



Joint Base  
Elmendorf-Richardson







# **Environmental Handbook**

**Joint Base  
Elmendorf-Richardson**

**2019 4th Edition**



**Presented by:**

**673 CES/CEIEC  
Environmental Office**

## Report On-Base Emergencies to:

## Phone

Fire-Related Emergencies	911
Major Spills of Hazardous Substances or Wastes	911
Minor Spills of Hazardous Substances or Wastes	911

Environmental Points of Contact	Phone
Environmental Compliance Chief	(907) 384-2440
Environmental Conservation Chief	(907) 384-6224
Environmental Restoration Chief	(907) 384-1824
Hazardous Waste	(907) 384-3322
Hazardous Materials	(907) 384-3269
Underground/Aboveground Storage Tanks	(907) 384-2478
Storm Water Pollution Prevention	(907) 384-0250
Air Quality	(907) 384-2444
Spill Prevention, Countermeasures, and Control	(907) 384-2478
Toxic Substance	(907) 384-3466
Cultural Resources	(907) 384-3467
Emergency Spill Response	911
Dig Permit: Environmental Coordination	(907) 384-2984
Hazardous Waste Center (HWC)	(907) 552-3435
National Environmental Policy Act (NEPA)	(907) 384-2460
Qualified Recycling Program	(907) 384-7854
Non-Hazardous Solid Waste	(907) 384-7854



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# 1.

## The JBER Environmental Handbook

This JBER Environmental Handbook is a simple and informational “how-to” guide for environmental compliance on Joint Base Elmendorf-Richardson (JBER). The handbook is organized into short fact sheets that address the most frequently asked environmental questions and provides information for managing environmental issues at JBER.

This document does not represent policy and is not meant to be a Standard Operating Procedure (SOP) or other form of operational control. This handbook is informational. It is made available to help personnel manage environmental concerns and situations they may encounter.

The JBER Environmental Handbook may be used by the following organizations:

- All organizations, tenants, contractors and activities located on JBER.
- Any outside organizations or activities training on JBER ranges.

*Disclaimer: It is noted that some waste management or disposal procedures specified in this guide may not apply to certain contractors and installation tenants based on contractual relationships, support agreements and scopes of work. Please contact the JBER Hazardous Waste Center (HWC), (907) 552-3435, if you have questions about your unit/activity's tenant agreement with JBER. **This handbook is not intended for use in JBER Military Family Housing. Military Family Housing residents should contact the JBER military housing office for assistance.***

## 2. How to Use This Guide

Use the Table of Contents to find the topic heading you are looking for and refer to the corresponding fact sheet number to find the page you need. If the information you are looking for is not contained in this handbook, do not hesitate to contact Environmental Program personnel listed in the Point of Contact directory of this handbook for assistance.

## 3. Introduction

JBER contains approximately 73,041 acres of property not including geographically separated areas. JBER supports a population of about 36,611 that includes approximately 15,000 Arctic Warriors. JBER provides services, installation facilities, training areas, and outdoor recreation for the JBER community that must maintain a balance with the unique environment of JBER.

The Department of Defense (DoD) addresses sustainability in its operations as a systematic framework aimed at building an enduring future (from DoD Strategic Sustainability Performance Plan, Fiscal Year 2011):

*“The Department’s vision of sustainability is to maintain the ability to operate into the future without decline – either in the mission or in the natural and manufactured systems that support it. DoD embraces sustainability as a critical enabler in the performance of our mission, recognizing that it must plan for and act in a sustainable manner now in order to build an enduring future. Sustainability is not an individual Departmental program; rather, it is an organizing paradigm that applies to all DoD mission and program areas. Applying a systematic framework for improving sustainability involves a wide range of practices that span much of the Department’s day-to-day activities and military operations, and DoD personnel are learning to apply this*

*mindset to improve mission performance and reduce lifecycle costs. The Department recognizes that many key issues facing DoD can be addressed through smart investments that improve the sustainability as well as promote the mission, such as using energy and water more efficiently, acquiring more energy from renewable sources, designing buildings for high performance, reducing the use of toxic and hazardous chemicals, and optimally managing solid waste.”*

The JBER Environmental Element (673 CES/CEIEC) is tasked with supporting the JBER mission through environmental sustainability.

## 4. The Environmental Element at JBER

The JBER Environmental Element is divided into two sections that work cooperatively to reach program goals: Environmental Conservation and Environmental Compliance. The Environmental Restoration section is managed by Air Force Civil Engineer Center (AFCEC), but still resides on JBER.

### 4.1. Environmental Compliance

The Environmental Compliance programs ensure JBER is in compliance with federal, state, local, and Air Force environmental rules and regulations. The section manages compliance with regulations for environmental management, air quality, hazardous and non-hazardous waste, hazardous materials, water quality (drinking water, storm water, and wastewater), storage tanks, spill response, landfills, recycling, toxics (lead, asbestos and PCBs), pollution prevention (P2), and environmental baseline surveys. The element offers hands-on management of hazardous wastes for all JBER units/shops and offers training courses to personnel and contractors working on the installation.

## 4.2. Environmental Conservation Section

JBER is responsible for the management and protection of more than 73,000 acres of land. These lands serve as natural areas for local wildlife. They are also open to the base population and general public for outdoor recreational uses. The Conservation program is responsible for forestry, fish and wildlife management, outdoor recreation planning, as well as cultural resources management on JBER. The Environmental Planning program ensures that all projects undertaken on base are reviewed to determine their impacts on the environment and natural resources.

## 4.3. Environmental Restoration

The Environmental Restoration program is responsible for cleaning up contamination from past operations and reducing risks to human health and the environment. This section manages the Installation Restoration Program, Military Munitions Response Program, and Contaminated Sites Program. The Environmental Restoration Program is centrally managed by AFCEC.

# 5.

## Environmental Compliance Section

JBER maintains environmental compliance with state, federal, local and DoD regulations through numerous management programs, including but not limited to the following:

- The Environmental Management System (EMS)
- Environmental Compliance Assessment Management Program
- Unit Environmental Coordinator (UEC) program
- Hazardous Waste Management
- Hazardous Material Management

- Spill Management and Response
- P2
- Solid Waste and Recycling
- Air Quality
- Water Quality

## **5.1. Environmental Management System**

The EMS is part of the overall joint base management system for developing, implementing, achieving, reviewing and improving environmental performance. The EMS follows the requirements of the International Organization for Standardization (ISO) 14001.

## **5.2. Environmental Compliance Assessment Management Program (ECAMP)**

The ECAMP is a compliance management tool to ensure JBER complies with federal, state, DoD, and Air Force policies and regulations. It assists base leadership in managing their environmental, safety and occupational health programs more effectively by helping identify and correct deficiencies before they result in accidents or violations. Internal assessments are conducted yearly, while external assessments are conducted every three years.

## **5.3. Unit Environmental Coordinator**

UECs are primary liaison between JBER units and the JBER Environmental Office. The UEC organizes and tracks training for personnel assigned as primary or alternate hazardous material, hazardous waste managers, and storm water points of contact within their units. UECs ensure all unit personnel are aware of the JBER EMS requirements and have accomplished appropriate training for their specific role (hazardous waste manager, general worker, etc.) They also identify and communicate unit requirements and

subsequent changes to unit operations that may affect environmental programs such as hazardous waste or materials, recycling, storm water discharge, air quality, or energy recovery. UECs inspect and assist individual managers with environmental compliance issues or concerns.

## **5.4. Hazardous Waste Management**

Hazardous waste is harmful and may cause immediate physical harm or adverse health effects that show up years later. State and federal agencies have strict regulations on hazardous wastes and violators may be subjected to fines and disciplinary action. The Resource Conservation and Recovery Act (RCRA) gives the Environmental Protection Agency (EPA) the authority to regulate control hazardous waste from the cradle-to-grave. This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also sets forth a framework for the management of non-hazardous solid wastes. JBER maintains a RCRA permit for operation of a treatment, storage, and disposal facility (TSDF) located at Building 11735. The TSDF processes all hazardous wastes generated on JBER.

JBER is regulated as a large quantity generator of RCRA hazardous waste. Efforts are made to minimize the generation of all wastes. When waste is generated, it must be properly identified, managed, and disposed. All generators of hazardous waste need to be aware of and in compliance with hazardous waste regulations and management procedures. For guidance on hazardous waste management, contact your unit's Hazardous Waste Manager, UEC, or the JBER Hazardous Waste Program Manager.



## 5.5. Hazardous Material Management

Hazardous material (HAZMAT) includes all items (including medical supply items, but excluding drugs in their finished form and pharmaceuticals in individually-issued items) covered under the Emergency Planning and Community Right-to-Know Act (EPCRA), the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard, and all Class I and Class II Ozone Depleting Substances. HAZMAT does not include munitions or hazardous waste. Established procedures and standards that govern management of hazardous materials throughout the Air Force are located in Air Force Instruction 32-7086, *Hazardous Materials Management*.

Air Force Instruction 32-7086, *Hazardous Materials Management*, requires the Environmental, Safety, and Occupational Health Committee to establish a cross-functional Hazardous Material Management Process (HMMP) Team. The HMMP Team includes representatives from Civil Engineering, Bioenvironmental Engineering, Safety, and Logistics. The HMMP provides oversight for three major areas: the Hazardous Materials Pharmacy Program, the weapon system Hazardous Materials Reduction Prioritization Process, and the Ozone Depleting Substance Management Program. The HAZMAT Pharmacy is the single point of authorization on JBER through which hazardous materials may be requested. Designed to facilitate control of hazardous materials, the HAZMAT Pharmacy's goal is to achieve reductions in hazardous material usage, procurements of hazardous materials, and hazardous wastes generation through combinations of management controls, organizational changes, and automated information system support. Each organization storing or bringing hazardous material on JBER is required to comply with EPCRA and register the materials with the HAZMAT Pharmacy.

## 5.6. Spill Prevention and Response

Spill prevention is one of the most important aspects of the Environmental Quality Program and is regulated by the EPA and the Alaska Department of Environmental Conservation (ADEC). The EPA requires certain facilities to prepare and implement a Spill Prevention, Control, and Countermeasure (SPCC) Plan in order to reduce or eliminate oil discharges to navigable waters of the United States. There is also a state requirement from ADEC for JBER to have an Oil Discharge Prevention and Contingency Plan. The two plans have been integrated and are renewed every five years per state and federal requirements. JBER refers to the base plan as Spill Prevention, Control, and Countermeasure Plan/Oil Discharge Prevention and Contingency Plan (SPCC/CPlan). Both plans establish guidelines for the safe and proper storage and management of petroleum, oils, and lubricants (POL) on JBER as well as the coordinated deployment and response of emergency resources when a spill occurs. This plan works to protect JBER's natural resources and the Alaskan environment, in addition to installation personnel, residents, and the surrounding community from the potential detrimental effects of a spill or release.

The goal of the SPCC/CPlan plan is to ensure that proper training, planning, and resources are in place for all industrial activities to minimize the potential of any harmful releases from occurring. The SPCC/CPlan plan includes site-specific plans that consider the unique aspects of facilities and activities on JBER. The Plan establishes best management practices to prevent spills and releases as well as response actions to minimize the effect of a release should one occur. Updated regularly, the SPCC/CPlan reflects the changing processes and activities at JBER and includes training exercises to assess the effectiveness of response procedures.

## 5.7. JBER Pollution Prevention Program

The P2 plan at JBER includes concepts and practices necessary for reducing the use of hazardous materials and the release of pollutants to as near zero as is feasible. P2 is accomplished by reducing or eliminating pollution at its source. By using fewer hazardous materials, decreasing the release of pollutants, and improving resource use, P2 provides JBER with the opportunity to reduce or eliminate harmful discharges to the air, land, and water. In order for P2 efforts to be effective, a proactive management approach is necessary to incorporate P2 throughout the varied installation programs.

The P2 Program Manager is responsible for organizing, implementing, managing and monitoring the methods and programs that enact P2 principles. The P2 Manager coordinates efforts with media area managers to achieve P2 goals. Media area managers must plan, implement, check and revise P2 activities regularly to make these goals a reality.

## 5.8. Solid Waste and Recycling

In May 1998, the DoD published the Measure of Merit memorandum (DoD 1998a) to establish that, by the end of 2005, the diversion rate for non-hazardous solid waste should exceed 40 percent while ensuring that integrated solid waste management programs provide an economic benefit when compared with disposal by landfilling and/or incineration. The primary methods of managing non-hazardous solid waste includes diversion through recycling and reuse, disposal at the local solid waste landfill, and burning for energy recovery. Diversion of non-hazardous solid waste is the preferred method of managing solid waste; disposal is the option of last resort.

Air Force Instruction 32-7042 outlines procedures for municipal solid waste management planning, training, collecting and disposing. Installations will integrate cost-effective waste reduction and recycling programs into their municipal solid waste management program. AFI 32-7042 establishes the requirements for recycling

under a Qualified Recycling Program (QRP) and describes the requirements for recovered materials and procurement of materials with recycled content (Green Procurement). All organizations on JBER will participate in the QRP.

## **5.9. Air Quality**

The JBER Air Quality Program works to ensure that JBER is in compliance with the numerous federal, state, local, and DoD regulations pertaining to air quality. The ADEC has regulatory authority for air quality in Alaska including issuance of permits and enforcement, in accordance with federal regulations and EPA oversight.

JBER maintains a Title V Air Quality permit for Flightline operations and several minor air quality permits associated with other base operations. The permits require JBER to maintain a complete air emissions source inventory (AEI) for sources such as boilers, generators, paint booths, incinerators, and fuel storage tanks. The AEI is used to document operating data and calculate pollutant emissions from these sources, evaluate which regulations are applicable to JBER, and track permit requirements.

There are source specific requirements for a few shops on JBER, however most air quality compliance issues do not affect the general population on a day to day basis. Two areas of facility-wide concern are generation of dust and open burning. Fugitive dust can be generated by the use of leaf blowers, street sweepers, uncovered piles or truckloads of soil and debris, and vehicle traffic on unpaved roads. Methods to minimize these emissions include limiting use of blowers in dusty areas, wetting surfaces and roads, and using secure covers on stockpiles and truckloads. Open burning is not allowed without prior coordination and approval from the Fire Department and Environmental.

## 5.10. Water Quality

The JBER Water Quality Program works to ensure that JBER is in compliance with the numerous federal, state, local, and DoD regulations pertaining to drinking water, storm water, and wastewater. These programs are regulated by the ADEC and require comprehensive inspection of all potential water pollutant sources and activities.

JBER maintains three different types of permits for storm water management. The Multisector General Permit (MSGP) regulates storm water discharges associated with specific industrial sources such as those from Flightline activities. The Municipal Separate Storm Sewer System (MS4) permit issued by ADEC regulates non-industrial activities on the base. The MS4 permit contains a comprehensive list of requirements that must be met for compliance, to include education and training for base personnel and contractors.

The Construction General Permit (CGP) authorizes storm water discharges from large and small construction-related activities that result in a total land disturbance of equal to or greater than one acre and where those discharges enter waters of the U.S. (directly or through a storm water conveyance system) or an MS4 leading to waters of the U.S. Discharge of fill into wetlands and other waters of the U.S. are regulated by the U.S. Army Corps of Engineers under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act. A Permit from the U.S. Army Corps of Engineers is required prior to incurring such impacts and compensatory mitigation of unavoidable impacts may be required. Costs and effort associated with environmental assessment, regulatory permitting, and any necessary compensatory mitigation are the responsibility of the project proponent. There are exceptions to the CGP, such as road resurfacing projects that do not exceed the area of prior road disturbance. The CGP, MS4, and the MSGP all require implementation of best management practices to prevent sediment and other pollutants from entering surface waters.

JBER also maintains a wastewater discharge permit with the Anchorage Water and Wastewater Utility (AWWU). Wastewater from the base is discharged into AWWU's system, treated by AWWU, and then discharged into Cook Inlet. AWWU issues permits and regulates discharges into their utility. JBER continually monitors effluent to ensure compliance with permit requirements.

## **6.** Environmental Conservation Section

The Environmental Conservation Section is responsible for the sound management and protection of JBER's environmental resources. As administrator of these lands, the Air Force is obligated to the American people to be a good steward and manage these lands and resources properly and effectively in balance with support of the military mission. Environmental planning, forest management, wetlands management, cultural resources management, outdoor recreation, and fish and wildlife management are major components of JBER's Environmental Conservation Section. The Environmental Conservation Section manages the hunting and fishing with the support of the Conservation Law Enforcement Officers and use of the recreational access system, iSportsman.

### **6.1. Environmental Planning**

JBER is required to comply with NEPA, which requires an assessment of environmental impacts associated with federal undertakings such as construction projects. JBER lands must be carefully managed and treated with respect if we are to accomplish sustained use of the land. Soils and vegetation in Alaska are particularly vulnerable to damage from human activities such as off-road vehicle travel and even foot traffic. Degradation to soils and vegetation in environmentally sensitive areas from mission activities can take years to heal and may be highly visible. Environmental

Planning staff actively participate decision-making activities regarding land use to ensure that current and planned mission activities are conducted in a manner compatible with mandated natural resource and environmental requirements. Environmental Planning staff from the 673d CES often support U.S. Army Alaska Range personnel on projects that affect JBER-Richardson training lands. The Army's Integrated Training Area Management and Range and Training Land Assessment programs remain integral to effective land management on JBER-Richardson.

## **6.2. Wetland Management**

Wetlands are of critical importance to a myriad of living resources. They provide essential breeding, spawning, nesting, and wintering habitats for a major portion of the nation's fish and wildlife species. Wetlands also protect the quality of surface waters by hindering the erosive forces of moving water and by trapping sediments and pollutants. Wetlands are critical in buffering and sustaining connectivity within and between watersheds and facilitate the transport, availability, and purity of potable groundwater sources. Wetlands aid in the prevention of flooding and other natural processes which may threaten human lives and property. Wetlands provide critical habitat and support the highest vegetative diversity of any other habitat type.

Executive Order 11990 Protection of Wetlands requires that federal agencies avoid and/or minimize any significant action that contributes to the loss or degradation of wetlands and requires that steps are taken to enhance their natural areal and functional value to the maximum extent practicable. JBER policy is to protect existing wetlands, rehabilitate damaged wetlands, and create new wetlands when practical.

Environmental Conservation staff support project development within training and operation areas where wetlands may be temporarily or permanently affected, either directly or indirectly, by mission critical actions. Staff aid in identifying wetlands, their functional values, and

assist with developing necessary means to avoid wetland impacts where possible and mitigate for any unavoidable direct or indirect, temporary or permanent impacts to wetlands or waterways. The Integrated Natural Resources Management Plans (INRMP) specifies setbacks that must be applied when conducting ground-disturbing activities near wetlands and other waters. Setbacks range from 100-feet for projects near anadromous streams and fish bearing lakes and 65-feet from all other streams, as well as lakes. Wetlands require a minimum setback of 15 feet. Vegetation removal and ground disturbance is not allowed in setback areas.

### **6.3. Forest Management**

JBER contains a rich diversity of trees and plants that are crucial to the health and welfare of the natural ecosystem. The benefits of an ecologically sound forest management program include realistic training settings, natural beauty, recreation, improved wildlife habitat, increased wildlife populations, and the protection of watersheds. Additionally, trees serve to muffle noise and remove pollutants from the air. Forest management on JBER is mandated by Air Force Instruction 32-7064, which sets forth policy, procedures, and responsibilities for the conservation, management, and restoration of renewable natural resources consistent with the Air Force's military mission. Destruction of trees and vegetation should be avoided unless absolutely required to achieve training objectives and should never be carried out without concurrence from the Environmental Conservation Office. Significant clearing operations will require NEPA documentation. Extra care should be given during cross-country training to avoid mechanical damage to tree trunks and roots.

JBER makes available both commercial and personal-use wood cutting permits. Commercial sales focus on project sites and improving forest health. Personal-use permits are currently free and are used to dispose of trees that cannot be sold or may be located in areas that are not practical for a timber sale. The personal-use program on JBER-Elmendorf is open to all DoD personnel, and



on JBER-Richardson it is open to all iSportsman pass holders. Civilian users are also eligible to obtain an iSportsman pass and authorization to cut wood in the Richardson Training Areas. Permits are distributed from the JBER Wildlife Education Center by contacting the JBER forester. Contact information, wood-cutting maps, and program information are included on the iSportsman website under the "Forestry" tab. Areas open to cutting and specific cutting instructions are provided with the permit and detailed on the website. Personal use permits are issued for 30 days, valid for up to one cord of wood, and may be authorized up to three times in a calendar year. Additionally, a Christmas tree cutting program is authorized for designated areas between Thanksgiving and Christmas, annually. The JBER Wildlife Education Center (currently closed due to maintenance issues) is located in Building 8481 and can be reached at 552-0200 for more details, or visit [www.jber.isportsman.net](http://www.jber.isportsman.net).

## **6.4. Cultural Resources Management**

Cultural resources are identified, managed, and maintained on JBER. The JBER Cultural Resources Program manages and promotes the preservation and productive use of significant historic buildings, cultural landscapes, and archeological and sacred sites. Activities that cause ground disturbance can alter or destroy cultural resources. New facilities construction, clearing of vegetation, military training and live fire activities, looting, and theft all pose threats to cultural resources and must be managed accordingly.

## **6.5. Outdoor Recreation**

JBER provides opportunities for a variety of non-military recreational activities including hunting, hiking, fishing, berry picking, and other river and lake uses. Designated portions of JBER may be used for recreation purposes by military and non-military personnel. Every effort will be made to ensure multiple uses of military land when compatible with mission requirements, safety and environmental concerns. Off-road access by personally owned vehicles to

recreational areas and facilities is prohibited unless specifically authorized. Recreation access is authorized only after registration in the iSportsman system and by signing into the areas in which a pass holder wishes to recreate.

Hunting and fishing is controlled by each base. Programs are described and regulated through state hunting and fishing regulations and base regulations. Seasonal license requirements are published by the Alaska Department of Fish and Game and can be found online at <http://www.adfg.alaska.gov>.

A single source for daily information on available hunting and fishing areas on-base and for check-in and check-out is available at [www.jber.isportsman.net](http://www.jber.isportsman.net). Supplemental information may also be obtained through the Fort Richardson gate and the Conservation Law Enforcement Offices. For more details, visit [www.jber.isportsman.net](http://www.jber.isportsman.net).

Organizations and individuals may apply for recreational passes to use portions of JBER. Individual recreational access passes are issued via [www.jber.isportsman.net](http://www.jber.isportsman.net). The 673d Public Affairs Office coordinates access for external group recreational requests on JBER. Impact areas are off-limits for all activities except those associated with military training.

## 6.6. Fish and Wildlife Management

JBER's Fish and Wildlife Program includes the management of fisheries, game and non-game species. Emphasis is placed on the maintenance and restoration of habitat favorable to native species.

There are numerous state and federal laws that apply to JBER which are meant to protect fish and wildlife:

- The Sikes Act requires military facilities to ensure that services are provided for proper fish and wildlife management and that priority is given to cooperative efforts with state and federal agencies responsible for conserving or managing fish and wildlife.

## DOs and DON'Ts for Outdoor Recreation

**DO** properly dispose of litter and trash generated in the field. All litter and trash must be placed in containers or plastic bags so they can be taken out of the field and disposed of properly.

**DON'T** burn, bury or dump trash on base lands for any reason.

**DON'T** feed or harass wildlife. This is prohibited by State law and base regulations.

**DO** have fun and enjoy what the outdoors has to offer.



- The Anadromous Fish Conservation Act is designed to protect fish that must move from salt water to fresh water in order to spawn. Under this law, the state issues permits for a change or obstruction to the flow or bed of specified streams.
- The Bald and Golden Eagle Protection Act protects both bald and golden eagles and restricts any clearing or timber harvesting, construction, surface mining, operation of all-terrain vehicles, heavy equipment and any obtrusive human activity, including loud conversations, during critical nesting periods.

- The Migratory Bird Treaty Act prohibits commerce in migrating birds by making it illegal, except as permitted by regulation, to pursue, hunt, kill, take, possess, import, and export any migratory bird (including any part or egg). All migratory birds and their nests are protected and may not be disturbed while birds are using them.
- The Endangered Species Act promotes the existence of endangered, threatened or otherwise protected species and seeks to prevent the destruction or adverse modification of critical habitat of these species. All personnel must pay special attention to protected wildlife. Currently, the only commonly encountered listed endangered species on or near JBER is the Cook Inlet beluga whale which uses waters on Eagle River and Knik Arm, adjacent to the installation.

## 6.7. Protecting Fish and Their Habitat

Protecting fish and their habitat is a major concern on JBER. All work must be conducted to prevent the silting of streams and disturbances of streams and their banks. ***Depositing debris and operation of any equipment in a stream is prohibited (unless permitted for a specific project).***

**Military and personal vehicles are not allowed to cross fish streams on JBER.** Any work, equipment or vehicle movement in a stream requires a specific permit. Different permit requirements apply to streams with anadromous fish (salmon) versus those with resident fish only. Contact the Environmental Conservation Office well in advance before any planned activity in streams, floodplains or wetlands.

## 7. Environmental Restoration Section

The Environmental Restoration Section is responsible for the identification and cleanup of sites on JBER that have been contaminated in the past. Through the Installation Restoration Program, the Military Munitions Response Program, and the Contaminated Sites Program, the Restoration Section supports the JBER mission by managing contaminated soils and groundwater to enhance the JBER environment and prepare JBER lands for future beneficial use. The Environmental Restoration Section is tasked with the identification and characterization of contaminated sites, interfacing with EPA and State representatives regarding cleanup of contaminated sites, contract oversight, and cradle-to-grave management of restoration activities.

Land Use Controls (LUC) have been established on JBER to prevent exposure to contaminated soil and water and are based on agreements between the Air Force, EPA, and the ADEC. The process and responsibilities for the management of and compliance with LUCs on JBER are contained in 673d Air Base Wing Instruction (ABWI) 32-7003, Land Use Control Management. JBER personnel, tenants or contractors whose projects or activities require excavation must comply with all LUCs and the requirements in 673d ABWI 32-1007, Safeguarding Utilities from Damage. The current land use control areas can be found on the Environmental Restoration map located on the GeoBase webpage.

## 8.

# National Environmental Policy Act

The Air Force regulation implementing NEPA is promulgated at Title 32 Code of Federal Regulations (CFR) Part 989 – Environmental Impact Analysis Process (EIAP). 32 CFR 989 (2011). The NEPA process allows the military to make informed decisions that take into account both potential environmental consequences and public opinion.

All installation proposed actions or projects should integrate NEPA into the planning process as early as possible so that environmental concerns can be considered during planning and prior to the decision on the proposed action. Early NEPA analysis prevents costly delays and provides for decisions to meet mission timelines and requirements.

**Before any decision is made on the proposed action, initiate the EIAP by either making contact directly with the JBER Environmental Planning Function (EPF) representative (673d CES/CENPP) or by submitting a Base Civil Engineer Work Request form (Work Order Form 332) to JBER Customer Service.**

Initiating the EIAP will result in the EPF representative providing the requisite “hard look” required under NEPA to determine what level of environmental review is warranted based on the potential for significant impacts. These are the three levels of NEPA analysis, each having specific documentation requirements:

- ***Categorical Exclusion (CATEX)***
- ***Environmental Assessment (EA)***
- ***Environmental Impact Statement (EIS)***

In most cases, projects will qualify for a CATEX upon submission of a Work Order Form 332 to Customer Service because these usually represent small and routine projects.

The 673d CES/CENPP retains NEPA documentation of the EIAP review and will have copies of Air Force Forms 813, EAs, and EISs prepared at/for JBER, including former Elmendorf Air Force Base and former Fort Richardson.

**Disclaimer:** *“The JBER EPF supports Air Force and certain non-Air Force proposed actions in accordance with the terms of 32 CFR 989 and any subsequent Memorandums of Agreement(s)/contracts(s) that further define the support relationship. For questions, contact the JBER EPF to determine if coordination with the EPF representative is required for any proposed action.”*

## 9. Energy, Fuel, and Paper

Conservation is the careful management, use, and preservation of natural resources and the environment. Conservation is a balance between what we need to perform our jobs and live healthy, comfortable lives without being wasteful of our resources.

### 9.1. JBER Energy Usage

Energy conservation relies on two factors: human behavior and efficient technologies. Our behaviors have a direct input into the amount of energy consumed on JBER. Please make a concerted effort to reduce energy consumption both on the job and at home by turning off lights when not in use, powering down office equipment at the end of the day, and making sure no windows are open while the heat or air conditioning is on.

New technologies in energy conservation are being developed every day. JBER is making a concerted effort to build its new facilities and retrofit its older facilities to ensure that energy systems are operating as efficiently as possible in accordance with the Leadership in Energy and Environmental Design standards whenever possible.

## 9.2. JBER Fuel Usage

Oil is not a renewable fuel source. As fuel prices continue to climb, JBER must take appropriate actions to sustain its mission by lowering its fuel consumption and expenditure.

Executive Order 13423, *Strengthening Federal Environmental, Energy, and Transportation Management*, calls for a reduction of petroleum product consumption by 2 percent annually, to increase the total fuel consumption that is non-petroleum based by 10 percent annually, and to purchase or use plug-in hybrid vehicles when they are available at comparable prices to gas powered vehicles.

### **The following tips will help conserve fuel:**

**Reduce Idling** – Turn off your engine if your vehicle will be idling in an off-street area for more than two minutes. Idle reduction is an easy and effective way to reduce fuel use, air emissions, and unnecessary wear on engines.

**Tune Your Vehicle** – A well maintained vehicle is more fuel efficient and produces less greenhouse emissions. Follow your monthly General Services Administration vehicle maintenance and oil change schedule and keep tires fully inflated.

**Give Your Vehicle a Break** – Carpool, share rides to meetings and combine trips whenever possible to cut down on driving time.

**Travel Light** – Don't haul extra weight in your vehicle. A heavier vehicle uses more gasoline.

**Drive Smart** – Avoid quick starts and hard stops and slow down. Avoid unnecessary fuel consumption and wear on your vehicle.



**Time it Right** – Leaving for work earlier in the morning or later at night will reduce fuel burned in bumper-to-bumper traffic.

**Walk or Bike When You Can** – Zero emissions are the best way to go and it's a good way to stay in shape.

### **9.3. JBER Paper Usage**

The average U.S. government worker uses 10,000 sheets of copier paper annually, equal to 20 reams of paper per person. For each sheet of paper used, JBER incurs not only purchasing costs, but also equipment maintenance, storage, copying, printing, disposal, and recycling costs. By some estimates, the indirect cost associated with paper consumption can reach 10 times higher than the original purchase price of the paper itself.

**The following practices will help conserve paper:**

- **Set your computer to default to two-sided (duplex) printing.**
- **Promote an office culture of printing on both sides.**
- **Use the print preview feature before printing.**
- **Avoid unnecessary pages by adjusting the margins.**
- **Share reports and other documents electronically.**
- **Try to avoid printing emails or web sites. Save electronically.**
- **Use 'printer-friendly' versions of websites and emails if you must print.**
- **Make copies as needed rather than in large batches at one time.**
- **Run a sample copy and inspect before copying or printing big jobs.**
- **Set up desk-side paper collection and have employees sort their paper into the requisite containers by their desk. Participation increases when collection begins at each desk.**



# Environmental Management

## Fact Sheets

# Aboveground Storage Tanks (Fuel Storage)

## General Information

Aboveground Storage Tanks (ASTs) are guided by National Fire Protection Associations standards, Title 40 CFR Part 112, SPCC Plan, 18 Alaska Administrative Code 75.425 Oil Discharge Prevention and Contingency Plan for tanks containing regulated

substances, and applicable sections of various (and predominantly local) building and structural codes.



## Potential Hazards

Fuel is a hazardous material that can cause harm to both the environment and to human health. Spilled fuel from an AST can contaminate land and water resources. Fuel is highly flammable and easily ignited by heat, sparks, or flames. Spill runoff to storm sewers and storm drains carry fire and explosion potential.

## General Requirements

By law, all ASTs are required to have secondary containment, corrosion protection and leak detection. ASTs are inspected frequently to monitor the physical condition of the tanks. All fuel handlers must be trained annually. Contact your supervisor if you think you need fuel handler training.

## Situational Awareness

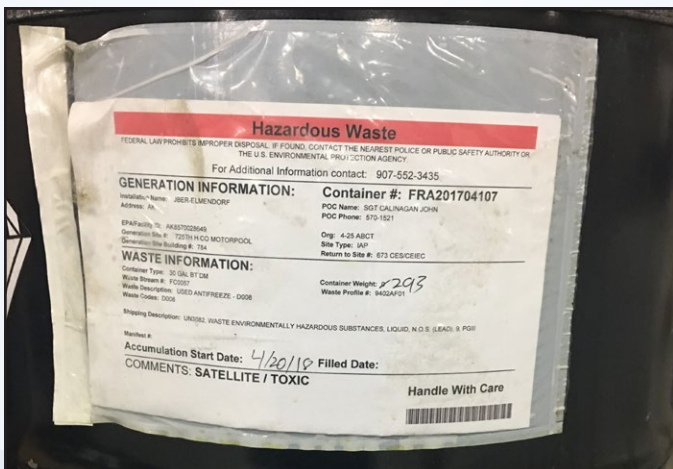
If you observe a potential hazard regarding an AST, contact the JBER Fire Department Dispatch at 552-2801 and the JBER Storage Tank Program Manager at 384-2478. If there is a threat to human life or property, dial 911.

# Absorbents with Petroleum, Oil and Lubricants (POL) (Used Rags, Pads, Booms, Technical Wipes)

## General Information

Absorbents include used rags, pads, booms and technical wipes. Keep absorbents contaminated with other hazardous materials separate from absorbents with POL. Absorbents with solvents, gasoline (MoGas), or other regulated materials must be stored in correctly labeled containers acquired from the JBER HWC. However, used rags contaminated with small amounts of oils (not saturated), fuel, grease, and antifreeze may be laundered for reuse. Call the JBER HWC at 552-3435 for disposal options and guidance prior to storing any kind of used absorbent for re-use. The JBER Hazardous Waste Program does not support the use of granulated media for absorbents; please use absorbent pads in the work space.

continued



## A-2 Absorbents with Petroleum, continued

### Potential Hazards

Absorbents **saturated** with POL may be flammable and/or toxic; use the proper Personal Protective Equipment (PPE) while handling these items. Call the JBER HWC at 552-3435 for disposal options and guidance.

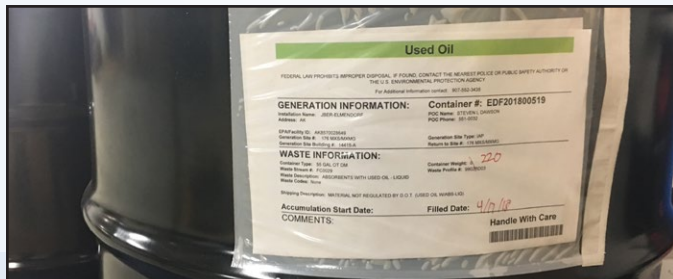
### Waste Characterization

Used absorbents that are contaminated with POL products **cannot** be disposed of in the trash. Absorbents contaminated with POL are considered RECYCLABLE MATERIALS and must be turned in to the JBER HWC for disposal.

Step	Procedure
1	Use/Re-use absorbent rags or pads to their fullest extent without becoming saturated (dripping) during the same shift. Do not store them after a shift in any place other than the correctly labeled container.
2	Place used absorbents that will be laundered into a closable metal container labeled "USED POL RAGS FOR LAUNDERING" every day before close of business.
3	When absorbents are no longer usable, place them in the appropriate container provided by the JBER HWC.

### Additional Information

Use rags in the "USED POL RAGS" container first, before using a new rag. Re-using rags reduces waste and saves money.



# Adhesives, Sealants, and Epoxy

## General Information

Most adhesives are flammable and must be stored in an approved flammable storage cabinet. Many adhesives also have an expiration date. Check each item to see if it has expired or if it is no longer usable. Locally developed instructions and old-fashioned common sense may be used for expiration identification. Reference Air Force Manual 23-110 for more specific shelf life procedures. For most type II materials, shelf life extension test are not complicated, do not require a laboratory, and can be done on the spot by anyone with a minimal amount of training. They are usually nothing more than visual checks for damage or deterioration. The Defense Logistics Agency maintains a DoD Shelf Life Extension System (SLES) web page (login required) that has access to a Quality Status List (QSL) which extends certain type II Federal Stock Class (FSC) material. Included on the QSL are FSCs: 6635, 6750, 6810, 6840, 6850, 9110, 9150, and 9160. Directions for obtaining an entire list of items on the Extension List is also shown on the SLES site: <https://www.shelflife.dla.mil/>. If the expiration date is not extendable, obtain a current copy of the manufacturer's Safety Data Sheet (SDS) and turn in all unusable or expired items immediately to the JBER HWC, 4344 Kenney Avenue, phone number 552-3435.

## Potential Hazards

Adhesives, sealants, caulking and multiple-part epoxies are made of combinations of chemicals suspended in a solvent that partially evaporates during use. Refer to the SDS for hazards and proper PPE.

## Waste Characterization

Expired adhesives and sealants may be HAZARDOUS WASTE. Spent adhesives and sealants along with the wastes generated during use (stir sticks, containers, material being replaced) may also be considered HAZARDOUS WASTE. Call the JBER HWC at 552-3435 for disposal guidance.

continued

## A-3 Adhesives, continued

### Handling and Disposal Procedures

Step	Procedure
1	Contact the JBER HWC (552-3435) for the appropriately labeled containers to collect all applicators, stir sticks, brushes, mixing cups, and any other disposable tools used in the application of adhesives, solvents, and epoxies.
2	Contact the JBER HWC (552-3435) to determine if your waste is a Hazardous Waste and to arrange for an appropriate waste container when the container is full or reaches the disposal pickup date on the container label.
3	Label each item according to the waste characterization ("HAZARDOUS WASTE" or "NON-REGULATED WASTE"). Hazardous waste must be managed in the Satellite Accumulation Area (SAA). See the SAA (Fact Sheet H-2) for more information.





# Aerosol Cans

## General Information

Maintenance procedures require the use of many aerosol products including paint, solvents, lubricants and adhesives. Many of these products are flammable and must be stored in an approved flammable storage cabinet with an associated manufacturer's specific SDS.

## Potential Hazards

Aerosols are under pressure and may be flammable, reactive, corrosive and/or toxic depending on the contents of the cans.

## Waste Characterization

Used aerosol cans and those that are no longer serviceable, such as defective cans are considered **HAZARDOUS WASTE**. Contact the JBER HWC at 552-3435 for disposal options and guidance.

## Handling and Disposal Procedures

Step	Procedure
1	DO NOT dispose of aerosol cans in the trash.
2	Place all used aerosol cans in your unit's correctly labeled waste container provided by the JBER HWC at 552-3435, and fill the container log out appropriately.
3	Hazardous waste must be managed in an Accumulation Area. See the Accumulation Area Fact Sheet for more information.
4	Contact the JBER HWC at 552-3435 for pick-up of hazardous waste.

# Animal or Fish Carcasses

## General Information

Proper disposal of animal or fish carcasses is important to prevent the transmission of disease and to protect the environment.

## Potential Hazards

Animal or fish carcasses can attract bears and other wildlife into unwanted areas. Personal safety hazards may result from nuisance wildlife.



## Waste Characterization

Animal or fish carcasses are considered MUNICIPAL SOLID WASTES, the same category as typical trash and garbage and should be disposed of promptly.

## Handling and Disposal Procedures

Refer to the JBER tenant handbook or contact the Housing Office for disposal questions in JBER housing areas. All dumpsters should be closed to prevent nuisance wildlife. Freezing fish carcasses and placing them for proper disposal immediately prior to refuse collection times may reduce nuisance wildlife issues.

## Additional Information

Contact the JBER Conservation Law Enforcement Offices at 552-8609 for additional information regarding animal or fish carcasses.



# Antifreeze/Coolant

## General Information

Antifreeze/coolant/aircraft deicer typically contains propylene glycol. New formulations may contain ethylene glycol, which is highly toxic.

## Potential Hazards

Used antifreeze (ethylene or propylene glycol) is recycled and must never be mixed with hazardous waste or with petroleum, oil, and lubricant products or waste. Some used antifreeze from older vehicles may contain hazardous concentrations of toxic metals such as copper, zinc, lead, cadmium, and chromium, and therefore must be handled with care and disposed of properly.

## Waste Characterization

Used antifreeze is managed as a RECYCLABLE MATERIAL and is collected and recycled by a service contractor. Unknown sources of antifreeze are managed as hazardous waste and are profiled separately, requiring a Toxicity Characteristic Leaching Procedure testing protocol to determine whether the waste is hazardous or non-hazardous.

## Handling and Disposal Procedures

Step	Procedure
1	Transfer used antifreeze from drip pans into your unit's correctly labeled waste container provided by the JBER HWC and fill the container log out appropriately. Make sure the container is closed (finger-tight) when done. The drum must be marked "USED ANTIFREEZE."
2	Enter the amount placed into the drum on the container log.

**Note:** Before using a drip pan, clean out any residual amounts of petroleum, oil, or lubricant product with an absorbent pad. Keep used antifreeze as clean as possible for recycling. If antifreeze is mixed with oil, close that container and contact the JBER HWC for guidance at 552-3435.

# Asbestos (Floor Tiles, Insulation) and Lead-Based Paint Containing Material

## General Information

Asbestos and lead-based paint may be found on any building on JBER. Typical asbestos-containing materials include old floor tile, pipe/tank insulation, fire-resistant safes and coatings. Lead-based paint is found in the older coats of paint on some of the installations older facilities.

## Potential Hazards

Activities such as sanding, grinding, drilling, or sawing of asbestos-containing materials or lead-based paint are **not allowed**. Self-help removal of asbestos-containing tiles is **prohibited**. Only trained and certified abatement workers may disturb or remove these materials (asbestos, lead). The exposure effects of asbestos and lead are dangerous and can be fatal. There may be increased health risks associated with exposure by not following the recommended handling procedures.

## Waste Characterization

Asbestos-containing materials are managed as ASBESTOS-CONTAINING MATERIALS, NOT A HAZARDOUS WASTE. Lead-based paint waste is managed as a HAZARDOUS WASTE.

continued

## A-7 Asbestos, continued

### Handling and Disposal Procedures

Step	Procedure
1	Contact the 773d CES Asbestos Office at 552-8667 before beginning your self-help project to determine if asbestos or lead-based paint is present.
2	If potential asbestos-containing material is found, contact the 773d CES Asbestos Office to arrange testing.

*Note: Do NOT touch or disturb asbestos. Fibers will become airborne and hazardous to human health.*



# Batteries – Absorbed Glass Mat (AGM) (e.g., Hawker® Armasafe™ Plus and Optima™)

## General Information

Absorbed Glass Mat (AGM) batteries are non-spillable. They have no caps that can be opened, do not leak acid, and are maintenance free because they do not require water or electrolyte to be added. Consequently, they are safer to use than the typical “wet” lead-acid batteries.

## Potential Hazards

AGM batteries may vent explosive hydrogen gas if they are improperly charged with excessive voltage.

## Waste Characterization

Unserviceable (non-rechargeable used) AGM batteries are considered a RECYCLABLE MATERIAL. Broken batteries may be HAZARDOUS WASTE. If you have a broken battery, contact the JBER HWC immediately for disposal at 552-3435.

continued



## B-1 Batteries – Absorbed Glass Mat, continued

### Handling and Disposal Procedures

Step	Procedure
1	AGM batteries need a higher quality charger for optimal maintenance and recovery. Be sure to use a “Redi-Pulse Pro HD” or similar auto sensing 12/24 volt pulse charger.
2	AGM batteries can be recovered from a “dead” state to full charge almost indefinitely. Do not turn in AGM type batteries for recycling until all attempts to recharge and reuse them have failed.
3	Once it is determined that a battery is no longer recoverable, write the words “Used Battery” along with the date on the battery and tape both terminals with tape (duct/ electrical).
4	If it is determined that a battery is no longer recoverable, contact your vendor or supply section for recycling. If you cannot recycle your batteries, call the Hazardous Waste Center at 552-3435 for assistance with storage and disposal options.



# Batteries – Alkaline

## General Information

Alkaline batteries may be disposed with nonhazardous waste. No other battery types may be disposed in normal nonhazardous waste. Several other battery types, such as small lithium batteries, might be similar to alkaline batteries in size and appearance. Please be very careful to avoid disposing other battery types in nonhazardous waste. Improper containerization and disposal of other battery types is a violation of federal regulation for which you or your organization may be fined. Contact the JBER Hazardous Waste Program Manager at (907) 384-3322 if you have questions.

## Potential Hazards

Over time, alkaline batteries are prone to leaking potassium hydroxide, a caustic agent that can cause respiratory, eye and skin irritation. This can be avoided by not attempting to re-charge alkaline cells, not mixing different battery types in the same device, replacing all of the batteries at the same time, storing in a dry place, and removing batteries for storage of devices.

## Waste Characterization

Used alkaline batteries are considered NON-REGULATED WASTE. However, all batteries must be segregated according to type and collected in an appropriate container obtained from the JBER HWC. Used alkaline batteries are NON-HAZARDOUS but shall be managed the same as other battery types and labeled with a JBER non-hazardous waste label. Any battery that shows evidence of damage, leakage or spillage must be separated into a closeable plastic bag.





# Batteries – Lead-Acid (Vehicles, UPS Batteries)

## General Information

Lead-acid batteries are considered “wet-cell” batteries because they contain cells made of lead, lead dioxide and an acidic electrolyte solution of sulfuric acid. The electrolyte is a strong corrosive agent. Most vehicle and Uninterrupted Power Supply (UPS) batteries are lead-acid batteries.

## Potential Hazards

Lead-acid batteries may vent explosive hydrogen gas. Batteries should be stored in a cool, dry place on a plastic secondary containment pallet.

## Waste Characterization

Most standard vehicle-type lead-acid batteries and uninterrupted power supply batteries are recycled and are managed as a RECYCLABLE MATERIAL. However, damaged lead-acid batteries must be managed as HAZARDOUS WASTE and must be stored in an appropriate container and turned into the JBER HWC for proper disposal. Call the JBER HWC at 552-3435 for disposal guidance with damaged lead-acid batteries.

continued

## B-3 Batteries – Lead-Acid, continued

### Handling and Disposal Procedures

Step	Procedure
1	Make every attempt to recharge and reuse a lead-acid battery before disposing of it.
2	Battery terminals MUST be taped with duct or electrical tape to prevent electrical shorting. Metal strapping should not be used to strap batteries to pallets.
3	If it is determined that a battery is no longer recoverable, contact your vendor or supply section for recycling. If you cannot recycle your batteries, call the JBER HWC at 552-3435 for assistance with storage and disposal options.



# Batteries – Tactical

## General Information

Tactical rechargeable and non-rechargeable batteries, such as lithium sulfur dioxide, nickel-cadmium, nickel metal hydride, etc. have hazardous chemicals which require special consideration for their disposal. Some common examples of tactical batteries are the BA-5590, BA-5800, BA-5600, BB-390, or BB-388.

## Potential Hazards

All tactical batteries are to be stored in a cool, dry place. Batteries may react violently or explode when exposed to high temperatures or water. Failure to properly manage and dispose of tactical batteries is harmful to the environment and is a violation of environmental regulations, which could result in serious penalties and fines. Some lithium batteries have a discharge device that should not be activated. **DO NOT DISCHARGE LITHIUM OR ANY OTHER BATTERIES.**

## Waste Characterization

Most used batteries are considered RECYCLABLE MATERIAL. However, damaged and broken batteries must be managed as HAZARDOUS WASTE and must be stored in an appropriate container and turned into the JBER HWC for proper disposal. Check with the Environmental Section or the JBER HWC at 552-3435 for guidance or assistance.

continued



## B-4 Batteries – Tactical, continued

### Handling and Disposal Procedures

Step	Procedure
1	<b>DO NOT DISCHARGE ANY BATTERY.</b> Separate batteries according to type (i.e., lithium, nickel-cadmium, nickel metal hydride). Do not mix different kinds of batteries in the same container.
2	Tape all terminals with duct or electrical tape to prevent electrical shorting and place in the appropriate labeled container.
3	If it is determined that a battery is no longer recoverable, contact your vendor or supply section for recycling. If you cannot recycle your batteries, call the JBER HWC at 552-3435 for assistance with storage and disposal options.
4	Broken/damaged batteries are managed as hazardous waste. Contact the JBER HWC for guidance.

# Bulk Waste (Government-Owned Furniture, Appliances, and Others)

## General Information

Bulk waste refers to large waste items such as furniture, large appliances, and plumbing fixtures (bath tubs, toilets). Military furniture, appliances and fixtures (government property) require special handling and disposal procedures. Excess and surplus property is regulated by the Defense Material Disposition Manual – DoD 4160.21-M.

## Waste Characterization

Bulk waste include: furniture, appliances, wood waste, pallets, batteries, tires, construction debris, plumbing fixtures, large scrap metal, large green waste etc. Furniture and appliances should be recycled or reused when applicable.

## Handling and Disposal Procedures

- DO NOT place any bulk waste items in the garbage dumpsters.
- Scrap metal generated from JBER shops can be recycled by contacting the JBER QRP at 384-7854.
- See individual fact sheets for batteries and tires.
- Take government owned bulk waste to the supporting unit's Supply Support Agency to determine requirements for turn-in.
- For other bulk waste, contact JBERs' Recycling Program Manager at 384-7854.
- For more information or assistance on waste diversion, contact the JBER Environmental Quality Section Solid Waste Program Manager, 384-7854.

# Calcium Hypochlorite

## General Information

Calcium hypochlorite is commonly used in water purification operations. However, calcium hypochlorite must be stored and managed as a hazardous material.



## Potential Hazards

Calcium hypochlorite (e.g., water purification tablets, bleach) is commonly available in the concentrated form of a white powder and/or pellets. It is a strong oxidizer which poses an extreme fire and inhalation risk, and must be handled and stored very carefully. If it is ingested or absorbed through the skin it is extremely toxic, and decomposes with water to release chlorine or chloramine, which are corrosive and can cause severe lung damage if inhaled. It can generate enough heat to cause a fire if thrown in a dumpster, and while not flammable in itself it can react explosively if it comes in contact with other household chemicals, such as ammonia.

## Waste Characterization

Discarded, expired or contaminated calcium hypochlorite is a HAZARDOUS WASTE. Keep all calcium hypochlorite away from organic materials.

## Handling and Disposal Procedures

Step	Procedure
1	Obtain a manufacturer's specific SDS and use appropriate PPE when handling calcium hypochlorite. Store this material in a cabinet labeled "Corrosive" away from flammables and acids.
2	If the material is expired or no longer usable, contact the JBER HWC at 552-3435 for disposal guidance.

# Cardboard

## General Information

Corrugated cardboard is recyclable and is accepted for recycling by the JBER QRP. Cardboard is made from a paper-based material consisting of a fluted corrugated sheet and one or two flat linerboards. It is widely used in the manufacture of shipping boxes.

## Waste Characterization

All clean corrugated cardboard can be recycled. All cardboard that is contaminated with cooking oil, wax, food, dripped oil or fuel cannot be recycled and should be disposed of properly.

## Handling and Disposal Procedures

Cardboard should be flattened and placed in a labeled cardboard recycling trailer or cardboard dumpster. Contact the JBER Qualified Recycling Program at [673CES.CEIEC.EnvCom@us.af.mil](mailto:673CES.CEIEC.EnvCom@us.af.mil) or on Facebook at **JBER Recycles** for recycling locations and additional information.



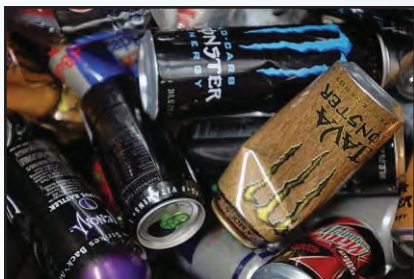
*JBER Recycles on Facebook*



# Containers – Beverage (Aluminum Cans)

## General Information

Approximately two-thirds of all disposable beverage containers sold in the U.S. are not recycled (source:



[www.container-recycling.org](http://www.container-recycling.org)). Consumers can help prevent beverage containers from ending up in the waste stream or as litter in the JBER community by recycling plastic and aluminum beverage containers.

## Waste Characterization

Aluminum beverage containers are a RECYCLABLE MATERIAL.

## Handling and Disposal Procedures

- Place aluminum beverage containers in one of the scrap metal recycling roll-offs located at buildings 4314, 952, or 755.
- Contact the JBER QRP for questions about beverage container recycling at [673CES.CEIEC.EnvCom@us.af.mil](mailto:673CES.CEIEC.EnvCom@us.af.mil).



*JBER Recycles on Facebook*



# Cooking Oil

## General Information

Oil and grease generated during cooking operations cannot be poured into the sink, sanitary sewer/storm water drain, or be disposed of as a free liquid.

## Potential Hazards

Dumping cooking oils or grease down the drain can clog sewer lines, which can result in sewage back-ups and flooding. For residents of on-base housing, contact Aurora Housing office for proper disposal options. Never dump grease and oil directly into trash dumpsters.

## Waste Characterization

DO NOT pour grease into the sink, sanitary sewer or storm water drain.

## Handling and Disposal Procedures

### JBER Operations:

Step	Procedure
1	Food service operations at JBER facilities must dispose of cooking oil/grease in the containers provided at dining facilities. Make sure the container is clearly marked "USED COOKING OIL/GREASE."
2	Use caution when transferring oil/grease into containers. Secondary containment, overhead protection, and spill cleanup materials should be available.

### Field Operations:

- Bring cooking oil back to your dining facility and pour into the cooking oil container. Do not pour on the ground. Clean up any spills.
- The responsible party is in charge of cleaning up any spill of cooking oil. Used cooking oil is a wildlife attractant-another reason for proper storage and disposal.

# Cultural Resources

## General Information

The JBER Cultural Resources Program promotes the preservation and productive use of significant historic buildings, cultural landscapes, and archeological and sacred sites.

## Threats to JBER's Cultural Resources

Natural occurrences and human activities threaten fragile archaeological sites and historic properties. Cultural resources can be impacted by naturally occurring erosion, pedestrian and animal traffic, and aggressive vegetation or weather.

Human activities that cause ground disturbance can alter or destroy cultural resources. New facilities, construction of underground utilities, clearing of vegetation, detonation of explosives, military training exercises and live-fire activity, vandalism, looting, and theft all pose threats to cultural resources.

## Conservation Procedures

Step	Procedure
1	Never engage in activities that could potentially alter the historical integrity, features and value of a building, archeological, or cultural site. Cultural resources are 'non-renewable', once lost they can never be replaced.
2	To avoid costly mistakes, consult with the Environmental Conservation Office before you begin any self-help project. Preserving historical buildings may range from the paint color of the facility to the type of doors and windows used for replacement.
3	When training on ranges, stay clear of areas that delineate natural or culturally sensitive areas.

# Drip Pans

## General Information

Leaks and spills from vehicles and equipment are a large contributor to industrial sources of storm water pollutants. JBER prescribes and implements best management practices to reduce or prevent pollutants in industrial storm water discharges by limiting contact of storm water with source materials (fuel, oil, chemicals, solvents, etc.). The proper placement and management of drip pans under vehicles is vital to meeting this requirement. All drip pans shall be appropriately labeled or marked for their use by means of stenciling the words "USED OIL," or "JP-8" for flat pans under aircraft. Antifreeze and other POLs may be placed in a Used Oil drip pan as long as the drip pan is wiped clean prior and after each specific use. All drip pans shall be emptied as soon as the last drop leaves the unit being maintained. Do not leave drip pans unattended.

continued



## D-1 Drip Pans, continued

### Potential Hazards

Vehicles and equipment that are parked in motor pools on the installation have the potential to leak fluids onto ground surfaces that lead to the storm water system. Failure to properly use drip pans to prevent releases to the environment could lead to storm water contamination as well as violations and monetary fines by regulatory agencies.

### Waste Characterization

Drip pans under vehicles may contain POL products, water, coolant, or a mixture of all three products. Any used oil products in drip pans must be managed as USED OIL (see Used Oil Fact Sheet U-3).

### Handling and Disposal Procedures

Step	Procedure
1	Mark all drip pans with the words "Used Oil."
2	Drip pans should be placed below engines and other potential areas of leakage on vehicles and equipment that are parked or stored outside and exposed to storm water.
3	Water in drip pans should be visually inspected for oil or other contaminants prior to emptying.
4	<b>Do not pour oily water into USED OIL collection drums.</b> Remove any POL from the water using a white oil-only absorbent pad until no POL sheen is visible. Water with no POL sheen can be discarded. Place used absorbent pads in the used POL rag container.
5	A routine inspection by the UEC should be conducted to ensure that drip pans are being used and kept clean. Drip pans should also be in-spected after heavy rains.

# E-Waste (Electronic Waste)

## General Information

Electronic waste, e-waste, e-scrap, or Waste Electrical and Electronic Equipment describe loosely discarded, surplus, obsolete, or broken electrical or electronic devices. Often these products contain hazardous or toxic materials that can pollute the environment and threaten human health. Computers, laptops, monitors and peripheral equipment (i.e., keyboards, scanners, printers, cables, digital photo and music devices, DVD/VCR players) are recyclable and should not be discarded in the trash. All government-owned office electronics must be turned in according to your unit turn-in procedures for processing.

## Waste Characterization

Government-owned electronic items, that will not be reassigned to another organization, should be turned in to Defense Logistics Agency-Disposition Services for disposal.

## Handling and Disposal Procedures

- For government-owned obsolete electronics, take them to your supporting unit turn-in location.
- When buying new electronic products make sure they are energy efficient and Electronic Product Environmental Assessment Tool certified.
- For personal e-waste, contact the manufacturer or a local retailer for recycling instructions.

## Filters – Fuel

### General Information

Military fuel filters are generally used with Jet Propulsion 8 (JP-8) and diesel fuel. However, some specialty vehicles or equipment utilize MoGas.

### Potential Hazards

Fuel filters have volatile organic compounds in varying levels based on the type of fuel they are used with. Refer to the fuel specific SDSs for specific hazards. Fuel filters are fuel specific and may contain benzene (a listed hazardous waste) and must be treated differently than other types of filters.

### Waste Characterization

Military-type fuel filters used with JP-8 or diesel fuel are **NON-REGULATED WASTE** once they have been properly drained. Filters used with MoGas may be **HAZARDOUS WASTE**. Contact the JBER HWC for assistance with these filters.



### Handling and Disposal Procedures

Step	Procedure
1	Used fuel filters must be drained into the appropriate container and the used filter can be placed into the "Used Fuel Filter Drum."
2	MoGas filters should be placed in a container marked "Hazardous Waste MOGAS Filters" and placed in the Satellite Accumulation Area.
3	Contact the JBER HWC at 552-3435 to schedule a pickup.

## Filters – Oil

### General Information

Metal oil filters are recyclable and should never be thrown into the dumpster.

### Potential Hazards

Oil filters have volatile organic compounds in varying levels. Refer to the oil specific SDS for specific hazards. Used oil filters that are not properly drained and thrown in the trash can release oil into the environment. Just one quart of oil can affect an area the size of three football fields and one gallon can pollute 250,000 gallons of water.



### Waste Characterization

Used oil filters should be drained in the appropriate drum, and the used filter should be placed in the "Used Oil Filter Drum." Used oil filters should never be thrown in the trash.

### Handling and Disposal Procedures

Step	Procedure
1	Empty the oil filter into the drip pan, transfer the oil into the USED OIL DRUM, and place the filter into the OIL FILTER DRUM.

# Fire Extinguishers

## General Information

A variety of fire extinguishers are present on JBER including: ABC or monoammonium phosphate, Purple K, Carbon Dioxide and Halon.

## Potential Hazards

Fire extinguishers pose a health and safety risk when discharging. Fire extinguishers may contain residue that could be an irritant.

continued





## F-3 Fire Extinguishers, continued

### Handling and Disposal Procedures

#### Standard Guidance recommends:

- Used fire extinguishers may be turned into Fire Station #2; however, the fire department does not “replace in kind.”
- Fire extinguishers must be serviced and/or disposed of through a private vendor. This means that the unit must contact the vendor and pay for the service or disposal on its own. The unit is responsible for selecting a provider for this service and JBER does not endorse any particular company. Prices will vary depending on the type and number of extinguishers, so it will be up to the unit to find the best value.
- All portable fire extinguishers should be inspected at least monthly and maintained according to Fire Department and manufacturer’s recommendations.
- Access should be maintained at all times to all portable fire extinguishers. This is commonly interpreted to mean a clear and unobstructed path of approximately 2 to 3 feet in width. In addition, each extinguisher should be mounted at approximately three feet above the ground.
- The fire extinguishers should be the appropriate size and type to fight the type of fire that may occur in the area where they are located. Contact the JBER Fire Department Fire Prevention office at 552-2620 for more information.
- Keep fire extinguishers out of the elements. The effects of the weather on canisters will quickly cause rust and compromise the integrity of the extinguisher. If an extinguisher is showing signs of corrosion on the base or any welds, ultra-violet damage to the head caps, or is missing parts, it should not be used.

# Fuel – Diesel, Jet Propulsion 8 (JP-8), Gasoline (MOGAS), Aviation Gas (AVGAS)

## General Information

Types of fuel that are used on JBER include: diesel fuel, JP-8, MOGAS, and AVGAS.

## Potential Hazards

All fuels are potentially dangerous and should be handled in accordance with the proper safety guidelines. Refer to the fuel specific SDS and always use the appropriate PPE.

## Waste Characterization

All off-specification fuel is recycled and managed as a RECYCLABLE MATERIAL.

continued



## F-4 Fuel-Diesel, JP-8, MOGAS, AVGAS, continued

### Handling and Disposal Procedures

Step	Procedure
1	UNITS SHOULD NOT USE PLASTIC CONTAINERS/ JERRICANS FOR STORING FUEL AT THE WORKPLACE. (Jerricans should only be used to store/ transport fuel for training.)
2	Use an approved metal safety can National Stock Number (NSN): 7240-00-177-4997) if you must temporarily store a small quantity of fuel. Fuel for lawn mowers and other MoGas driven power equipment should be maintained at minimum levels.
3	Mark the approved can with its contents and always keep containers closed except when adding or removing fuel.
4	Ensure the containers are in good condition, not leaking, and are placed in flammable lockers with secondary containment when not in use.
5	Transfer used recyclable fuel into the accumulation drum at the SAA or Recycling Accumulation Point.
6	Close drum, finger tighten, and mark drum with contents (e.g., Used JP-8, MOGAS, etc.).
7	Contact the JBER HWC at 552-3435 to arrange for pickup at the unit or drop-off of recyclable fuel at the JBER HWC.

# Fuel Trucks (JP-8) – Fuel Tankers, HEMMT, Truck Mounted Pump, Tank Units

## General Information

Activity/unit personnel may transport hazardous materials (including Heavy Expanded Mobility Tactical Truck [HEMTT] fuel tankers and truck mounted pump/tank units) provided:

- The transport vehicle is equipped with an appropriate spill kit.
- The driver received the DoD equivalent of a Commercial Drivers License with a HAZMAT endorsement offered through the JBER Transportation Office.
- Commercial or government owned vehicles must be used to transport fuel.

## Potential Hazards

JP-8 is a Department of Transportation flammable material and should be handled in accordance with appropriate safety guidelines. Storage of large quantities of JP-8 presents a potential risk to the storm water system. Preventive measures (i.e., secondary containment) must be in place prior to conducting any fuel storage or transfer operations.

## Waste Characterization

Off-specification JP-8 is a **RECYCLABLE MATERIAL**.

## F-5 Fuel Trucks, continued

### Handling and Disposal Procedures

- The EPA does not require mobile fuel trucks to use secondary containment. However, while sitting idle, they must use drip pans under each outlet on the fueling system when parked.
- All fuel trucks must be equipped with the appropriate spill kit.
- All drivers of fuel trucks must have the DoD equivalent of a Commercial Drivers License with a HAZMAT endorsement from the JBER Transportation Office.

*Use of privately owned vehicles to transport fuel is prohibited.*



# Hazardous Material (HAZMAT)

## General Information

HAZMAT is any material, liquid or solid, that can cause harm to humans or the environment, or any material that is required to have a SDS. All hazardous material must be approved to be used before the material is brought on base.

## Management Procedures

**Step 1:** All HAZMAT must first be requested to be used on JBER through Hazardous Materials Pharmacy (HAZMART) or Enterprise Environmental Safety and Occupational Health - Management Information System (EESOH-MIS), a hazardous material tracking database. If the material is authorized, it will be added to the unit's Authorized Use List and ordered through HAZMART.

**Step 2:** Anyone who uses HAZMAT as part of their normal duties must have Hazard Communication (HAZCOM) training specific to the hazardous material used. For more information on what HAZCOM training should entail, contact Bioenvironmental at (907) 384-3985.

**Step 3:** Personnel responsible for HAZMAT storage areas should have HAZMAT manager training. HAZMAT manager training is sponsored by the Environmental section every month. Shops that have very dangerous material or large quantities HAZMAT may have additional record-keeping requirements that are spelled out in the JBER Operating Instruction for Hazardous Materials.

**Step 4:** All HAZMAT on JBER must be tracked on inventory lists and have a SDS readily available and accessible by all personnel working in the area. See the SDS section (Fact Sheet S-1) for more information.

**Step 5:** When a material is no longer needed, the material must be turned back into HAZMART if it is unopened and still usable. If the material is opened and still usable, it can be given to another shop that is authorized to use the material, or it can be turned into the JBER HWC for disposal.

# Hazardous Waste – Satellite Accumulation Areas (SAA)

## General Information

An SAA is a satellite accumulation point for the storage of Hazardous Waste. Federal and state laws strictly regulate all types of SAAs. SAAs allow for the accumulation of up to 55 gallons of hazardous waste (or one quart of acute hazardous waste) to be stored at or near the point of waste generation.

## Potential Hazards

Improper management of hazardous waste could pose a threat to unit personnel and the environment and result in fines by the EPA.

## Management Procedures

Step	Procedure
1	Never establish, deactivate or move an SAA without prior authorization from the JBER HWC; 552-3435.
2	Hazardous material becomes a hazardous waste as soon as it can no longer be used for its intended purpose and a determination is made that it meets the criteria for hazardous waste. Once this determination is made, it must be transferred to the SAA immediately.
3	The maximum total empty hazardous waste container volume of an SAA may have 55 gallons or less non-acute hazardous waste; 1 quart or less liquid acute hazardous waste or 1 kilogram (2.2 pounds) solid acute hazardous waste. Spill debris from POL is not considered hazardous waste unless the POL was gasoline. Containers for POL may exceed 55 gallons.

continued

## H-2 Hazardous Waste – Satellite, continued

Step	Procedure
4	Transfer the hazardous waste to the SAA or CAA (HWC). All drums and containers in the SAA must be marked/ labeled with the proper Department of Transportation hazard class label.
5	Containers of hazardous waste may only be opened and closed when transferring hazardous waste into the container. If storing hazardous waste in a drum, close the drum and ensure it is finger tight.
6	Enter the amount of hazardous waste added to the hazardous waste container onto the hazardous waste “Container Log” found behind the label on the container or on a clip board next to the container.
7	Call the JBER HWC at 552-3435 for pickup prior to exceeding 55 gallons of hazardous waste or 1 quart of acute hazardous waste. If the SAA meets or exceeds 55 gallons of hazardous waste or 1 quart of acute hazardous waste, then a start date must be annotated on the container, and hazardous waste must be transferred to an SAA within 72 hours.





# Light Tubes and Light Bulbs

## General Information

Used mercury-containing lamps become a waste on the date the generator/handler permanently removes it from its fixture. An unused mercury-containing lamp becomes a waste on the date the handler decides to discard it.

Handlers of universal waste must immediately clean up and place in a container any lamp that is broken or shows evidence of breakage, leakage, or damage that could cause the release of mercury or other hazardous constituents to the environment. Containers must be closed, structurally sound and compatible with the contents of the lamps. The container must lack evidence of leakage, spillage, or any damage that could cause leakage or releases of mercury or other hazardous constituents to the environment under reasonable foreseeable conditions.

Commercial management and disposal of fluorescent light bulbs and other mercury-containing bulbs are regulated under the RCRA Universal Waste Rule and Subtitle C hazardous waste regulations.

Mercury containing light bulbs include compact fluorescent lights, fluorescent light tubes, neon/argon lamps, and high intensity discharge (HID) bulbs. HID bulbs include mercury vapor bulbs, metal halide, and high pressure sodium bulbs. All of the lights/lamps mentioned are considered "lamps" by EPA. Lamps that will no longer be used must be immediately placed in a waste container labeled "Universal Waste – waste lamps."

## Potential Hazards

Improper management of mercury containing light bulbs could pose a threat to unit personnel and the environment, and result in fines by the EPA.

continued 

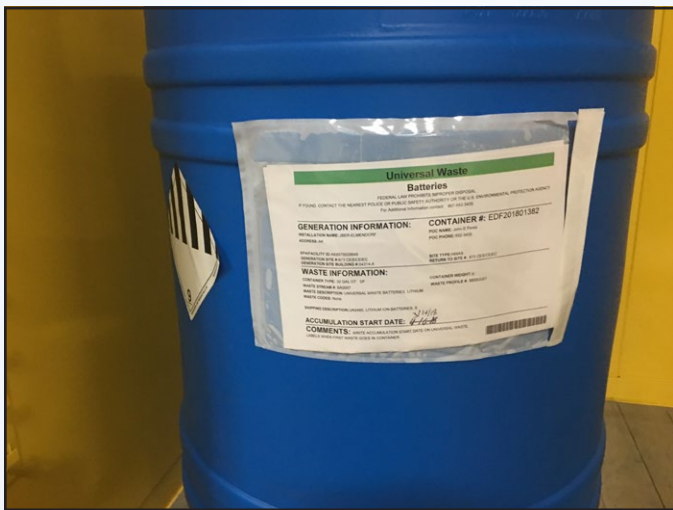
## L-1 Light Tubes and Light Bulbs, continued

### Management Procedures

**Step 1:** Locate an SAA that has a container appropriate for the type of lamp that is being discarded. Alternatively, you can turn in the lamps at the JBER HWC.

**Step 2:** If the lamp is the first waste placed in the container, make sure to date the container and inspection log at that time.

**Step 3:** Universal Waste can be accumulated for one year or less. UW containers should be moved to the HWC in 270 days.



# Meals Ready to Eat (MRE) and Flameless Ration Heaters (FRH)

## General Information

Meals Ready to Eat (MRE) contain Flameless Ration Heaters (FRHs) which consist of a plastic bag containing a piece of fiberboard and powdered magnesium or magnesium alloys along with other materials.

## Potential Hazards

Powdered magnesium is a water reactive chemical. Never store MREs in closed CONEXs, MILVANs, or TRICONS.

## Waste Characterization

Every MRE contains an FRH with water-reactive chemicals that heat up the meal. If an individual chooses not to use the FRH to heat a meal, the individual may throw the FRH into the regular trash. This is allowable under provisions of the Household Hazardous Waste regulations. However, bulk quantities of FRHs may not be disposed

continued



## M-1 Meals Ready, continued

of in the trash and must be turned into the JBER HWC. A best management practice is to use the FRHs for their intended purpose or to collect all FRHs and turn them in to the JBER HWC.

### Handling and Disposal Procedures

Step	Procedure
<b>1</b>	Whenever possible, use the FRH to heat the MRE.
<b>2</b>	All unused FRHs should be collected by the unit's Hazardous Waste Manager and turned in to the JBER HWC.
<b>3</b>	All FRHs used to heat the MRE can be disposed of as solid waste.
<b>4</b>	All damaged FRHs should be collected by the unit's Hazardous Waste Manager and managed as a HAZARDOUS WASTE.
<b>5</b>	Excess cases of MREs may be turned in to Defense Logistics Agency/Disposition Services (DLA building 11735).



# Medical Waste – Regulated (RMW)

## General Information

Regulated Medical Waste (RMW) includes human blood, blood products, body fluids, pathological wastes, and used/unused sharps. If you handle RMW, you are required by law to have training under OSHA Regulations 29 CFR 1910.1200 (HAZCOM and Hazardous Waste Operations and Emergency Response Standard) and 29 CFR 1910.1030 (Bloodborne Pathogen Standard). RMW generated on JBER is managed through 673d Medical Group. For assistance in managing or disposing of RMW, contact: Regulated Medical Waste Manager at 580-6134.

## Potential Hazards

Regulated medical waste (also known as infectious waste or biohazardous waste) is a waste capable of causing infectious disease in humans.

## Waste Characterization

The handling, treatment, transportation, and disposal of RMW is regulated by federal, Air Force, Army, Medical Command (MEDCOM) and installation regulations.

## Handling and Disposal Procedures

Step	Procedure
1	Only trained personnel should handle RMW.
2	Non-MEDCOM units will follow established RMW management procedures.
3	Ensure proper containers are available for the collection of RMW (i.e., "red bags," sharps containers).
4	Do not overfill or compress RMW in containers.
5	Contact 673d Medical Group for assistance and further information, 580-2778.

# Ozone Depleting Substances (ODSs)

## General Information

Ozone depleting substances (ODSs) are those substances which deplete the ozone layer and are widely used in refrigerators, freezers, air-conditioners, water coolers, dehumidifiers and fire extinguishers. ODSs are hazardous materials and must be approved prior to bringing onto JBER (see Hazardous Materials section).

## Potential Hazards

ODSs are man-made compounds that include chlorofluorocarbons (CFCs), hydro chlorofluorocarbons (HCFCs), halons, bromochloromethane, methyl bromide, carbon tetrachloride, and methyl chloroform. ODSs can destroy the protective ozone layer of earth's atmosphere, which allows more harmful ultra-violet rays to reach the earth's surface and can lead to higher rates of skin cancer and cataracts. Other suspected consequences of ozone depletion are damage to plants and a reduction of plankton populations.

## Leaks and Disposal Procedures

The known release or venting of an ODS is prohibited under the Clean Air Act; failure to comply may result in fines. Discovery of leaks from a refrigerant system that normally has a charge over 50 pounds must be reported to the Air Quality Program manager (384-2444).

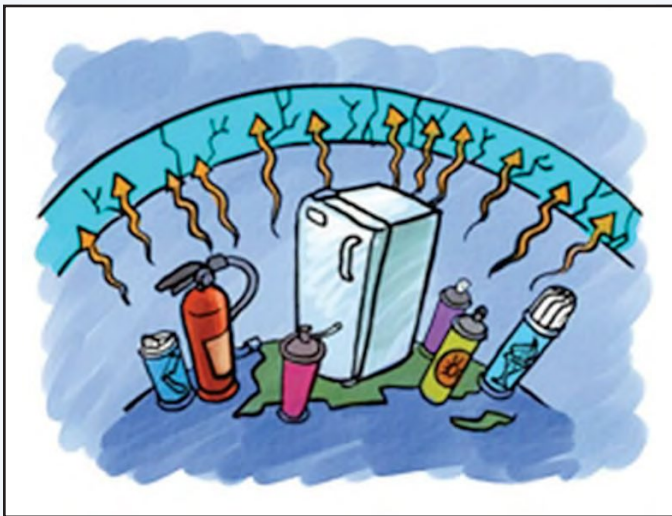
Removal of an ODS by a certified technician is required by the EPA before an appliance can be disposed of. The ODS must be captured and containerized utilizing certified equipment and canisters and then must be recycled, reclaimed, or destroyed. Air Force Policy requires that recovered Class I and R-22 refrigerants remain in Air Force ownership. Contact the JBER HWC (522-3435) for the proper disposal requirements.

continued

## O-1 Ozone Depleting, continued

### Additional Information

Appliances purchased from off-post suppliers should not contain Class I or R-22 refrigerant. These refrigerants have been or are in the process of being phased out of production, and appliances containing these substances will eventually be unserviceable. More information about ODSs is available in the ODS plan, written by the Air Program manager and the HAZMAT program manager.



# Paint

## General Information

Paint and paint-related material include Chemical Agent Resistant Coating (CARC), oil-based, and latex (water-based) paint and stain, as well as aerosol paint cans. All paint and paint-related material must meet Authorized Use List inventory and storage requirements.

## Potential Hazards

Paints and paint-related material may contain heavy metals and flammable chemicals. Check paint specific SDSs for precautions on all paints and paint-related materials. Mismanagement of paint and paint-related materials can cause harm to the environment or personnel and could result in fines by the EPA.

## Waste Characterization

Excess, unusable latex paint is potentially RECYCLABLE; contact the JBER HWC for information; 552-3435. Oil-based and CARC paint are considered HAZARDOUS WASTE if not used or recycled. Contact the JBER HAZMART at 552-2385 if the product is unopened and usable.

## Handling and Disposal Procedures

***NEVER leave cans of paint open to dry if they contain more than a slight residue in the can; contents may be flammable.***

Step	Procedure
1	Refer to paint specific SDS for handling of all CARC and oil-based paint and paint related materials.
2	Tarps, rollers, brushes, gloves, stir sticks and tape used with latex paint should be allowed to dry before being placed in the trash.

continued



## P-1 Paint, continued

Step	Procedure
3	Empty and dry metal cans of paint may be placed in a trash receptacle. A container, drum, or can is considered empty if it has less than 1% by volume remaining. This is basically a non-pourable product. For example, an oil can is empty once you have dumped the contents and the flow is a dribble. A 55-gallon drum would have less than an inch of product on the bottom.
4	Wastewater from latex paint cleanup can only be put into the sanitary sewer with prior approval from the Environmental Section Waste Water Program Manager. <b>Wastewater should never be disposed of in storm drains or septic systems.</b>
5	Where possible, reuse wastewater from latex paint cleanup by allowing the solids to settle out and put the water into another container. The latex solids can then be dried out and managed as latex paint waste.
6	Unused paint must be stored in a climate-controlled area marked clearly with a "Hazardous Material Storage Area" sign at the entry point.



# Pallets (Wood)

## General Information

Wood pallets are reusable.

## Waste Characterization

Wood pallets that are in good condition and considered usable can be reused. Contact your supply office for unwanted, reusable pallets. Broken or otherwise unusable wood pallets are disposed as SOLID WASTE.

## Handling and Disposal Procedures

Usable wood pallets should be neatly stacked and stored for reuse. Unusable pallets should be disposed of. Contact JBER Recycling Program Manager at 384-7854 for disposal guidance.



# Paper

## General Information

Various types of paper products are recyclable.

## Waste Characterization

Paper is categorized as “high grade” or “mixed.” Most office paper is considered high grade, which allows it to be recycled several times over. High grade paper includes office paper, envelopes and computer/copier printouts. Recyclable white paper must be shredded. Mixed paper includes color paper, blueprints, manila envelopes, unserviceable file folders, chipboard backing, magazines, phone books and junk mail. Mixed paper is not recyclable on JBER at this time.



## Handling and Disposal Procedures

**Do not mix high grade office paper** with mixed paper.

JBER has a 100 percent shred policy. Contact your Operational Security manager for additional information. Shred it; bag it; bin it. Contact JBER Recycles at [673CES.CEIEC.EnvCom@us.af.mil](mailto:673CES.CEIEC.EnvCom@us.af.mil) for more information about JBER paper recycling.



*JBER Recycles on Facebook*

# Parts Washers (Degreasers)

## General Information

Vehicle parts washers with closeable lids should remain closed when not in use. Both wash tubs should be clearly marked as such. Parts washers should be used for cleaning parts only, and the solvent in the washer should be properly labeled with an appropriate manufacturer's SDS located in a pouch or protective cover on the outside of the tub. A Spill Plan and SOP should also be affixed to the lid of the tub on the outside of the parts washer. The JBER HWC suggests that all parts washers be maintained by the manufacturer or vendor of the unit. Ensure that the vendor contacts the JBER HWC for the current process of solvent recycling. If a parts washer is to remain out of service for more than 90 days the solvent shall be placed into a correctly labeled container acquired from the JBER HWC and the parts washer shall be placed out of service.

## Potential Hazards

All personnel using the parts washer must read and adhere to the SDS warning labels and information posted on the parts washing equipment. Dry sweep, rags, filters, or other foreign matter do not belong in the parts washer. Parts washing machines must be used and maintained according to the manufacturer's specifications and be complete (i.e., not missing any control devices). JBER must find and use "greener" materials for solvents and may never use chlorinated or flammable solvents in the parts washer and must work with the JBER HAZMART to find a less hazardous substitute and a disposal method for those unapproved solvents.

## Waste Characterization

After parts washer solvent has been used to its fullest extent it may contain heavy metals or other substances hazardous to the environment. Please contact the JBER HWC at 552-3435 to ascertain if the solvents used in the parts washer may be recycled to reduce the cost of procurement and the environmental impact of hazardous waste generated.

continued

## P-4 Parts Washers (Degreasers), continued

### Handling and Disposal Procedures

Step	Procedure
1	Parts washer lids must be closed and locked when not in use. A label should be on the parts washer indicating "Keep Closed When Not in Use."
2	Proper PPE must be used at all times while operating or emptying the parts washer (rubber gloves, goggles and rubber apron).
3	Label the parts washer appropriately for its proper use (i.e., Vehicle or Weapons Parts Cleaning Station).
4	Equipment or parts should be pre-cleaned with absorbent pads (removal of excess grease and dirt) before using the parts washing equipment.
5	Do not contaminate parts washer solvent with other chemicals (i.e., paint, paint cleaning solvents, oil, gasoline, etc.)

**Solvents or solvent-containing items CANNOT BE BURNED for energy recovery.**



# Parts Washers (Weapons)

## General Information

The IT48WC weapons parts washer has a closed filtering system that requires regular maintenance.

## Potential Hazards

All personnel are to read and adhere to the product specific SDS warning labels, and information posted on the parts washing equipment. Dry sweep, rags and other foreign matter should be kept out of the parts washer. Parts washing machines must be used according to the manufacturer's specifications and be complete (i.e., not missing any control devices). Ensure that the location of the parts washer has been approved by the 673d Air Wing Base Safety Office.

continued

**Hazardous Waste**

FEDERAL LAW PROHIBITS IMPROPER DISPOSAL. IF FOUND, CONTACT THE NEAREST POLICE OR PUBLIC SAFETY AUTHORITY OR THE U.S. ENVIRONMENTAL PROTECTION AGENCY.

For Additional Information contact: 907-552-3435

<b>GENERATION INFORMATION:</b>	<b>Container #: FRA201704107</b>
Installation Name: JBLR-ELMENDORF	POC Name: SGT CALINAGAN JOHN
Address: AK	POC Phone: 570-1521
EPA Facility ID: AK3570228649	Org: 4-25 ABC
Generation Site #: 725TH H CO MOTORPOOL	Site Type: IAP
Generation Site Building #: 784	Return to Site #: 673 CES/CEIC

<b>WASTE INFORMATION:</b>	Container Weight: <i>293</i>
Container Type: 35 GAL BT DM	Waste Profile #: 9402AF01
Waste Stream #: FC0057	
Waste Description: USED ANTIFREEZE - D008	
Waste Codes: D008	


Shipping Description: UN3082, WASTE ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (LEAD); 9 PGR

Manifest #:

Accumulation Start Date: *4/20/18* Filled Date:

COMMENTS: SATELLITE / TOXIC

Handle With Care



## P-5 Parts Washers (Weapons), continued

### Waste Characterization

Weapons parts washer solvent is recycled by a two stage filter system. Regular preventative maintenance checks and service includes changing the filters, removing the sludge, and topping off the solvent according to the manufacturer's instructions. Used solvent, sludge and filters may be a HAZARDOUS WASTE when disposed. Contact the JBER HWC at 552-3435 for proper disposal guidance.

### Handling and Disposal Procedures

Step	Procedure
1	Parts washer lids must be closed and locked when not in use. A label should be on the parts washer indicating "Keep Closed." The washer should also be properly labeled with an appropriate manufacturer's SDS, Spill Plan, and SOPs on the outside of the parts washer.
2	Personal protective equipment must be available at all times and worn while operating the parts washer (rubber gloves, goggles, and rubber apron).
3	Perform regular preventative maintenance checks and service in accordance with the manufacturer's directions.
4	Contact the JBER HWC at 552-3435 for proper disposal methods of used solvent, sludge and filters.

**Solvents or solvent-containing items CANNOT BE BURNED for energy recovery.**

# Pesticides – Insecticides, Herbicides and Rodenticides

## General Information

Pest management at JBER is governed by the Federal Insecticide, Fungicide, and Rodenticide Act and the Installation Integrated Pest Management Plan. Air Force pest management programs are essential to prevent pest and disease vectors from adversely affecting military operations. Safe, effective, and environmentally sound Integrated Pest Management programs reduce pollution and other risk factors associated with pesticide use.

There are two classes of pesticides recognized and registered by the EPA: restricted use and general. The application and purchase of restricted-use pesticides is limited to personnel who are DoD or State certified in the operational category in which they are working. Contact 673d Civil Engineering customer service for assistance with pest issues in your work area at 552-3727.

## Potential Hazards

Many of these products can be HAZARDOUS WASTE and harmful to people and the environment. Always store, handle, apply and dispose of according to the SDS or manufacturer's label.

## Handling and Disposal Procedures

Step	Procedure
1	<b>Contact Pest Management to survey your work area to see if pesticide treatments are needed.</b>
2	If unused excess pesticides are discovered in your work area, refer to the SDS for each item to determine if they are hazardous or non-regulated waste. Contact the JBER HWC at 552-3435 for assistance.
3	Pesticides are managed as UNIVERSAL WASTE.
4	Contact the JBER HWC at 552-3435 for disposal.



# Pet Waste

## Pet Ownership

Educate yourself and your family before deciding to obtain a pet. Being a responsible pet owner is much more than just providing adequate water, food and shelter for your pet. Domestic pets are completely dependent on their owners for their welfare. All pets over four months of age must be registered with the JBER veterinarian and have certificates showing they have received the required vaccinations.

## Pet Waste

Pet feces must be picked up daily, or immediately after the pet leaves outside the patio or yard.”

## Potential Hazards

Canine waste is potentially hazardous to the water supply. When pet waste is improperly disposed of, it can be picked up by storm water runoff and washed into storm drains or nearby water bodies. Since storm drains on JBER are untreated, animal feces could end up directly in Ship Creek or Knik inlet, causing significant water pollution and violating the JBER storm water permit.

Decaying pet waste consumes oxygen and sometimes releases ammonia. Low oxygen levels and ammonia can damage the health of fish and other aquatic life. Pet waste carries bacteria, viruses, and parasites that can threaten the health of humans and wildlife.

continued

## P-7 Pet Waste, continued

### Handling and Disposal Procedures

Step	Procedure
<b>1</b>	Obtain a plastic bag. Used plastic shopping bags or biodegradable pet waste bags work well.
<b>2</b>	Pull the bag over your hand like a glove and ensure there are no holes in the bag.
<b>3</b>	Pick up the waste with the bagged hand. Use your other hand to grasp the open end of the bag and pull it inside out. Knot the bag and drop it in the nearest trash receptacle.



# Purging Fuel Tanks (Fuel Tankers, Trailers, HEMTT, Fuel Pods)

## General Information

Tank and container purging may be required for maintenance, transportation and turn-in. Purging of fuel tankers, HEMTT tankers and fuel pods is prohibited on unit wash racks.

## Potential Hazards

Fuel containers, tanker vehicles or trailer units may contain vapors or residue that may be dangerous during turn-in, transport or maintenance. Follow all safety requirements for purging fuel.

## Waste Characterization

Fuel in tanks or containers should be analyzed to determine if the product is still usable. Contact your unit's Fuel Quality Officer to conduct fuel testing. If the fuel is usable, it may be transferred to another unit. If the fuel is no longer usable, it may be recovered and recycled by the JBER HWC.

## Disposal Procedures

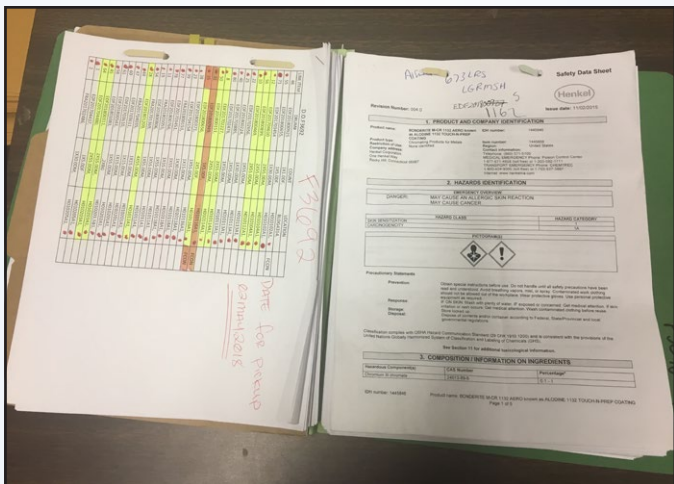
Step	Procedure
1	Contact the unit's Fuel Quality Officer to determine if the fuel is still usable.
2	If unusable, contact the JBER HWC at 552-3435 for guidance.

# Safety Data Sheets (SDS)

## General Information

SDS, previously known as Material Safety Data Sheets, are required for any hazardous material stored, used or disposed of on JBER. SDSs contain information on the chemical components of the hazardous material, storage requirements, personal protective equipment required for use, transportation, disposal, and spill response procedures. SDSs must be readily available to personnel requesting this information. All SDSs must be manufacturer specific, so if you have multiple manufacturers of a product, you will need a SDS for each manufacturer.

continued



## S-1 Safety Data, continued

### Management Procedures

Step	Procedure
1	All hazardous materials must first be approved for use by the unit and then ordered through the HAZMART or EESOH-MIS. A SDS must accompany any request to add a material to the unit authorized use list, to return the excess material to the HAZMART, and for any request for disposal once the material is expired or no longer usable.
2	SDSs can be provided by HAZMART personnel or EESOH-MIS for any approved hazardous material. SDSs for materials procured through authorized local purchases must be obtained from the vendor.
3	SDSs must be accessible to all personnel who work in the area.
4	SDS information and their location should be presented to all personnel as part of the unit's HAZCOM and Environmental Training.
5	All HAZMAT must be stored according to the SDS and guidance given in the HAZMAT training course.

# Scrap Metal (Steel, Aluminum, Copper, Wire)

## General Information

JBER-Elmendorf scrap metal is recyclable and is accepted at the JBER Recycling Center, 952 Warehouse Street. Contact the JBER QRP at [673CES.CEIEC.EnvCom@us.af.mil](mailto:673CES.CEIEC.EnvCom@us.af.mil) or 552-7854 for recycling JBER-Richardson scrap metal.

## Potential Hazards

Scrap metal contaminated with chemical agent resistant coating cannot be turned in as scrap metal. Contact the JBER HWC at 552-3435 for guidance on chemical agent resistant coated metal.

## Waste Characterization

Scrap metal that can be recycled include: metal bandings, wire, empty/clean oil cans, empty/clean drums/barrels, and other scrap steel, aluminum, and copper. Recyclable metal can't contain oil, gasoline, grease, or any other petroleum product.

## Handling and Disposal Procedures

- All scrap metal must be empty and cleaned of contaminants before recycling.
- For oil filters: see the Filters – Oil fact sheet for more information.
- Cut all metal banding into 1 foot sections.
- Place all scrap metal in a receptacle designated for scrap metal until it can be taken to the appropriate location for recycling. For more information on scrap metal recycling, contact 552-3304 on JBER-Elmendorf and [673CES.CEIEC.EnvCom@us.af.mil](mailto:673CES.CEIEC.EnvCom@us.af.mil) on JBER-Richardson.

# Solvent and Solvent Rags (Acetone, Denatured Alcohol, Methyl Ethyl Ketone [MEK], Methyl Propyl Ketone [MPK], Toluene, Xylene, Mineral Spirit, Paint Thinner)

## General Information

Solvents are commonly used in maintenance operations on JBER. Solvents used in painting and aviation maintenance operations include harmful chemicals such as paint thinner, acetone, denatured alcohol, MEK, MPK, toluene, xylene and mineral spirit. **Do not use any solvent unless you have an approved Air Force Form**

continued



## S-3 Solvent and Solvent Rags, continued

**3952 authorizing its use.** Approved solvents must be authorized by a technical manual and listed on the Authorized Use List. For authorization, contact JBER HAZMART at 552-2385.

### Potential Hazards

Excess or used solvents and rags contaminated with solvents may be hazardous to human health and the environment. Solvent and solvent-related materials may also be flammable. Refer to the SDS for specific hazards. Use the correct PPE recommended by the SDS.

### Waste Characterization

Excess/used solvents and used solvent rags may be HAZARDOUS WASTE. Consult the JBER HWC for assistance.

### Handling and Disposal Procedures

Step	Procedure
1	Ensure that the use of any solvent has been approved by the JBER HAZMART and listed on the unit's Authorized Use List.
2	Never discard excess or used solvent in the sanitary sewer, storm or floor drains. Contact the JBER HWC for proper management of excess or used solvents.
3	Contact the JBER HWC for a container appropriate for waste solvents.
4	The rags should be reused to the fullest extent possible. When the rags are no longer usable, place rags in an open head drum in the SAA labeled "HAZARDOUS WASTE (name of solvent) RAGS."
5	Contact the JBER HWC at 552-3435 for pickup of rags for disposal.



# Spill Kits

## General Information

Spill kits must be equipped with the type and quantity of spill equipment adequate to respond to a spill or release of a hazardous material that is stored or used in an operational area. Spill materials for cleanup and restocking of spill kits may be purchased from a local vendor or the General Services Administration.

A suggested general inventory for spill kits includes:

- Absorbent pillows (5 each) or pads (bundle of 100)
- Straight edge, non-sparking shovel (1 each)
- Broom (1 each)
- Rubber gloves (2 pairs)
- Rubber boots (2 pairs)
- Shoe covers (2 pairs)
- Absorbent booms/spill socks, 8 or 10 feet long (2 each)
- Plastic bags
- Eye protection/goggles/safety glasses
- A container to collect and store the clean-up material, ex. 55-gal drum
- Waste stickers
- Floor drain cover or plugs
- Floor sign noting "Danger Chemical Spill Keep Away"

**Note: White Pads:** Hydrocarbons only; will NOT pick up water.

**Gray Pads:** All fluids, hydrocarbons, aggressive chemicals (i.e., Acids, Bases, Pesticides).

**Note:** Spill kits should be appropriate for the size and type of spills that may occur in your work area.

continued

## S-4 Spill Kits, continued

### Handling and Disposal Procedures

Step	Procedure
1	<b>Report</b> all hazardous material or chemical spills to the JBER Fire Department at 911. Petroleum spills over one (1) gallon must be reported JBER Fire Department; call 911 to report the spill.
2	Spill kits must be marked/labeled "SPILL KIT." The location of spill kits should be based on common sense and past performance. Maintain a clear access to the spill kit and around the spill kit area. Remember that different products/materials require different spill kits.
3	<b>Consult</b> your manufacturer's specific SDSs to determine proper procedures and spill control. Know where the SDSs are located in your building.
4	Used spill response materials become hazardous or non-regulated waste depending on the material that is cleaned up. See the Spill Response fact sheet for cleanup and management procedures.
5	Coordinate the disposal of used spill response materials/soil with the JBER HWC at 552-3435.

continued

## S-4 Spill Kits, continued

### Examples of What Spill Kits Should Look Like

These items can be ordered from the GSA Store or online.

55 Gallon POL Spill Kit	
NAME	55 Gal Kit
Shovel, Non-Sparking	1
Gloves, Rubber	3
Drum, 95 Gallon, Empty Yellow	1
Goggles, Splash Proof	3
Spill Label, 3x5	2
Spill Label, 3x12	2
55 Gal Drum	1
Absorbent, Peat (8 lb. bag)	4
Absorbent Socks, 3x10	6
Disposal Bags	10
Absorbent Pads	100
Est Cost:	\$333.72



55 Gallon POL Spill Kit

continued

## S-4 Spill Kits, continued

<b>30 Gallon POL Spill Kit</b>	
<b>NAME</b>	<b>30 Gal Kit</b>
Gloves, Rubber	2
Drum, 30 Gallon, Empty Black	1
Goggles, Splash Proof	1
Spill Label, 3x5	2
Spill Label, 3x12	2
Absorbent, Peat (8 lb. bag)	2
Absorbent Socks, 3x10	3
Disposal Bags	5
Absorbent Pads	25
Dust Dan	1
Est Cost:	\$127.59



**30 Gallon POL Spill Kit**



**KIT Bag POL Spill Kit**

continued

## S-4 Spill Kits, continued

KIT Bag POL Spill Kit	
NAME	Kit Bag
Gloves, Rubber	1
Goggles, Splash Proof	1
Absorbent, Peat (8 lb. bag)	1
Flight Bag	1
Absorbent Socks, 3x10	2
Disposal Bags	3
Absorbent Pads	25
Est Cost:	\$127.61

### Possible Areas of Concern

Spills from hazardous materials may cause more problems if not properly cleaned and disposed.

Improperly discharged POL products

### Waste Characterization

Some absorbent materials may become hazardous waste when used. Confirm with the JBER HWC for non-POL materials that are cleaned.

Spill materials for cleanup and to restock spill kits may be obtained from the General Services Administration (GSA) Store or online.

**White Pads:** hydrocarbons only; will *not* pick up water.

**Gray:** All fluids, hydrocarbons, aggressive chemicals (i.e., Acids, Bases, Pesticides).

For more information, contact the JBER HWC at 552-3435.

continued

## S-4 Spill Kits, continued

### Spill Kit Requirements

Fuel Carrying Vehicles	POL Sites
<ul style="list-style-type: none"> <li>□ HEMTT                             <ul style="list-style-type: none"> <li>▪ 1-30 GAL spill kit per 1 vehicle                                     <ul style="list-style-type: none"> <li>• Located on vehicle</li> </ul> </li> <li>▪ 1-55 GAL spill kit per 3 vehicles                                     <ul style="list-style-type: none"> <li>• Located on ground</li> </ul> </li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>□ Motor Pool                             <ul style="list-style-type: none"> <li>▪ 3-30 GAL spill kit per 1 building                                     <ul style="list-style-type: none"> <li>• Spaced between operation locations/bay doors</li> </ul> </li> <li>▪ 1-55 GAL spill kit per 1 building                                     <ul style="list-style-type: none"> <li>• Located by HAZMAT locker/central location</li> </ul> </li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>□ 5K Tanker                             <ul style="list-style-type: none"> <li>▪ 1-30 GAL spill kit per 1 vehicle                                     <ul style="list-style-type: none"> <li>• Located on vehicle</li> </ul> </li> <li>▪ 1-55 GAL spill kit per 3 vehicles                                     <ul style="list-style-type: none"> <li>• Located on ground</li> </ul> </li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>□ Hangar                             <ul style="list-style-type: none"> <li>▪ 1-30 GAL spill kit per 1 hangar                                     <ul style="list-style-type: none"> <li>• Located by HAZMAT locker/central location</li> </ul> </li> <li>▪ 4-55 GAL spill kit per 1 hangar                                     <ul style="list-style-type: none"> <li>• Spaced between operation locations/bay doors</li> </ul> </li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>□ Tanker Pump Units                             <ul style="list-style-type: none"> <li>▪ 1-30 GAL spill kit per 1 vehicle                                     <ul style="list-style-type: none"> <li>• Located on vehicle</li> </ul> </li> <li>▪ 1-55 GAL spill kit per 1 field exercise location                                     <ul style="list-style-type: none"> <li>• Located on ground</li> </ul> </li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>□ Flightline                             <ul style="list-style-type: none"> <li>▪ 1-30 GAL spill kit per 3 aircraft                                     <ul style="list-style-type: none"> <li>• Located on ground</li> </ul> </li> </ul> </li> </ul>
	<ul style="list-style-type: none"> <li>□ Bulk Fueling                             <ul style="list-style-type: none"> <li>▪ 1-55 GAL spill kit per 1 off-loading rack                                     <ul style="list-style-type: none"> <li>• Located on ground</li> </ul> </li> </ul> </li> </ul>
	<ul style="list-style-type: none"> <li>□ AFEES/Troop Mall                             <ul style="list-style-type: none"> <li>▪ 2-30 GAL spill kit per 1 building                                     <ul style="list-style-type: none"> <li>• Located by fueling transfer operations</li> </ul> </li> </ul> </li> </ul>

continued

## S-4 Spill Kits, continued

### Reporting, Safety, Clean-up

Failure to properly clean up spills violates State and Federal regulations and causes concerns to human health and safety.

Step	Procedure
1	<b>BE PREPARED</b> <ul style="list-style-type: none"><li>▪ Know response material locations</li><li>▪ Know response procedures</li></ul>
2	<b>BE SAFE</b> <ul style="list-style-type: none"><li>▪ Identify spilled substance/Read SDS</li><li>▪ Use PPE if trained and familiar with the spilled material</li></ul>
3	<b>WHEN TO CALL</b> <ul style="list-style-type: none"><li>▪ POL greater than 1 gallon.</li><li>▪ All releases of hazardous waste/material</li><li>▪ Enters any water source including lakes, rivers, streams, retention areas or groundwater</li></ul>
4	<b>NOTIFY</b> <ul style="list-style-type: none"><li>▪ Tell your supervisor or Commander</li><li>▪ JBER Fire Department by dialing 911</li><li>▪ Range Control Fire Desk 384-6230</li></ul>
5	<b>WHAT TO REPORT</b> <ul style="list-style-type: none"><li>▪ Location and address of release</li><li>▪ Name and phone number of point of contact</li><li>▪ Date and time of release</li><li>▪ Type and quantity of substance</li><li>▪ Cause and source of release</li></ul>
6	<b>STOP THE SOURCE</b> <ul style="list-style-type: none"><li>▪ Plug, roll, or right drums</li><li>▪ Use emergency shut-off devices</li></ul>
7	<b>PROTECT WATER</b> <ul style="list-style-type: none"><li>▪ Confine the spill with sandbags or booms</li><li>▪ Block access to stormwater grates</li></ul>

continued

## S-4 Spill Kits, continued

Step	Procedure
<b>8</b>	<b>CLEAN UP</b> <ul style="list-style-type: none"><li>▪ Pump or sweep into a safe container</li></ul>
<b>9</b>	<b>DISPOSE</b> <ul style="list-style-type: none"><li>▪ Contain waste water or sweepings</li><li>▪ Call the Spills Manager for proper disposal</li></ul>
<b>10</b>	<b>RESTOCK AND REVIEW</b> <ul style="list-style-type: none"><li>▪ Replace other materials and equipment</li><li>▪ Review the incident for lessons learned</li></ul>

Additional spill assistance/guidance may also be obtained from the JBER Spill Response Manager and Storage Tank Manager (see page iii for contact information).



# Spill Response

## General Information

Many hazardous materials/waste and POLs are used in the daily maintenance and training operations on JBER. Hazardous material/waste and POL spills pose a risk to personnel safety and a risk to the environment. Never attempt to clean a spill unless it is safe to do so. **To clean up spills, use absorbent pads, socks, or booms that can be placed into your unit's appropriate absorbent pad waste container located in the hazardous waste or satellite accumulation area. Use dry sweep, in addition to absorbent pads, if necessary.** Use limited amounts of dry sweep to clean up the remainder of a spill or when the spill occurs on a rough surface. Grind in the dry sweep for best results. If you do not have a spill response container, you can purchase one with your Government Purchase Card at the GSA or a private supplier.

## Potential Hazards

Make sure your facility is prepared to respond to a spill based on the material that is stored and in-use, (i.e., specific spill kits need to match the hazardous materials being stored and used at the unit). Different hazardous materials will have different threats when released or spilled into the environment. These threats should be based on the material stored at the facility. Your unit is responsible to prepare and maintain a Spill Response Plan/Site-Specific Spill Plan. Reference the "Site Specific Spill Plan" at the end of this section. Ensure that all members of the unit are familiar with the spill plan.

## Waste Characterization

Spill response materials used to clean up hazardous spills may be regulated as Hazardous or Non-Regulated Waste. Contact the JBER HWC 552-3435 for assistance with the disposal of any used spill response materials.

continued 

## S-5 Spill Response, continued

### Handling and Disposal Procedures

Step	Procedure
1	<b>Immediately</b> alert area supervisor/occupants and evacuate the area if necessary or in an "Emergency".
2	<b>Consult</b> your SDS to determine proper procedures and spill control.
3	If the spill occurs in an area where there is a floor drain or sanitary/storm drain, immediately cover, berm, or plug the drainage area. Block with sandbags, spill boom, absorbent or drain cover.
4	If a spill occurs and it is safe to respond, do so immediately with proper PPE and training. Control/contain the spread of liquid. Make a dike around the outside edges of the spill. Use absorbent materials such as vermiculite, spill litter, or spill pillows to clean up and contain the spill.
5	If in doubt, call JBER Fire Department at 911, or if it is an emergency, call 911 <b>immediately</b> .
6	Report POL spills in excess of 1 gallon and ALL hazardous material or waste spills immediately to the JBER Fire Department at 911. Report all spills that enter any water source, including lakes, rivers, streams, retention areas, or groundwater.
7	Coordinate the disposal of used spill response materials with the JBER HWC at 552-3435

continued 

## S-5 Spill Response, continued

# SITE-SPECIFIC SPILL PLAN

(unit: \_\_\_\_\_) - BLDG. \_\_\_\_\_  
(\_\_\_\_\_) OFFICE SYMBOL: (\_\_\_\_\_)

**IN CASE OF EMERGENCY AND/OR SPILLS**  
**NOTIFY JBER FIRE DEPARTMENT**

**DIAL 911**

### REPORT THE FOLLOWING SPILL INFORMATION

- YOUR NAME AND TELEPHONE NUMBER
- EXACT LOCATION OF THE SPILL OR EMERGENCY
- TYPE AND DESCRIPTION OF THE EMERGENCY
- SUBSTANCE SPILLED, NSN, SDS OR OTHER IDENTIFICATION
- ESTIMATED AMOUNT OF MATERIAL SPILLED, ON FIRE, ETC.
- NUMBER OF INJURED PERSONNEL AND NATURE OF INJURIES
- WEATHER SPILL HAS ENTERED, OR IS IN VICINITY OF FLOOR DRAINS OR SEWER
- RATE OF SUBSTANCE CURRENTLY SPILLING AND DISTANCE SPILL HAS TRAVELED
- TIME INCIDENT OCCURRED AND ACTIONS TAKEN (EVACUATE, CONTAIN, ETC.)
- ANY OTHER PERTINENT INFORMATION

### ACTIONS TO TAKE IN CASE OF SPILL

- ALERT PERSONNEL IN THE IMMEDIATE SPILL AREA AND INITIATE EVACUATION IF NECESSARY (UPWIND 2000 FEET IF SUBSTANCE IS UNKNOWN)
- MOVE TO A SAFE AREA AND ACCOUNT FOR PERSONNEL
- CHECK CAUSE AND STOP SOURCE OF SPILL (IF THIS CAN BE DONE **SAFELY**)
- RESTRICT ALL SOURCES OF IGNITION AND CORDON OFF SPILL AREA
- NOTIFY YOUR SUPERVISOR/HAZARDOUS WASTE MANAGER
- NOTIFY VEHICLE MAINTENANCE MANAGER/LRS COMMANDER
- DIRECT EMERGENCY SPILL RESPONSE TEAMS TO SPILL
- OBTAIN THE SDS AND GIVE IT TO THE EMERGENCY SPILL RESPONSE TEAM CHIEF

### SPECIAL PRECAUTIONARY MEASURES:

- AVOID CONTACT WITH LIQUID SPILLS
- IF FIRE, EXPLOSION, OR HEALTH HAZARD, EVACUATE ENTIRE BUILDING
- **INSIDE:** BLOCK FLOOR DRAIN IMMEDIATELY WITH SORBENT PADS
- **OUTSIDE:** CONTAIN/CLEANUP WITH EMERGENCY SPILL KIT

### CONTAINMENT, CLEANUP AND DISPOSAL:

- COORDINATION WITH HAZARDOUS WASTE MANAGER IS MANDATORY
- DISPOSE OF ALL SPILL CLEANUP MATERIALS SATURATED WITH HAZARDOUS MATERIALS IN ACCORDANCE WITH BASE, LOCAL, STATE AND FEDERAL LAWS

### POINTS OF CONTACT:

- HAZARDOUS WASTE MANAGER (Primary)..... \_\_\_\_\_ Ph# \_\_\_\_\_
- HAZARDOUS WASTE MANAGER (Alternate)..... \_\_\_\_\_ Ph# \_\_\_\_\_
- JBER HAZWASTE FACILITY..... 552-3435

continued

## S-5 Spill Response, continued



# SPILL REPORTING

## REPORT ALL SPILLS TO:

**JBER.Spill.Report@us.af.mil**

### WHEN REPORTING INCLUDE:

- Your name and contact information
- Time of spill or discovery
- Location of spill or discovery
- Type and quantity of substance spilled
- Actions taken (cleaned up, contained, evacuated area, etc.)
- Call 907-384-2478 with any questions

### Spills of Petroleum, Oil, or Lubricants (POLs)

- First, if capable, contain and clean up the contaminated area; if in doubt call 911
- Second, submit a report to the Environmental Element (JBER.Spill.Report@us.af.mil)
- Call the Hazardous Waste Center at 552-3435 to obtain containers for wastes and disposal

### CALL 911 WHEN:

- GREATER than 10 gallons of POL is released to the environment or to floor drains
- ANY amount of hazardous waste/material is released
- ANY amount of POL or hazardous waste/material is released to waters of the U.S. (lakes, rivers, storm drains, etc.)
- The spill presents a fire, safety, or health risk
- The spill cannot be contained or spill response equipment is not available

**MAKE SURE YOU STATE "NON-EMERGENCY" IF ASSISTANCE ISN'T NEEDED TO CLEAN UP THE SPILL**

# Storm Water

## General Information

Unlike wastewater that enters JBER's sanitary sewer system, storm water runoff generated on JBER goes untreated and is discharged into surface waters.. When it rains or the snow melts, oils, antifreeze, detergents, pesticides, pet waste, grass clippings, and other pollutants get washed from driveways, backyards, parking lots, and streets into storm drains or ditches. The drains and ditches direct storm water to swales leading to Ship Creek, wetlands, or Cook Inlet.

It is critical that we all do our part in preventing pollutants from entering the storm water system. Polluted runoff is the nation's greatest threat to clean water. At JBER, we comply with three separate storm water permits that are meant to protect water quality.

## Construction Activities (Contractors)

This state-issued general permit is required for construction projects that disturb one or more acres of land and where those discharges enter waters of the U.S. (directly or through a storm water conveyance system) or an MS4 leading to waters of the U.S.. The CGP requires preparation of a site-specific storm water pollution prevention plan (SWPPP). SWPPP requirements are discussed in the CPG. The SWPPP must indicate which actions the contractor will take to ensure sediment is kept on site and which actions the contractor will take if sediment leaves the site”

It also much address management of all other potential pollutants on the project site (fuels, oils, solvents, etc.). A permit must be obtained by the prime contractor and/or the entity responsible for making changes to the project plans. All SWPPPs must be reviewed and approved by the 673d CES/CEIEC Water Program Manager BEFORE a notification of intent (NOI) is filed with the state.

continued 

## **S-6 Storm Water (Construction), continued**

### **Multi-Sector General Permit (Mission Support Activities)**

At JBER, a majority of the facilities that support airfield and military vehicle maintenance operations are covered under the MSGP. These activities (refueling aircraft, washing vehicles, repairing vehicles and equipment, and deicing airplanes) are regulated under the MSGP because of their potential for products they use to be exposed to storm water. Key individuals at these facilities are training to understand the regulatory requirements as well as know their specific role in protecting our waterways. Specific details on which buildings are included, what sampling and monitoring JBER's Environmental team conducts, and what you can do to help, is available in JBER's SWPPP.

### **Municipal Separate Storm Sewer System Permit (Everyone)**

As with every small community, each individual has a responsibility to make sure that waste gets disposed of correctly, and that we protect all streams, creeks, and waterways. On JBER, it is no different. Everyone is responsible for preventing storm water pollution. Here are a few ways that you can help:

- Keep your vehicle free of leaks and spills;
- Clean up after your pet;
- Practice safe lawn and garden habits;
- Properly dispose of hazardous materials and waste;
- Report all hazardous material and waste spills.

For more details about storm water and what you can do to help, visit the JBER Storm Water website for the SWPPP at:  
<http://www.jber.jb.mil/Services-Resources/Environmental/>

# Tires

## General Information

Tires may be used for many purposes. About 290 million tires are disposed of annually in the United States (source: [www.earth911.com](http://www.earth911.com))

## Waste Characterization

Tires are very durable and do not break down easily. Stockpiling of tires can be a safety and environmental issue. Tire fires are very difficult to extinguish and release toxins into the air and create oil residue on the ground. Stockpiled tires are also breeding grounds for mosquitos and rodents that can carry diseases.

## Handling and Disposal Procedures

Unit/military tires are considered Class 9 repair parts. Ensure that tires are properly accounted for by maintenance personnel before disposal. Follow your unit's turn-in procedures.



# Toner and Ink Cartridges

## General Information

Over 375 million empty toner and ink cartridges are thrown into the trash every year in the U.S. Most of these printer cartridges end up on landfill sites or in incinerators. This mountain of waste can be reduced through reuse and recycling, yet approximately 70 percent of all ink cartridges and 50 percent of all toner cartridges are still not recycled.

Help us keep printer cartridges out of our waste stream and landfill by recycling and buying remanufactured cartridges. Buying recycled cartridges can reduce cost up to 50 percent as well.

## Waste Characterization

The plastics used in printer cartridges are made of an engineering grade polymer that has a very slow decomposition rate that ranges between 450 and 1,000 years. Ink cartridges may also leak excess printer ink, polluting the surrounding environment.

## Handling and Disposal Procedures

- Up to 97 percent of the materials that make up a printer cartridge can be recycled or reused.
- Printer cartridges can be refilled 5-7 times before reaching the end of their life.
- Contact Anchorage Municipal Landfill or the vendor for off-base toner and ink cartridge recycling.



# Universal Wastes

## General Information

Universal Wastes refer to items such as batteries, pesticides, mercury containing equipment, and lamps/bulbs. Universal wastes are widely generated wastes and require special handling and disposal procedures.

## Waste Characterization

A battery is any device consisting of one or more electrically connected electrochemical cells which are designed to receive, store, and deliver electric energy. The term "battery" also includes an intact, unbroken battery from which the electrolyte has been removed.

Pesticide means any substance or mixture intended for preventing, destroying, repelling, or mitigating any pest.

Mercury containing equipment contains elemental mercury integral to its function, such as thermostats (but excluding batteries and lamps).

Universal waste lamp bulbs can be fluorescent light bulbs or mercury-containing bulbs.

## Potential Hazards

Failure to properly manage and dispose of Universal Wastes is harmful to unit personnel and environmental health, and is a violation of environmental regulations. Refer to waste specific SDSs for potential hazards and disposal procedures.

## Situational Awareness

If you observe a potential hazard regarding Universal Waste, contact JBER HWC at 552-3435.

# Unknown Materials

## General Information

Every effort should be made to properly mark/label containers of hazardous materials.

## Potential Hazards

Unmarked/unlabeled containers and chemicals pose a great risk to personnel and the environment. Unmarked/unlabeled containers are violations of safety and environmental regulations and may result in safety and environmental violations and fines.

## Waste Characterization

Chemical identification/characterization must be made prior to proper disposal. Analytical testing of unknown materials is expensive. Every effort must be made to properly identify the contents of any unmarked/unlabeled containers to avoid this unnecessary expense. Unknown materials must be managed as a HAZARDOUS WASTE until proper identification can be made.

## Handling and Disposal Procedures

Step	Procedure
1	Make every safe attempt possible to identify possible contents without putting yourself or others at risk.
2	If unable to identify the material/chemical, manage the material as a hazardous waste and contact the JBER HWC at 552-3435 for guidance.



# Used Oil (Motor Oil; Diesel Fuel; Transmission, Brake, and Hydraulic Fluid; Synthetic and Heating Oils)

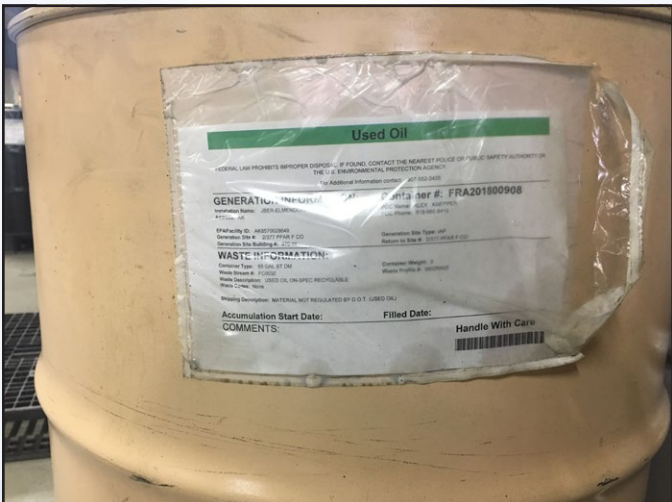
## General Information

Used oil includes all of the following items: motor oil, diesel fuel, transmission fluid, brake fluid, hydraulic fluid, synthetic oils and heating oil. Used oil is generated by vehicle/aircraft repair and maintenance services. Used oil is regulated by used oil regulations and always must be properly marked "USED OIL."

## Potential Hazards

Mismanagement of used oil could be harmful to the environment and may result in fines by the ADEC and the EPA. Never mix solvents, antifreeze or other hazardous waste with used oil.

continued



## U-3 Used Oil (Motor), continued

### Waste Characterization

When managed properly, used oil is a RECYCLABLE MATERIAL.

### Handling and Disposal Procedures

Step	Procedure
1	Ensure that your facility is authorized to collect used oil by contacting the JBER HWC at 552-3435.
2	All containers containing free flowing used oil must be marked with the words "USED OIL." This includes drums and drain pans.
3	Transfer used oil to the appropriate drum in the SAA.
4	Do not mix used oil with antifreeze or any other material. If used oil becomes contaminated, contact the JBER HWC for assistance.
5	Drip pans with oil and water should not be poured in used oil container; see Drip Pans (fact sheet D-1) for disposal procedures.

***For Personally Owned Vehicles used oil, take to the Auto Hobby Centers, Anchorage Regional Landfill, or the Anchorage Central Transfer Station used oil collection areas.***

# Vegetation

## Protection

Protection of vegetation assists in the control of flooding, soil erosion, dust, water filtration, helps maintain aesthetic values, and control invasive species. Vegetative buffers are required near lakes, streams and wetlands.

Clearing of vegetation (trees, shrubs, turf or any other surface vegetation) is limited to the construction area only as outlined on an approved site plan. All vegetation outside of the development area shall be maintained and protected from direct and/or indirect impacts of activities including, but not limited to, construction, training, and/or recreational uses. Areas to be preserved shall be protected by placing a highly visible fence around the perimeter of the area and instructing users to avoid activities that would impact the area, such as driving All-Terrain Vehicles (ATVs) or other equipment, staging materials or soils used for construction or road maintenance, digging, mowing, cutting, or plowing soil, and herbaceous or woody vegetation. Temporary, accidental, or incidental impacts to vegetation shall be restored to its prior condition and composition, free of invasive weeds, upon completion of site activities.

## Regulations

Protection of existing vegetation, structures, equipment, utilities, and improvements by military contractors is outlined in 48 CFR 52.236-9. Further, Executive Order 13112, Invasive Species, requires all federal agencies to prevent the introduction of invasive species, to provide for their control, and to minimize economic, ecological, and human health impacts that invasive species may cause.

Vegetative buffers, as defined in the INRMP, require no disturbance of vegetation within 100 feet of an anadromous streams and fish bearing lakes and ponds; 85 feet of headwaters and tributaries of anadromous streams or those that drain into fish bearing lakes and ponds; and 65 feet of all other waters. A minimum 15-foot buffer is required for all wetlands. High quality wetlands require a 25-foot

## V-1 Vegetation, continued

buffer. Harvest of timber may not be undertaken within 100 feet immediately adjacent to an anadromous or high value resident fish waterbody.

### Planting

Parties needing to plant surface vegetation on JBER need to coordinate with the 673d CES/CEIEC Office (384-3913) to ensure that invasive plant species are not planted on JBER. Seed mixes should contain only native grasses and forb species. Locally adapted species are strongly recommended where practicable. The State of Alaska Prohibited and Restricted Noxious Weed List may be found at <http://plants.alaska.gov/invasives/noxious-weeds.htm>.

### Potential Hazards and Risks

Failure to maintain an adequate vegetative mat may lead to erosion and pollutants entering water bodies. Sediment trapped in storm drain catch basins will need to be cleaned out more often, which leads to additional costs. Vegetative upland buffers no less than 100 feet must be maintained between construction and/or project areas, streams, and wetlands.

- **Damaged or destroyed vegetation will need to be replaced, which leads to additional cost.**

Invasive species can be a threat to natural resources, impact local economies, and adversely affect the military mission.



# Wetlands

## Definition

Wetlands are defined as “Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of wetland vegetation typically adapted for life in saturated soil conditions.” To be classified as a wetland, the area must meet all three of the following wetland criteria:

**Hydrology:** Soil must be saturated to the surface (within 12 inches) for at least 5% of the growing season. This means that an area may be classified as a wetland even if there is no visible water on the surface.

**Soils:** Soils must contain unique characteristics indicating the presence of water, such as having a thick, dark, organic layer, or discolorations in the soil indicating prolonged saturation.

**Vegetation:** Vegetation must be dominated by wetland species that are specifically adapted to prolonged saturation in wet soils.

Wetlands provide important ecological and economic benefits to the human, biological, and physical environment. The functions and values of wetlands include habitat for fish and wildlife, protection of water quality, support for groundwater recharge and discharge, protection from erosion into lakes and streams, stabilization of shorelines, recreation space, and protection from flooding. It is in recognition of these functions and values that wetlands are protected by federal law.

## Regulations

Protection of wetlands and waters is mandated by federal law. Section 404 of the Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act of 1899 require that any necessary discharge of fill materials into waters of the U.S., their tributaries or wetlands, must be authorized by the U.S. Army Corps of Engineers. Discharge of wetlands includes a temporary or permanent application of fill materials, including incidental discharge, such as (but not limited to) soil, rock, dredge sediment, concrete,

continued

## W-1 Wetlands, continued

etc. Executive Order 11990 requires a finding of No Practical Alternative for all construction activity in a wetland regardless of jurisdictional status.

### Project Planning

Projects that are unable to avoid wetland impacts will be required to have a wetland delineation and functional assessment performed by a qualified wetland scientist, have a Jurisdictional Determination completed by the U.S. Army Corps of Engineers, demonstrate all efforts to avoid and minimize direct, indirect, temporary, and permanent impacts to wetlands, and provide a plan for mitigating the effect of the project on the wetlands, including provision of compensatory wetland mitigation if required.

Clearing of vegetation (trees, shrubs, turf or any other vegetation) above the soil surface is not regulated by the CWA, but is limited to the construction area only as outlined on an approved site plan. All vegetation outside of the development area shall be maintained and protected from direct and/or indirect impacts of activities including, but not limited to, construction, training, and/or recreational uses. Areas to be preserved shall be protected by placing a highly visible fence around the perimeter of the area and instructing users to avoid activities that would impact the area such as driving ATVs or other equipment; staging materials or soils used for construction or road maintenance; digging, mowing, cutting, or plowing soils and herbaceous or woody vegetation. Temporary, accidental, or incidental impacts to wetlands must be restored to their prior condition – including topographical elevation, slope, aspect, and contour, and be free of invasive weeds upon completion of site activities.

### Potential Hazards and Risks

Failure to protect wetlands may lead to erosion and pollutants entering water bodies, loss of critical plant and animal habitat, damage from flooding and/or loss of public values – in addition to the potential action by the EPA for CWA violations. Clear avoidance of wetlands includes vegetative upland buffers no less than 100 feet between construction and/or project areas and wetlands.

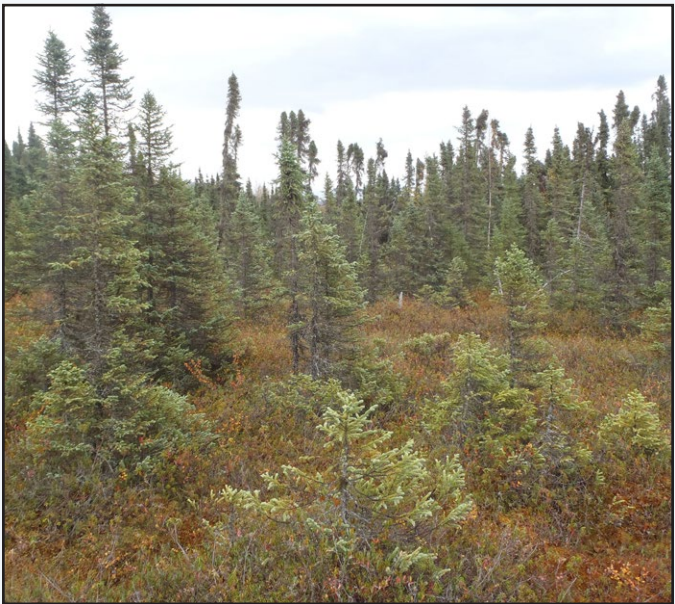
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## W-1 Wetlands, continued

Damaged or destroyed wetlands may be subject to legal action by the EPA. Avoidable impacts may require restoration will need to be replaced, which leads to additional costs.

Parties with concerns regarding project impacts to wetlands on JBER need to coordinate with the 673d CES/CEIEC Office Wetland Ecologist (384-3913) for guidance on project planning around wetlands on JBER.





# Acronyms

<b>ABWI</b>	Air Base Wing Instruction
<b>ADEC</b>	Alaska Department of Environmental Conservation
<b>AEI</b>	Air Emissions Source Inventory
<b>AFCEC</b>	Air Force Civil Engineer Center
<b>AGM</b>	Absorbed Glass Mat
<b>AST</b>	Aboveground Storage Tank
<b>ATV</b>	All-Terrain Vehicle
<b>AVGAS</b>	Aviation Gasoline
<b>AWWU</b>	Anchorage Water and Wastewater Utility
<b>CARC</b>	Chemical Agent Resistant Coating
<b>CATEX</b>	Categorical Exclusion
<b>CES</b>	Civil Engineer Squadron
<b>CES/CEIEC</b>	Civil Engineer Squadron, Environmental Quality
<b>CES/CENPP</b>	Civil Engineer Squadron, Environmental Planning
<b>CES/CZOP</b>	Civil Engineer Squadron, Environmental Restoration
<b>CFC</b>	Chlorofluorocarbon
<b>CFR</b>	Code of Federal Regulations
<b>CGP</b>	Construction General Permit
<b>CWA</b>	Clean Water Act
<b>DoD</b>	Department of Defense
<b>EA</b>	Environmental Assessment
<b>ECAMP</b>	Environmental Compliance Assessment Management Program

<b>EESOH-MIS</b>	Enterprise Environmental Safety and Occupational Health-Management Information System
<b>EIAP</b>	Environmental Impact Analysis Process
<b>EIS</b>	Environmental Impact Statement
<b>EMS</b>	Environmental Management System
<b>EPA</b>	Environmental Protection Agency
<b>EPCRA</b>	Emergency Planning and Community Right-to-Know Act
<b>EPF</b>	Environmental Planning Function
<b>FRH</b>	Flameless Ration Heater
<b>FSC</b>	Federal Stock Class
<b>GSA</b>	General Services Administration
<b>HAZCOM</b>	Hazard Communication
<b>HAZMART</b>	Hazardous Materials Pharmacy
<b>HAZMAT</b>	Hazardous Material
<b>HCFC</b>	hydro chlorofluorocarbon
<b>HEMTT</b>	Heavy Expanded Mobility Tactical Truck
<b>HID</b>	High Intensity Discharge
<b>HMMP</b>	Hazardous Material Management Process
<b>HWC</b>	Hazardous Waste Center
<b>INRMP</b>	Integrated Natural Resources Management Plans
<b>ISO</b>	International Organization for Standardization
<b>JBER</b>	Joint Base Elmendorf-Richardson
<b>JP-8</b>	Jet Propulsion 8
<b>LUC</b>	Land Use Control
<b>MEDCOM</b>	Medical Command
<b>MEK</b>	Methyl Ethyl Ketone
<b>MoGas</b>	Motor Gasoline

<b>MPK</b>	Methyl Propyl Ketone
<b>MRE</b>	Meals Ready to Eat
<b>MS4</b>	Municipal Separate Storm Sewer System
<b>MSGP</b>	Multisector General Permit
<b>NEPA</b>	National Environmental Policy Act of 1969
<b>NOI</b>	Notification of Intent
<b>NSN</b>	National Stock Number
<b>ODS</b>	Ozone Depleting Substance
<b>OSHA</b>	Occupational Safety and Health Administration
<b>P2</b>	Pollution Prevention
<b>PCB</b>	Polychlorinated Biphenyl
<b>POL</b>	Petroleum, Oil, and Lubricant
<b>PPE</b>	Personal Protective Equipment
<b>QRP</b>	Qualified Recycling Program
<b>QSL</b>	Quality Status List
<b>RCRA</b>	Resource Conservation and Recovery Act
<b>RMW</b>	Regulated Medical Waste
<b>SAA</b>	Satellite Accumulation Area
<b>SDS</b>	Safety Data Sheet
<b>SLES</b>	Shelf Life Extension System
<b>SOP</b>	Standard Operating Procedure
<b>SPCC</b>	Spill Prevention, Control, and Countermeasure
<b>SPCC/CPlan</b>	Spill Prevention, Control, and Countermeasure Plan/Oil Discharge Prevention and Contingency Plan
<b>SWPPP</b>	Storm Water Pollution Prevention Plan
<b>TSDF</b>	Treatment, Storage, and Disposal Facility
<b>UEC</b>	Unit Environmental Coordinator
<b>UPS</b>	Uninterrupted Power Supply





