division of Fire Prevention
18.70 Hazardous Chemicals, Materials and Wastes Placarding

The following federal publications are available for review at the local Environmental Protection Agency office, public library, or may be ordered through:

Government Printing Office
915 2nd Avenue, Room 194
Seattle, Washington 98174
(206) 553-4270/(206) 764-3301 (fax)

Regulations/Laws:

Superfund Amendments and Reauthorization Act of 1986
42 USC 11001-11050
40 CFR 350, 355, 370

Hazardous Waste Operations and Emergency Response
29 CFR 1910.120

Publications:

U.S. Department of Transportation “Emergency Response Guidebook”
Publication 58000.6

NIOSH/OSHA/USCG/EPA “Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities”
National Institute Occupational Safety and Health (NIOSH) publication 85-115

EPA “Standard Operating Safety Guidelines”
U.S. GPO Publication 1987-748-121-67022

EPA “Health and Safety Audit Guidelines”
EPA Publication 540/G-89/010

National Response Team “Hazardous Materials Emergency Planning Guide”
NRT-1

National Response Team “Criteria for Review of Hazardous Materials Emergency Plans”
NRT-2

EPA/FEMA/US DOT “Handbook of Chemical Hazards Analysis Procedures”
EPA publication 1988-519-501/63067

FEMA “Hazardous Materials Exercise Evaluation Methodology” (HM-EEM)
Federal Emergency Management Agency publication 1992-621-086/41663

Information Hotlines:

Superfund Association Hotline
800-424-9346

SARA Hotline
800-535-0202

Chemical Transportation Emergency Center (CHEMTREC)
non-emergency information 800-262-8200

The following National Fire Protection Association (NFPA) publications may be reviewed at local fire departments, public library, or ordered through:

National Fire Protection Association
1 Batterymarch Park
P.O. Box 9101
Quincy, MA 02269-9101

Fire Department Occupational Safety and Health Program
NFPA 1500

Fire Department Safety Officer
NFPA 1501

Standard on Fire Department Incident Management System
NFPA 1561

Recommended Practice for Responding to Hazardous Materials Incidents
NFPA 471

Standard for Professional Competence of Responders to Hazardous Materials Incidents
NFPA 472 *

Standard for Professional Competence of Emergency Medical Service Personnel Responding to
Hazardous Materials Incidents
NFPA 473 *

Vapor Protective Suits for Hazardous Chemical Emergencies
NFPA 1991

Liquid Splash-Protective Suits for Hazardous Chemical Emergencies
NFPA 1992

Support Function Protective Garments for Hazardous Chemical Operations
NFPA 1993

- Adopted as SERC Policy Guidance Documents, available for review through SERC Training Committee

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