

# Standard Operating Procedure

*for the Management of  
Hazardous Materials  
and Hazardous Wastes*

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Bureau of Land Management  
Alaska Fire Service  
Fort Wainwright Facility

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## **1.0 Introduction**

The purpose of this SOP is to prescribe the proper procedures for all AFS personnel who handle, use, store, or transport hazardous materials or hazardous wastes. All hazardous materials handled, used, stored, and transported will be managed to comply with safety, pollution prevention, waste minimization, waste management regulations, and Bureau policy. A hazardous material is any material which, because of its quantity, concentration, or physical, chemical, or infectious characteristics may pose substantial threat to human health of the environment when released or spilled. Typical hazardous materials used by the Bureau of Land Management include, but are not limited to: fuels, oils, paints, solvents, batteries, asbestos, compressed gases, and wastes of these materials.

Management of hazardous materials and hazardous wastes will be in accordance with U. S. Army Alaska (USARAK) Regulation 200-1, Environmental Protection and Enhancement. Each Fort Wainwright AFS division will maintain a copy of this SOP and USARAK Pamphlet 200-1. All employees who manage, use, store, or dispose of hazardous materials or wastes will be familiar with this SOP and the regulations that are pertinent to their job duties.

## **2.0 Training**

All employees who manage, use, store, or dispose of hazardous materials or wastes will be trained on the following topics: hazard communication, acquisition, use, handling, transportation of hazardous materials, waste management, pollution prevention, waste minimization, spill response and cleanup, emergency response, and field awareness. Other function specific training, such as Hazardous Waste Operations and Emergency Response (HAZWOPER), as required by OSHA; Hazardous Materials Transportation, as required by Department of Transportation; and Basic Hazardous Waste Manager and Hazardous Waste Subject Matter Expert training, as required by the U. S. Army, will be completed by employees whose duties result in direct handling or management of hazardous materials or wastes.

## **3.0 Procurement**

A Safety Data Sheet (SDS) will be obtained with all purchases of hazardous materials. The SDS will be conveniently available to all users of that product. All employees will know where the SDSs are located for all materials they use and will be familiar with the information found in the SDSs.

## **4.0 Hazardous Materials and Waste Management**

Elizabeth Andringa, Environmental and Hazardous Material Coordinator, is the Primary Hazardous Waste Manager for BLM – Alaska Fire Service.

Doug Mackey, Safety Manager, is the Alternate Hazardous Waste Manager.

Other persons filling jobs related to hazardous materials/waste management are:

Chris Walters, Automotive Mechanic

John Frisone, Automotive Mechanic

David Lee Edwards, Maintenance Mechanic

Pete Pineault, Maintenance Mechanic Supervisor

Kenneth "Abe" Camp, Acting Warehouse Chief

Bob Wishart, Fuel Shop Supervisor

Lindsey Wyatt, Lead Fuel Specialist

Russell Myers, Fuel Specialist

#### **4.1 Safety Data Sheets (SDS)**

Employees will use SDSs as a guide to the safe use, handling, and storage of hazardous materials. Appropriate personal protection, such as goggles, gloves, outwears and respirators, will be worn by employees when using or handling hazardous materials. Material Safety Data Sheets (MSDSs) may be used in place of an SDS until each product manufacturer has transitioned to the new SDS format. Once the manufacturer transitions to the SDS format, it is the responsibility of the shop that uses and maintains the hazardous material to update the SDS book by replacing the old MSDS with the new SDS. It remains the responsibility of each shop to ensure that the correct SDS or MSDS is on file for the products in use.

The details of the Hazard Communication & Chemical Safety Program may be obtained by contacting the AFS Safety and Occupational Health Manager, Mr. Doug Mackey, at (907) 356-5868 or [dmackey@blm.gov](mailto:dmackey@blm.gov).

#### **4.2 Storage of Hazardous Materials**

All hazardous materials will be stored and secured in designated areas that are marked as such and are well known to facility personnel. Materials in operating areas will be kept to a minimum.

##### **4.2.1 Container Identification**

All containers of hazardous materials will be labeled with the contents of the container. Labels will be of a material compatible with the contents and be readable throughout the life of the contents. Containers used for transferring smaller quantities of a product will be marked with the contents of the container. Only the contents of the container shall be evident on the container. All other labels or markings will be eliminated. Containers without labels may be used for small quantities of hazardous materials that are in the direct control of the user. Hazardous materials will never be stored or left unattended in containers without appropriate labels.

##### **4.2.2 Incompatible Materials**

Incompatible materials such as flammables and corrosives or flammables and oxidizers will not be stored together.

### **4.2.3 Flammable Liquid Storage Cabinets**

Flammable materials are those that have vapors which ignite at temperatures less than 100 degrees Fahrenheit. Combustible materials are those that have vapors which ignite at temperatures between 100 and 200 degrees Fahrenheit.

Flammable and combustible materials stored indoors must be stored in storage cabinets specifically designed for such materials. Flammable storage cabinets will be approved by the Fort Wainwright Fire Chief. The inspection certificate, good for one year, will be posted on the cabinet. If cabinets are moved, the cabinet will be recertified by the fire inspector.

Cabinets will be properly grounded and vented. Each cabinet is rated for a specific volume of flammable or combustible material. These volumes will not be exceeded. The integrity of the fire containment mechanisms will be maintained. No combustible materials, such as cardboard and rags, will be stored in the cabinets.

### **4.2.4 Corrosive Cabinets**

Corrosive materials are liquids or solids such as acids and bases that damage human skin on contact. Cabinets specifically designed for the storage of corrosive materials are recommended for large quantities of highly corrosive materials.

### **4.2.5 Closed containers**

Hazardous material containers will be kept in serviceable condition and be kept closed when not in immediate use. The contents of a leaking or otherwise unserviceable container will be transferred or placed within an overpack designed for such use. Overpack containers will have proper markings and labels.

### **4.2.6 Funnels**

All funnels affixed to drums of hazardous materials will be equipped with some kind of closing device, such as a ball valve, to keep product from spilling and evaporating. If drums are not otherwise secured, funnels will be equipped with a locking device.

## **4.3 Hazardous Waste Management**

As a tenant of Fort Wainwright, Alaska, the Alaska Fire Service is required to comply with all applicable regulations, guidance, and policies. The Alaska Fire Service has two Hazardous Waste Accumulation Areas located at the Small Engine/ATV Repair Shop in Building 1500 and the fuel yard. When it comes to waste management, don't guess! If there are any questions, call the Environmental and Hazardous Materials Coordinator at 356-5867.

## **4.4 Used Oil**

Used oil will not be handled as a hazardous waste if it has not been contaminated with a hazardous waste. The Fort Wainwright hazardous materials/hazardous waste contractor will sample the used oil and make a hazardous waste determination. Used oil accumulation points are located with the Hazardous Waste Accumulation Areas at the Small Engine/ATV Repair Shop in

Building 1500 and the fuel yard. All used oil must be stored within containment structures capable of retaining the entire contents of the largest single container. Individual logs will be maintained for each container. Logs will state the date, type, and amount of oil added, and the name of the employee adding the oil. Drip pans, buckets, drums, and other containers used to catch or store used oil will be labeled with the words “Used Oil”. A 3-inch to 4-inch space for material expansion will be maintained in 55-gallon drums. Petroleum based and synthetic based oils may be mixed.

#### **4.5 Oil Filters**

Used oil filters must NOT be drained. They will be treated as “used oil” and must be placed (undrained) in a container specifically marked for used oil filters in the Small Engine/ATV Repair Shop in Building 1500.

#### **4.6 Fuels and Absorbents with Fuels**

Fuels will be storage in compatible containers in good condition (no dings or dents in seams, no large dents in sides, or rust that compromises the integrity of the container). All fuels must be stored within containment structures capable of retaining the entire contents of the largest single container, plus sufficient freeboard to allow for precipitation. Fuel containers will have markings and labels consistent with their contents, including warning labels, fuel type, and fuel condition.

Fuel storage areas will be identified with easily visible “No Smoking” signs and other warnings. Refer to USARAK Regulation 200-1 for more detailed fuel storage requirements. Fuels will be turned in to the Fort Wainwright hazardous materials/hazardous waste contractor and will be handled as a hazardous material whenever possible. Absorbents with fuels and fuel filters will be handled as hazardous materials as long as they are not drained. Fuels, absorbents with fuels, and fuel filters (undrained) should be placed in the appropriately label drum at the Hazardous Waste Accumulation Areas located at the Small Engine/ATV Repair Shop in Building 1500 and the fuel yard. Individual logs will be maintained for each container. Logs will state the date, type, and amount of fuel/absorbents with fuel/fuel filters added, and the name of the employee adding the fuel.

#### **4.7 Solvents and Absorbents with Solvents**

Many solvents are flammable and/or toxic. Employees will consult the SDS and individual shop Standard Operating Procedure for proper use, storage, and handling of solvents. Solvents may be considered hazardous wastes when ready for disposal. Solvents will be turned in to the Fort Wainwright hazardous material/hazardous waste contractor. Due to hazardous waste characteristics and Resource Conservation and Recovery Act (RCRA), listed chemicals in many solvents, absorbents with solvents will be handles as hazardous waste.

#### **4.8 Antifreeze and Absorbents with Antifreeze**

Used antifreeze will be accumulated in the Hazardous Waste Accumulation Area located at the Small Engine/ATV Repair Shop in Building 1500 in a container specifically marked for used

antifreeze. Antifreeze is not a hazardous material, but may not be thrown in the trash or dumpster. Antifreeze will be turned in to the hazardous material/hazardous waste contractor.

#### **4.9 Paints and Thinners and Absorbents with Paints and Thinners**

Flammable paints and thinners will be stored in flammable liquids storage cabinets. Paints, thinners, and absorbents containing paints and thinners will be turned in to the hazardous material/hazardous waste contractor.

#### **4.10 Cleanup Materials from Spills**

Used pads, booms, and other absorbent materials used to clean up spills of hazardous materials will be placed into compatible containers. The containers will be labeled with the contents, and they will be turned in to the hazardous material/hazardous waste contractor. A copy of the spill report will be turned in with the waste.

#### **4.11 Batteries**

All spent batteries (alkaline, lead/acid, nickel-cadmium, lithium, or other batteries) will be collected as a Universal Waste and turned in to the Fort Wainwright hazardous materials/hazardous waste contractor. There are two Universal Waste Accumulation Areas located along the North wall of the Warehouse in Building 1544 and in the Communications Shop in Building 1538. Batteries typically retain a little bit of charge even when thought to be empty or cease to operate. All batteries will have their terminals taped or placed in original packaging (with positive/negative terminals all facing the same direction) to prevent batteries from coming into contact with one another and discharging. Batteries will be segregated by type (alkaline, lead/acid, nickel-cadmium, lithium, etc.) and placed in the appropriate drum at the Universal Waste Accumulation Area. Individual logs will be maintained for each container. Logs will state the date, type, and number of batteries added, and the name of the employee adding the batteries.

#### **4.12 Pressurized Cylinders**

All pressurized gas cylinders will be secured when stored or in use to prevent them from being knocked or pulled over. Pressurized gas cylinders will be labeled with appropriate DOT labels. Entrances to rooms or building containing pressurized gas cylinders will also be labeled with appropriate DOT labels.

Flammable gas cylinder storage shall be in a separate room or compartment which has no open flame for heating and is well ventilated. Outside storage will be used when practical. During welding operations, oxygen and acetylene cylinders will be located far enough away from the operators position to prevent undue danger from radiation, sparks, slag, or misdirection of the torch flame. Cylinder valves must be closed when the apparatus is not actually in use by the welder, and the regulator and hose drained. Both gauges will read zero.

### **4.13 Fuel Purging Operations**

Fuel purging operations will only be conducted by trained personnel in the Warehouse Bell Building using the vent booth, proper protective gear/equipment, and following the Warehouse Fuel Purging SOP.

### **4.14 Spill Cleanup and Response**

#### **4.14.1 Cleanup**

Any employee who causes or learns of a release of a hazardous substance associated with their work will make reasonable efforts to promptly contain and cleanup the hazardous substance. Employees will follow spill cleanup procedures as directed by their shop's SOPs, the Emergency Response Guide, and as provided by the SDS of the product spilled. Spill kits containing appropriate cleanup materials and protective gear will be kept in all areas where hazardous materials are used or stored. Used pads, booms, and other absorbent materials used to clean up spills of hazardous materials will be placed in compatible containers. The containers will be labeled with the contents and the Environmental and Hazardous Materials Coordinator will be notified immediately for disposal instructions.

#### **4.14.2 Response**

If a spill is of an unknown material, presents a safety hazard, or is beyond the capacity of the employee to clean up or contain, immediately report the spill to the post fire department at **911** and the Environmental and Hazardous Materials Coordinator.

#### **4.14.3 Reporting**

All spills of hazardous substances in any amount will immediately be reported to the Environmental and Hazardous Materials Coordinator at 356-5867. The Environmental and Hazardous Materials Coordinator is responsible for notifying the State of Alaska Department of Environmental Conservation immediately for spills greater than 55 gallons and within 48 hours of spills less than 55 gallons. Additionally, the Environmental and Hazardous Materials Coordinator is responsible for notifying the National Response Center for all spills greater than 55 gallons.

## **5.0 Pollution Prevention and Waste Minimization**

AFS will manage its operations with the following pollution prevention priorities:

1. Prevention
2. Environmentally sound recycling
3. Environmentally sound treatment
4. Environmentally sound disposal

## 5.1 Spill Prevention

The AFS operates under a Spill Prevention, Control, and Countermeasures (SPCC) Plan as required by 40 CFR 112. The SPCC Plan provides spill prevention practices for petroleum products managed by AFS. These include spill containment, training, and spill response actions. Employees whose duties include management of petroleum products will be familiar with the SPCC Plan.

Inventories of hazardous materials will be kept to a minimum. Hazardous material work areas will be kept to a minimum. Quantities of hazardous materials removed from storage will be limited to the amount required for the job at hand.

The potential for the release of a hazardous material or wastes in the work areas will be minimized by proper storage and handling practices.

## 5.2 Recycling

Whenever possible, employees will purchase recycled products as required by Executive Order 13101 on September 18, 1998.

## 5.3 Waste minimization

It is the responsibility of every Bureau employee to minimize waste through the following techniques:

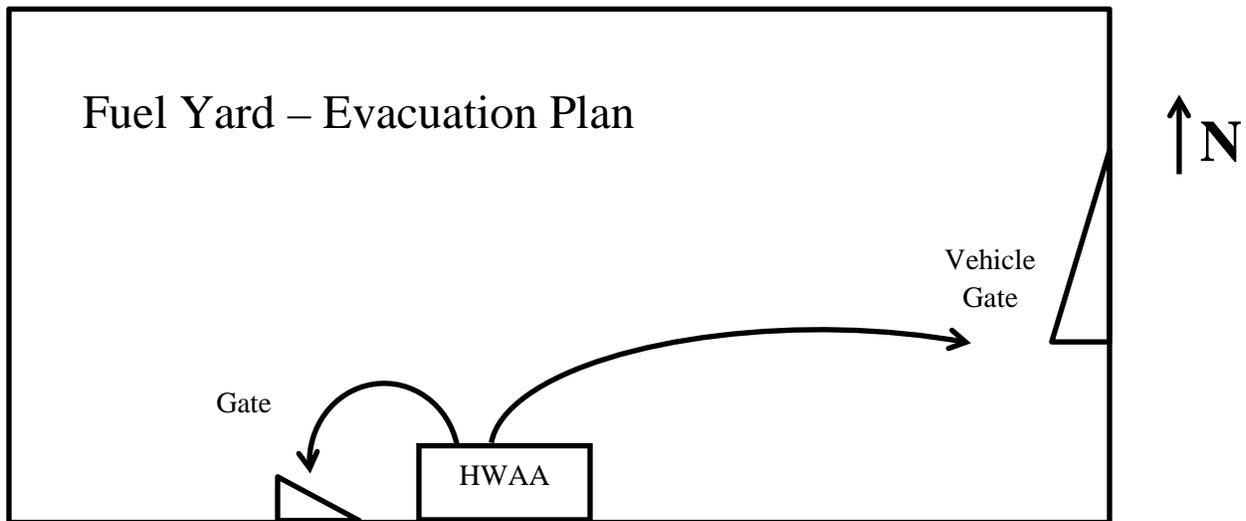
- **Product substitution** – Substitute less toxic products when possible.
- **Product streamlining** – Reduce to a minimum the number of different products.
- **Purchasing control** – Purchase only the amounts absolutely needed.
- **Materials management** – Improve material receiving, storage, and handling practices to reduce damage and loss.
- **Material separation** – Separate incompatible products and hazardous from nonhazardous materials.
- **Material rotation** – Rotate perishable materials so material which will expire soonest are used first.
- **Proper storage** – Store at proper environmental conditions.
- **Housekeeping practices** – Improve housekeeping and provide an organized and neat work environment.
- **Preventive maintenance** – Maintain a strong preventive maintenance program.
- **Work planning** – Plan and sequence work to reduce leftover products and materials.
- **Recycling** – Recover and reuse waste materials for the original purpose or another appropriate purpose.
- **Equipment and system assessments** – Assess the necessity of using waste generating equipment and systems.

- **Cost accountability** – Assign the total cost of carrying out an activity to that activity’s cost code, including the cost of using chemical products or hazardous materials and the cost of disposing spent product or hazardous waste.

#### 5.4 Storm Water Drain Filter

A storm water drain filter will be installed in the storm water drain near the Warehouse yard (aka “Dirty Nasty Yard”) each year, to prevent industrial storm water runoff from polluting local water ways. Warehouse personnel will ensure that a drain filter is installed prior to conducting any washing operations for the season; soaps/detergents may not be used during the cleaning process. Hazardous materials may not be washed off in the yard. Washing operations MAY NOT occur until the filter is in place. The filter system will be pulled at the end of each season and stored in the Warehouse maintenance room. The filter may be thrown in the dumpster on odd numbered calendar years and packaged in a poly drum and tested by the Fort Wainwright hazardous waste contractor on even numbered calendar years. This will ensure no hazardous materials or heavy metals above the threshold are being washed down the storm drain. If test results show elevated levels above the allowable threshold, filters must be treated as hazardous waste and disposed of properly. A clean test result must be achieved before filters can be thrown in the dumpster.

#### 6.0 HWAAs and Evacuation Routes.



# Small Engine/ATV Repair Shop – Building 1500 – Evacuation Plan

