Environmental Handbook



U.S. Army Fort Greely, Alaska

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Protecting Our Environment

Keeping the environment clean and safe is a responsibility we all share. Our efforts are essential to the success of protecting health and the environment, not only for ourselves but for future generations as well.

The purpose of this Environmental Handbook is to give Fort Greely personnel, residents, and contractors guidance on the primary environmental rules and regulations that affect their daily activities. All personnel (including contractors) working at Fort Greely are required to follow all environmental requirements, including U.S. Army policies and procedures, Fort Greely policies and procedures, and all local, State, and Federal laws.

Environmental Laws and Compliance

Protecting the environment is not just a good idea—it's the law! Numerous and increasingly stringent local, State, Federal, Army, and DoD environmental laws and regulations have been enacted in the past 35 years. Penalties for non-compliance are severe and can be levied against both the installation and those individuals knowingly involved.

The Army is committed to maintaining total environmental compliance. Copies of all applicable laws and regulations can be found at the Department of Public Works Environmental Office. If you are unsure about your compliance or reporting responsibilities, please contact the Department of Public Works Environmental Office at (907) 873-4664.

Environmental Management System

The Fort Greely Environmental Management System (EMS) is a set of management processes and procedures that allow the organization to analyze, control, and reduce the environmental impact of its activities, products, and services and operate with greater efficiency and control. The EMS integrates the environment into everyday business operations and environmental stewardship becomes part of the daily responsibility across the entire organization, not just in the

environmental department. An EMS is an installation commitment. It includes everyone from the Commander to the workers to the residents. Everyone can and should take part.

Environmental awareness training is required for all workers. Copies of the Fort Greely Environmental policy are Fort Greely is firmly committed to environmental leadership, utilizing the best management practices in all that we do, and focusing on environmental stewardship for all lands and activities under our control.

posted throughout the installation and can also be obtained from the Department of Public Works Environmental Office, by calling (907) 873-4664.

General Do's and Don'ts

It is everyone's responsibility to protect the plants, animals, and natural habitat at our installation. Following is a general list of do's and don'ts.

- **DO** limit vehicle movement to established, existing roads.
- **DO** remain on marked trails and designated routes.
- **DO** properly dispose of litter and trash.
- **DON'T** drive on the edges of roads, which causes washout and erosion.
- **DON'T** drain oil or pour other hazardous substances onto the ground.
- DON'T feed or harass wildlife.

RESIDENTS

--- Waste Management ---

All waste generated on Fort Greely is to be disposed of on Fort Greely or delivered to the hazardous waste disposal contractor (907-873-1007).

Non-Hazardous Household Waste

Segregate garbage in the following manner.

- Mixed paper, corrugated cardboard, #1 plastic (water and soft drink bottles) and aluminum cans go into separate designated recycling dumpsters. Mixed paper includes cardstock, paperboard, newspaper, and office paper.
 Corrugated cardboard boxes should be broken down before depositing in the appropriate recycling dumpster.
- All other garbage (food, etc.) goes into the mixed waste dumpster.
- Paints, paint thinners, pesticides, poisons, automotive fluids, aerosol cans, and propane tanks are not to be put in the dumpsters or down drains. Please call the Department of Public Works Environmental Office at (907) 873-4664 or the hazardous waste disposal contractor at (907) 873-1007 for disposal information on these items.

Fort Greely's recycling program includes: cardboard, mixed paper, #1 plastic and aluminum cans. Bins for recyclables are available to residents and additional dumpsters are available for the collection of recyclables. Contact the Environmental Office and North Haven Communities for more information on the recycling program.

Hazardous Household Waste

Some jobs around your quarters may require the use of products containing hazardous components. Such products may include oilbased paints, cleaners, stains and varnishes, car batteries, motor oil, and pesticides. The leftover contents of such consumer products are known as "household hazardous waste." When improperly disposed of, household hazardous waste can create a potential risk to people and the environment.

Individuals sometimes dispose of household hazardous wastes improperly by pouring wastes down the drain or toilet, onto the ground or by putting them out with the trash. The dangers of such disposal methods may not be immediately obvious, but certain types of household hazardous waste have the potential to cause physical injury to sanitation workers; contaminate wastewater treatment systems; and degrade the environment.

Periodically, the Department of Public Works Environmental Office in conjunction with North Haven Communities, will conduct a household hazardous waste collection effort. You will be notified of the waste collection times and given waste collection instructions. If you have questions or need to dispose of household hazardous waste at times other than the normal collection times, contact the Department of Public Works Environmental Office at (907) 873-4664 or the hazardous waste disposal contractor at (907) 873-1007.

Proper Chemical Use, Storage, and Disposal Fort Greely Residential Areas

- Read safety instructions on household product labels.
- Do not pour excess chemicals down the drain or onto the ground.
- Purchase only the amount of product that you need to prevent having excess products that must be disposed of.
- Use only the recommended amount.
- Use the oldest product first, to prevent spoilage.
- Reuse or recycle surplus products.
- Use proper safety measures as directed on the product label.
- Never mix products unless approved by the manufacturer.
- Do not store incompatible products together.
- Substitute less toxic products when possible.
- Keep products in original containers.
- Keep products stored away from the reach of children.
- Do not store chemicals near heat or flames.
- Do not store chemicals outside without protection from the weather.
- Make sure containers are in good condition.
- Protect containers from spilling or breaking during transportation.

--- Spills and Emergency Response ---

Chemical and petroleum spills (e.g., motor oil, antifreeze, gasoline, paints, paint thinner etc.) pose a significant threat to human health and the environment and are costly to Fort Greely. Federal and State laws prohibit the discharge of oil or

Immediately report all spills to the Fort Greely Emergency Dispatch at 873-3473 (FIRE)

hazardous substances into the environment without a permit and the penalties for non-compliance can be severe.

If you discover or cause a spill, immediately evacuate the spill area and call Emergency Dispatch at (907) 873-3473 (FIRE). Provide Emergency Dispatch with as much of the following information as you have:

- Name and telephone number of person making notification
- Exact location of spill or emergency
- Type and description of emergency
- Estimate of amount and type of material spilled
- Extent of actual or potential environmental damage
- Injuries or property damage, if any
- Possible hazards to off-post human health and environment
- Immediate response actions taken

--- Water Resources and Wastewater Management ---

Drinking Water

Doyon Utilities produces and distributes drinking (potable) water at Fort Greely. Source water is derived from an underground aquifer at depths of 200 feet. Doyon Utilities oversees the operation of drinking water systems in the cantonment area. The Missile Defense Agency's prime contractor operates the Missile Defense Complex water systems. The drinking water service for housing and the school is provided by the cantonment system. Because of the pristine nature of the water, treatment is not required except for the addition of chlorine and fluoride. In compliance with both Army and State of Alaska regulations, the following procedures for drinking water are in effect.

- Water is tested on a regular basis for contaminants using special instruments at Fort Greely and independent, certified laboratories.
- On or before July 1 of each year, Doyon Utilities provides a *Consumer Confidence Report (Water Quality Report)* to all consumers. The report gives drinking water test results (e.g., total coliform) for the previous calendar year.
- In the event the drinking water becomes contaminated, the water provider will provide notices to all housing units, the school, organizations, offices, and tenants. Notices will be posted in offices and public locations throughout Fort

- Greely. Depending on the nature of the contamination, a notice will be published in the *Delta Wind* and the *Fairbanks Daily News Miner*.
- If the contamination poses an acute risk to human health, a notice will be broadcast over the regional radio and television stations.

Consumers are encouraged to contact Doyon Utilities at (907) 869-3600 or the Environmental Office if their drinking water ever tastes, smells, or appears abnormal.

Domestic Wastewater

Doyon Utilities oversees operation of the Fort Greely wastewater treatment systems. Wastewater generated on the Fort Greely cantonment area is treated in sewage lagoons and then discharged to Jarvis Creek. Wastewater generated in the airfield area or Missile Defense Complex is disposed by septic systems. The wastewater system is designed for the treatment of domestic sewage.

- Use household cleaning chemicals in the manner instructed by the manufacturer. Only cleaning chemicals that are marked safe for sanitary use are to be poured down sinks, drains, or lavatories.
- Contact the Department of Public Works Service Desk at 873-3188 if your drain or lavatory malfunctions.
- Information on method and location for disposal of chemicals, poisons (e.g., herbicides and pesticides), paint, oil, and the like is provided in the Waste Management section of this handbook.

Storm Water

The major body of surface water in the Fort Greely vicinity is Jarvis Creek. During periods of heavy rainfall and snowmelt, water run-off is channeled through storm water ditches to the creek. Fort Greely

has a storm water plan in place to control pollutants reaching Jarvis Creek.

- Wash-down activities and vehicle washing are to be conducted in designated areas. Washing personal vehicles is allowed in the residential area. Contact the Department of Public Works Environmental Office (907) 873-4664 for a complete listing of designated areas.
- Practice good housekeeping when outside by properly disposing of trash in closed containers to prevent debris from floating into storm ditches.
- No oil or antifreeze changes are allowed in the residential area. Utilize commercial services or the Auto Hobby Shop for oil and antifreeze changes.

--- Asbestos ---

Asbestos is a naturally occurring fiber that was widely used prior to 1980 for its heat-resistant properties. Some forms of asbestos can cause lung disease or cancer if its fibers are inhaled. While much of the asbestos contained in Fort Greely buildings has been removed, some

Do not disturb items containing asbestos! Contact the Department of Public Works Environmental Office before starting any work that may disturb asbestos or any renovation or demolition project.

still remains in floor tiles, pipe insulation, and other materials. This remaining asbestos does not pose a safety concern unless it is disturbed or damaged and asbestos fibers are released into the air.

Asbestos removal, which is regulated under Federal and State laws, can only be performed by properly trained and certified workers. If you suspect that asbestos-containing materials have been damaged in your living area or if you have any other asbestos related questions, contact the Department of Public Works Environmental Office at (907) 873-4664 for assistance.

--- Lead Based Painted Materials ---

Lead was a common ingredient for paint pigments up until the late 1970's. Lead based paint becomes a problem as it deteriorates over time or if it is disturbed, creating dust and chips that may be inhaled or ingested.

Many of the Fort Greely buildings were built prior to 1980 and may contain lead based paint. The walls in these facilities may be safely maintained by repainting, but the painted surfaces should not be disturbed. Only properly trained personnel may demolish or renovate facilities that may contain lead based paint. Contact North Haven Communities at (907) 869-3032 to report any peeling or damaged paint in your quarters. Contact the Department of Public Works Environmental Office at (907) 873-4664 or North Haven Communities for guidance before starting any renovation projects.

--- Mold ---

Molds are microscopic organisms commonly found both indoors and outdoors. Molds, along with mushrooms and yeast, are known scientifically as fungi. Molds reproduce by means of tiny spores; the spores are invisible to the naked eye and float through outdoor and indoor air. Mold may begin growing indoors when mold spores land on surfaces that are wet. Mold growth on surfaces can often be seen as a colored spot, frequently green, gray, brown, black, or white. It commonly appears as a powdery, fuzzy, or hair-like material. Actively growing molds typically produce odors, sometimes

described as earthy or ammonia-like.

Large-scale mold problems are most likely to occur when there has been an ongoing water leak, a flood, or very high levels of humidity in the home.

- The key to mold control is moisture control.
- Dry water-damaged areas and items within 24-48 hours to prevent mold growth.
- If mold is a problem in your quarters, report the problem to the housing provider.

Molds produce allergens, irritants, and, in some cases, potentially toxic mycotoxins that may cause health problems when inhaled or touched by sensitive individuals. Allergic responses include hay fever-type symptoms, such as sneezing, runny nose, red eyes, and skin rash (dermatitis).

Mold spores will not grow if moisture is not present. Indoor mold growth can and should be prevented or controlled by controlling moisture indoors. If there is mold growth in your quarters, contact North Haven Communities at (907) 869-3032 or the Environmental Office at (907) 873-4664.

--- Radon ---

Radon is a naturally occurring, colorless and odorless gas that is a decay product of the elements uranium and radium. Radon is a hazard because it is a known cancer-causing agent. Radon can become concentrated in an "air-tight" building and then be inhaled by the building's occupants. All existing facilities at Fort Greely have been tested for radon. New facilities will be tested as they come online and action will be taken if the radon levels occur above the action level established by the U.S. Army and the U.S. Environmental Protection Agency. Contact the Department of Public Works Environmental Office at (907) 873-4664 for additional information.

--- Noise ---

Noise can be a nuisance and potentially impact public health. Fort Greely has set up a noise complaint program. If you have any noise problems or complaints, please call the Fort Greely Public Affairs Officer at (907) 873-5023.

--- Open Burning ---

Open burning (vegetation, debris, etc.) is generally prohibited at Fort Greely. Please direct any questions on this issue to the Fire

Department at (907) 873-3473 and the Department of Public Works Environmental Office at (907) 873-4664.

--- Pest Management ---

Pesticides are strictly regulated under State and Federal laws such as the Federal Insecticide, Fungicide and Rodenticide Act. The Army requires that only certified personnel can apply commercial pesticides. The commissary carries a limited number of approved pest control products that can be used by Fort Greely residents. All other pest control efforts on Fort Greely are to be handled by the base operations service contractor.

If you are experiencing a problem with insects (roaches, silverfish, bees, wasps, and mosquitoes), animals (rodents and birds), or plants (broadleaf weeds or other vegetation), please contact the Department of Public Works Environmental Office at (907) 873-4664.

--- Natural Resources ---

It is the Army's goal to conserve, perpetuate, and enhance the natural ecosystems present on Army lands. Natural ecosystems are best maintained by protecting the biological diversity of native plants and animals

Land Management

The destruction of trees and vegetation should never be carried out without consultation and concurrence by the Department of Public Works Environmental Office at (907) 873-4664. When operating heavy equipment, care should also be taken to avoid mechanical damage to tree trunks and roots.

Wildlife Management

Hunting is prohibited on the Fort Greely cantonment area. For information on hunting and fishing on Donnelly Training Area, contact the Integrated Training Area Management Specialist at (907) 873-1614.

A protected species at Fort Greely is the migratory swallow. Swallows, nests, eggs, and chicks are never to be disturbed or destroyed and anyone observing activities of this nature must immediately report the incident to the Environmental Office at (907) 873-4664. Please consult the

Immediately report any incidents of swallow nest, egg, or chick destruction to the Environmental Office at (907) 873-4664.

Integrated Training Area Management Specialist at (907) 873-1614, and the Environmental Office at (907) 873-4664 for further information on these birds and for a complete list of all the species that make their home in the Fort Greely area.

--- Historic, Archaeological, and Cultural Sites ---

The Fort Greely area is rich in pre-historic archaeological sites. Knowledge of the location of these sites is restricted to prevent looting and desecration. Requests for any type of ground disturbance activities must be made to the Department of Public Works Environmental Office well in advance of the proposed activity (see the section on digging, herein). The office will provide information about whether the project may affect a known site.

Archaeological resources discovered on Federal property are protected under the Archaeological Resource Protection Act. If an archaeological site or an artifact is discovered during the course of any activity, contact the Department of Public Works Environmental Office, (907) 873-4664. Record the location of the site and ensure that neither the site nor the artifacts are disturbed.

BASE WORKERS

THIS SECTION APPLIES TO BOTH GOVERNMENT AND CONTRACTOR PERSONNEL

--- Hazardous Materials Management ---

Hazardous materials are used at Fort Greely to clean restrooms, paint facilities, lubricate vehicles, control pests, and for numerous other reasons. All hazardous materials must be handled, used, stored, and disposed of properly to ensure personnel safety and to prevent an adverse environmental impact.

Area supervisors must ensure that all hazardous materials are identified with a clearly legible manufacturer's label or other appropriate label containing product and hazard information. Proper labeling is critical to providing a safe work environment and is an important part of the Fort Greely Right-to-Know Program. Every hazardous material used at Fort Greely must have readily available a Material Safety Data Sheet (MSDS) from the product manufacturer. The MSDS is a critical source of chemical identification and health

and safety information. If you need assistance in locating an MSDS, call the Fort Greely hazardous waste contractor at (907) 873-1007.

Another element of the Rightto-Know Program is training. All Fort Greely personnel who use hazardous chemicals as part of their job have a right and a need to know about the hazards of the chemicals they are using.

Material Safety Data Sheets Provide:

- Manufacturer information
- Product information
- Hazardous ingredients
- · Physical data
- Fire and explosion data
- · Health hazard data
- Reactivity data
- Spill and disposal procedures
- Required personal protective equipment
- Storage and handling procedures
- Transportation and additional information

Supervisors must provide documented hazard communication training when an employee begins work at Fort Greely, when the physical or health hazards change in the work area, or when an employee moves to a new work area. For additional information, contact the Fort Greely Safety Office at (907) 873-5031 or your organization's safety representative.

Asbestos

Asbestos is a naturally occurring fiber that was widely used prior to 1980 for its heat-resistant properties. Some forms of asbestos can cause lung disease or cancer if its fibers are inhaled. While much of the asbestos

Do not disturb items containing asbestos! Contact the Department of Public Works Environmental Office before starting any building repairs that may disturb asbestos or any renovation or demolition project.

contained in Fort Greely buildings has been removed, some still remains in floor tiles, pipe insulation, and other materials. This remaining asbestos does not pose a safety concern unless it is disturbed or damaged and asbestos fibers are released into the air.

Only properly trained and certified workers can perform asbestos removal, which is regulated under Federal and State laws. The proper NESHAP notifications must be made prior to renovation or demolition of asbestos containing material and the handling and disposal of the material must be in compliance with all Federal and State regulations (i.e., properly wetted, bagged, and disposed of). Asbestos containing waste materials must be disposed of at specific locations at Fort Greely. If you suspect that asbestos-containing materials have been damaged in your work area or if you have any other asbestos related questions, contact the Department of Public Works Environmental Office at (907) 873-4664 for assistance.

Lead Based Painted Materials

Lead was a common ingredient for paint pigments up until the late 1970's. Lead based paint becomes a problem as it deteriorates over time or if it is disturbed, creating dust and chips that may be inhaled or ingested.

Many of the Fort Greely buildings were built prior to 1980 and may contain lead based paint. The walls in these facilities may be safely maintained by repainting, but the painted surfaces should not be disturbed. Only properly trained personnel may demolish or renovate facilities that may contain lead based paint. Waste and debris containing lead-based paint may be disposed of only under the guidance of the Environmental Coordinator. Contact the Department of Public Works Environmental Office at (907) 873-4664 for guidance before any demolition or renovation projects.

--- Waste Management ---

Unless specifically authorized by the Environmental Office, all waste generated on Fort Greely must be disposed of on Fort Greely or delivered to the hazardous waste disposal contractor.

Non-Hazardous Waste

Segregate garbage in the following manner.

- Mixed paper, corrugated cardboard, #1 plastic (water and soft drink bottles) and aluminum cans go into the separate designated recycling dumpsters. Mixed paper includes cardstock, paperboard, newspaper and office paper. Corrugated cardboard boxes should be broken down before depositing in the appropriate recycling dumpster.
- All other garbage (food, etc.) goes into the mixed waste dumpster.

 Paints, paint thinners, pesticides, poisons, aerosol cans, and propane tanks are not to be put in the dumpsters or down drains. Please call the Department of Public Works Environmental Office at (907) 873-4664 or the hazardous waste disposal contractor at (907) 873-1007 for disposal information on these items.

Fort Greely's recycling program includes: cardboard, mixed paper, #1 plastic and aluminum cans. Bins for recyclables will be placed in offices. Additional dumpsters will be available for the collection of recyclables. The Department of Public Works Environmental Office can provide more information on this program.

Construction and Demolition Debris

Fort Greely has a permitted area to receive inert construction and demolition debris. Only debris that is inert, such as metal, masonry, brick, lumber, concrete, non-asbestos containing roofing material, etc., may be disposed of at the area. Certain categories of waste containing non-regulated asbestos materials may also be disposed of at the site under special conditions. No liquid, putrescible, hazardous, or toxic wastes can be accepted at this location. Authorization for contractors' construction and demolition debris deposits must be gained from the Environmental Office in the form of a Landfill 'Green' Card. Contractors will not be allow to deposit material without a valid card. Advance arrangements to dispose of construction and demolition debris must be made with the DPW Service Desk at (907) 873-3188. Questions concerning the suitability of wastes for this disposal area should be directed to the Environmental Office at (907) 873-4664.

Fort Greely requires all contractors to minimize the amounts of construction and demolition debris disposed of. Waste minimization, reuse and recycling are encouraged for all projects.

Hazardous Waste

Fort Greely uses paints, fuels, oils, cleaners and other chemicals in the course of its operations. Many of these chemicals are hazardous to the environment and must be handled, stored, and disposed of in accordance with a myriad of complex local, State and Federal laws and regulations. Fort Greely has established a waste management program that will ensure that wastes are handled in a safe manner in accordance with the regulations. Failure to follow the requirements of the program can result in worker exposure, adverse environmental impacts, and severe penalties.

The Fort Greely Environmental procedure titled "Hazardous Material & Waste Management" details the procedures to follow regarding waste generation, collection, documentation, and inspections.

Hazardous waste can be accumulated in either Satellite Accumulation Areas, Hazardous Waste Accumulation Areas or Waste Accumulation Areas. ALL accumulation areas must be approved by the Department of Public Works Environmental Office. These accumulation areas have stringent requirements concerning types and quantities of wastes permitted. Contact the Department Of Public Works Environmental Office or the Hazardous Waste Disposal Contractor for ordering containers, labeling, and training to manage the waste properly. Never mix different wastes or add an unknown material to a waste container.

If you manage hazardous materials or generate waste, you will be provided with training to ensure that you do so safely and in accordance with Fort Greely policy and procedures. The training programs include hazardous waste management, hazardous material handling, and hazardous waste operations and emergency response.

Wastes generally fall into one of the following categories: hazardous, non-hazardous, universal, or used oil and antifreeze. Each type of waste has unique regulatory requirements for its proper management. It is important that you follow the instructions provided in the training

and the directions provided by your supervisor, the Department of Public Works Environmental Office, and the hazardous waste disposal contractor. If you are unsure of how to properly manage waste in your work area, don't guess—speak to your supervisor or contact the Department of Public Works Environmental Office at (907) 873-4664 or the hazardous waste disposal contractor.

Fort Greely's goal is to reduce waste generation through pollution prevention efforts. All waste generators are expected to implement good management practices to reduce the quantity of waste generated to the lowest possible levels.

Table 1 identifies some common wastes generated at Fort Greely and provides the typical waste classification.

Table 1. Classifications of Typical Wastes at Fort Greely

Waste Description	Typical Waste Classification
Absorbents, Used – Dry sweep, rags, pads, and booms are all examples of absorbents that are used to absorb oils and chemicals. These contaminated absorbents must be collected and disposed of properly.	Hazardous or non-hazardous based on testing
Aerosol Cans, Empty – Aerosol cans that are empty of liquids and the gas pressure equals atmospheric pressure are considered non-hazardous.	Non-hazardous
Aerosol Cans, Not Empty – These cans will be punctured and emptied by the Fort Greely hazardous waste disposal contractor. The waste generator will collect these cans.	Determined by contents
Antifreeze	Determined by contents
Asbestos Containing Material	Asbestos waste (TSCA regulated)
Batteries – Collect batteries, including lead acid, nickel cadmium, and lithium, for pickup by the Hazardous Waste Contractor. Many of these batteries are recycled. Do not dispose in the trashcans for disposal at the landfill.	Universal waste – used batteries

Table 1. Classifications of Typical Wastes at Fort Greely (Continued)

Waste Description	Typical Waste Classification
Empty Containers – Containers that once held a hazardous material or regulated waste are considered to be empty if all possible material is removed by pumping, pouring, or other means. Empty containers may be sent to the landfill or recycled.	Non-hazardous
Electrical Transformers, Ballasts, Switches, Etc. – These wastes must be collected in containers as prescribed by the Fort Greely Waste Management Contractor. Also, see the entry on PCBs.	Hazardous TSCA regulated or non- hazardous, determined by contents
Fluorescent Lights – These lights may contain mercury in sufficient quantity to be hazardous waste. They should be collected in the original manufacturer's boxes and labeled as universal waste or in a manner prescribed by the Fort Greely Waste Management Contractor. Do not throw these bulbs into the landfill trash bins.	Universal waste or Hazardous waste (broken bulbs) or non- hazardous
Freon Refrigerants – These ozone-depleting substances must be captured for disposal or recovery.	Hazardous waste or recycled
Fuels (Diesel, Gasoline, JP-4, Kerosene, Propane) – Fuels that become a waste because of contamination or expiration must be collected for waste determination.	Hazardous or non-hazardous, determined by contents
Gas Cylinders – Cylinders that still contain pressurized gas must be collected and turned in to the Waste Management Contractor for a waste determination if the supplier cannot take the gas back for reuse or recovery. Empty cylinders should be collected for return to the manufacturer, recycling, or disposal in the landfill.	Hazardous or non-hazardous, determined by contents
Hydraulic Fluid	Determined by contents

Table 1. Classifications of Typical Wastes at Fort Greely (Continued)

Waste Description	Typical Waste Classification
Landfill Waste (Household & Office) – Wastes that are not hazardous, universal, recycled, or otherwise regulated or recoverable will be disposed of in the Fort Greely landfill. These wastes must be stored in a safe and sanitary way that prevents littering and attraction of wildlife. Do not send liquids (e.g., paints, antifreeze, cleaners), hazardous wastes, compressed gases, refrigerants, or materials that can be reused or recycled to the landfill.	Non-hazardous
Lead-Based Paint – Demolition materials and other surfaces that may contain lead based paint must be tested prior to demolition and disposal to determine proper collection and disposal. Contact the Department of Public Works Environmental Office prior to generating waste that may contain lead based paint.	Hazardous or Non-hazardous determined by testing
Oil Filters – Non-terne-plated oil filters that are drained of free-flowing oil should be collected for disposal at the landfill. Terne-plated oil filters contain lead and must be drained and then collected separately for disposal as hazardous waste.	Non-hazardous (non-terne- plated) Hazardous (terne-plated)
Oils and Greases – This waste stream includes oils in engines, transmissions, hydraulic systems, electrical equipment, and other lubricants. Used oils must be collected in properly labeled drums. Never mix oils with other substances, such as hazardous wastes and coolants. Mark all drip pans and temporary containers with the words "Used Oil."	Non-hazardous (unless testing indicates that it is off- specification)
Paint	Hazardous (oil based) Non- hazardous (water based)

Table 1. Classifications of Typical Wastes at Fort Greely (Continued)

Waste Description	Typical Waste Classification
Polychlorinated Biphenyls (PCBs) – Prior to 1978, PCBs were widely used in oil-filled electrical transformers, switches, ballasts, and voltage regulators. Unless an oil-filled item is stamped with a manufacture date after 1978 or is labeled as PCB free, these items should be stored and disposed of as PCB containing.	PCB waste (TSCA regulated)
Solvents and Paint Cleaners	Hazardous
Pesticides and Herbicides	Universal waste (waste pesticides)
Wastewater Containing Soaps and Detergents – This waste may not be discharged directly to the storm sewers or oil/water separators. This wastewater may be discharged to the sanitary sewer.	Non-hazardous
Wastewater Containing Solvents – This waste may not be discharged to the storm sewer, oil/water separators, or sanitary sewer, but must be collected and disposed of separately. Efforts should be taken to eliminate or reduce the quantity of wastewater containing solvents.	Hazardous or non-hazardous, determined by contents

--- Spills and Emergency Response ---

Hazardous substance spills pose a significant threat to human health and the environment and are costly to Fort Greely. Federal and State laws prohibit the non-permitted discharge of oil or hazardous substances into the

Immediately report all spills to the Fort Greely Emergency Dispatch at 873-3473 (FIRE)

environment and the penalties for non-compliance can be severe.

It is the responsibility of all Fort Greely personnel to report spills immediately to the Emergency Dispatch at (907) 873-3473(FIRE). The initial verbal report of the spill should include the following information:

- Name and telephone number of person making notification
- Exact location of spill or emergency
- Type and description of emergency
- Estimate of amount and type of material spilled
- Extent of actual or potential environmental damage
- Injuries or property damage, if any
- Possible hazards to off-post human health and environment
- Immediate response actions taken.

In the event of a spill, personnel trained in spill response should:

- Ensure the safety of all personnel where the spill occurred
- If safe to do so:
 - Extinguish all flames
 - Shut off electricity where disconnect spark is not a hazard
 - Eliminate ignition sources
 - Eliminate routes to water by blocking floor drains and storm drains
 - Stop spill source by closing valves, up righting container, etc.
 - Contain the spill with booms, sorbent, snow, dirt, or other material
 - Recover spilled material or contaminated soil.

When responding to a spill, perform only those actions that you have been trained to do without endangering yourself or others.

Workers in the area may clean up the spill if all of the following conditions exist.

- The workers have sufficient knowledge of the chemicals released, the personal protective equipment, and supplies necessary to clean up the spill.
- The Fire Department has determined that it is safe for the workers in the area to clean up the spill and has authorized the clean up.
- The Fort Greely Environmental Coordinator, or designee, has been notified and provides spill coordination and material disposal support.

Spill Prevention

It is Fort Greely's goal to prevent all spills and to maintain a strong spill prevention and contingency plan. Fort Greely personnel are responsible for promoting spill prevention through the following actions:

- Using drip pans and sorbents for oil transfers, fueling, or maintenance work
- Using and maintaining secondary containment around all tanks, and under portable equipment such as generators, compressors, and heavy equipment
- Monitoring all fuel transfers and checking hoses, fittings, and valves before and after transfers
- Storing fuel, lubricants, oils, and chemicals in designated storage areas with secondary containment
- Maintaining hydraulic hoses and fittings to avoid breakage
- Keeping work sites clean and neat so that no spill goes unnoticed.

--- Digging, Clearing, Well Drilling ---

There are a number of locations on Fort Greely where past activities have resulted in contamination or suspected contamination. In some cases, cleanup actions have been taken and, in others, administrative controls are in place to ensure that any remaining contamination is not disturbed to protect public health. Administrative controls vary from site to site and may include: restrictions on excavations and well drilling; land use limitations; and precautions to limit exposure. Maps and documents locating and describing the known sites of contamination or suspected contamination are available in the Department of Public Works Environmental Office.

All activities involving excavation, land clearing, well drilling, or any type of land disturbance must receive an excavation clearance before beginning. Excavation clearances are granted by the Director of the Department of Public Works, after review and concurrence by the Environmental Office and other offices, including Utilities, Fire Department, Roads and Grounds, Communications, and Public Safety. Excavation clearances may contain special conditions related to administrative controls and all clearances have general conditions regarding the discovery of contamination, historical artifacts, or utilities.

Instructions for any Type of Land Disturbing Activities

- 1. Contact the Department of Public Works Environmental Office to determine if any known or suspected contaminated sites are involved.
- 2. Obtain excavation clearance request forms from the Environmental Office.
- 3. Complete the forms and obtain all required concurrences and approvals before beginning the project.
- 4. Comply with all special and general conditions of the excavation clearance and promptly report any deviations.

--- Dust Control ---

Water use is the Army's preferred method of dust control on gravel roads and training sites. Oil-based products specifically designed for dust suppression may be used only if absolutely necessary for safe operations and only after authorization has been obtained from the Department of Public Works Environmental Office at (907) 873-4664.

--- Open Burning ---

Open burning of any kind (vegetation, construction debris, etc.) is generally forbidden at Fort Greely. Please direct any questions on this issue to the Department of Public Works Fire Department at (907) 873-3473 and the Department of Public Works Environmental Office at (907) 873-4664.

--- Noise ---

Noise can be a nuisance and potentially impact public health. Certain jobs require the use of hearing protection. If yours does, do yourself a favor and use it! If you think your job might require hearing protection but none is offered, talk to your supervisor or the Fort Greely Safety Officer. Fort Greely has set up a noise complaint program. If you have any noise problems or complaints, please call the Fort Greely Public Affairs Officer at (907) 873-5023.

--- Water Resources and Wastewater Management ---

Drinking Water

Doyon Utilities (869-3600) produces and distributes drinking (potable) water at Fort Greely. Source water is derived from an underground aquifer at depths of 200 feet. Doyon Utilities oversees operation of drinking water systems in the cantonment area. The Missile Defense Agency's prime contractor operates the Missile

Defense Complex water systems. The potable water supply for the Missile Defense Complex is a separate system. Because of the pristine nature of the water, treatment is not required except for the addition of chlorine. The potable water at the Main Post is also fluoridated. In compliance with Army and State of Alaska regulations, the drinking water is tested on a regular basis for contaminants.

- On or before July 1 of each year, Doyon Utilities provides a *Consumer Confidence Report (Water Quality Report)* to all consumers. The report gives drinking water test results (e.g., total coliform) for the previous calendar year.
- In the event the drinking water becomes contaminated, the water provider will provide notices to all housing units, the school, organizations, offices, and tenants. Notices will be posted in offices and public locations throughout Fort Greely. Depending on the nature of the contamination, a notice will be published in the *Delta Wind* and the *Fairbanks Daily News Miner*. If the contamination poses an acute risk to human health, a notice will be broadcast over the regional radio and television stations.
- Consumers are encouraged to contact Doyon Utilities at (907) 869-3600 or the Environmental Office if their drinking water ever tastes, smells, or appears abnormal.
- For additional information, please consult the Fort Greely Drinking Water Treatment procedure available at the Department of Public Works Environmental Office.

Wastewater

Doyon Utilities oversees operation of the Fort Greely wastewater treatment systems. Wastewater generated on the Fort Greely Main Post is treated in sewage lagoons. Missile Defense Complex wastewater is discharged to septic tanks and leach fields. All wastewater systems are designed for the treatment of domestic sewage.

- Industrial areas are prohibited from discharging chemicals to floor drains.
- Use cleaning chemicals only in the manner instructed by the manufacturer.
- Only cleaning chemicals that are marked safe for sanitary use are to be poured down sinks, drains, or lavatories.
- Contact the Department of Public Works Service Desk at (907) 873-3188 should drains or lavatories malfunction.
- Information on method and location for disposal of chemicals, poisons (e.g., herbicides and pesticides), paint, oil, and the like is provided in the Waste Management section of this handbook.
- For additional information, please consult the Fort Greely Waste Water Treatment procedure available at the Department of Public Works Environmental Office.
- No detergents, cleaners or surfactants may be discharged into an oil-water separator that discharges to the sanitary sewer.

Discharge of significant quantities of water to ground is regulated and must be authorized by the Environmental Office.

Storm Water

The major body of surface water in the Fort Greely vicinity is Jarvis Creek. During periods of heavy rainfall and snowmelt, water run-off is channeled through storm water ditches to the creek. Fort Greely has a storm water plan in place to control pollutants reaching Jarvis Creek.

- Wash-down activities and vehicle washing are to be conducted in designated areas that will not result in run-off flowing into storm water ditches. Contact the Department of Public Works Environmental Office (907) 873-4664 for a listing of the designated areas.
- Discharges to storm ditches or drains from industrial activities of any substance are prohibited.
- Practice good housekeeping when outside by properly disposing of trash in closed containers to prevent debris from floating into storm ditches.
- Outdoor activities, including mission, construction, and maintenance, are to be performed without contamination to storm ditches.
- For additional information, please consult the Fort Greely Storm Water Pollution Prevention Plan, available at the Department of Public Works Environmental Office.

Oil/Water Separators

Fluids such as soaps, detergents, solvents, fuels, thinners and paints are prohibited in oil/water separators. For additional information, please contact the Department of Public Works Environmental Office at (907) 873-4664.

--- Natural Resources ---

It is the Army's goal to conserve, perpetuate, and enhance the natural ecosystems present on Army lands. Natural ecosystems are best maintained by protecting the biological diversity of native plants and animals. Habitat management is the key to effective conservation and the protection of endangered or threatened species. Always check with the Department of Public Works Environmental Office (907) 873-4664 and the Integrated Training Area Management Specialist (907) 873-1614, well in advance of a new project.

Land Management

Soil and vegetation in Alaska are particularly vulnerable to damage from human activities such as off-road vehicle travel and even something as seemingly benign as foot traffic. When operating heavy equipment, care should also be taken to avoid mechanical damage to tree trunks and roots. The Department of Public Works Environmental Office (907) 873-4664, should be an active participant in all planning and decision-making activities regarding land use to ensure that current and planned mission activities (e.g., master planning, site approval requests, construction requests, etc.) are conducted in a manner compatible with natural resource and environmental requirements.

Wildlife Management

A protected species at Fort Greely is the migratory swallow. Swallows, nests, eggs, and chicks are never to be disturbed or destroyed and anyone observing activities of this nature must immediately report the incident to the Environmental Office at

Immediately report any incidents of swallow nest, egg, or chick destruction to the Environmental Coordinator at (907) 873-4664.

(907) 873-4664. Please consult the Integrated Training Area Management Specialist at (907) 873-1614, and the Environmental Office at (907) 873-4664 for further information on these birds and for a complete list of all the species that make their home in the Fort Greely area.

--- Historic, Archaeological, and Cultural Sites ---

The Alaska Historic Preservation Act, the National Historic Preservation Act, and Army Regulation 200-4 protect historic and archaeological resources at Fort Greely. (Refer to AR 200-4 and DA Pam 200-4 for regulatory guidance.) Some activities at Fort Greely may require consultation with the Alaska State Historic Preservation

Office (SHPO) before the work can commence. The Department of Public Works Environmental Office will arrange the consultation, if required. The consultation process can take approximately 6 to 12 weeks, depending on the nature and intensity of the proposed action.

The Fort Greely area is rich in pre-historic archaeological sites. Knowledge of the location of these sites is restricted to prevent looting and desecration. Requests for any type of ground disturbance activities must be made to the Department of Public Works Environmental Office well in advance of the proposed activity (see the section on digging, herein). That office will provide information on whether a site may be affected, and will conduct any required consultation with the State Historic Preservation Office.

Archaeological resources discovered on Federal property are protected under the Archaeological Resource Protection Act. If an archaeological site or an artifact is discovered during the course of any activity, contact the Department of Public Works Environmental Office (907) 873-4664. Record the location of the site and ensure that neither the site nor the artifacts are disturbed.

Environmental Procedures

The following is a list of the Fort Greely Environmental procedures available in the Public Works Environmental Office:

- Above Ground Storage Tank/Underground Storage Tank Monitoring
- Air Compliance Monitoring
- Asbestos Removal, Transportation, and Disposal
- Drinking Water Treatment
- Hazardous Materials and Waste Management
- Institutional Controls, Evacuation Clearances
- Lead Based Paint
- National Environmental Policy Act
- Pesticide/Herbicide Application
- Protection of Birds and Mammals–Swallows Policy
- Radon Monitoring
- Solid Waste Collection and Disposal
- Spill Notification and Response
- Storm Water Pollution Prevention
- Wastewater Treatment.

Key Contacts

Fire Department	873-3473
Department of Public Works	873-4582
Environmental Office	873-4664
Natural Resources	873-1614
Safety Office	873-5031
DA Police	873-2677
State Troopers	895-4800





U.S. Army Garrison Fort Greely, Alaska