

AIRCRAFT, VEHICLE, & EQUIPMENT MAINTENANCE & REPAIR ACTIVITIES BMP FACTSHEET 8

Rev. 04/2023



DESCRIPTION

Many facilities on Ft. Belvoir operate aircraft, vehicles and other types of equipment. It is very important to follow proper procedures when maintaining equipment to extend the life of the machinery so that byproducts of these activities **do not** come into contact with stormwater. Automotive maintenance facilities are considered to be stormwater “hot spots” where significant amounts of hydrocarbons, trace metals and other pollutants can contaminate storm water. Some of the wastes generated include: solvents, antifreeze, batteries, oils, grease, gasoline, diesel fuel and brake fluid. Common maintenance activities generating waste include parts cleaning, fluid changing and replacement or repair of equipment or parts. Fluid spills and improper disposal of materials can also result in pollutants entering surface waters, which creates public health and environmental risks. The goal of establishing procedures for maintaining aircrafts, vehicles and equipment is to prevent unnecessary and unlawful discharges of harmful pollutants into waterways.

Targeted Pollutants

Sediment	X
Nutrients	
Trash	
Metals	X
Bacteria	
Oil & Grease	X
Chemicals	
Salt	X

Objectives

Cover	X
Contain	X
Educate	X
Reduce/Minimize	X
Product Substitution	

GUIDELINES

Contact Fort Belvoir Hazardous Waste Management Program at [703-806-4537](tel:703-806-4537) for information on hazardous waste turn in.

In order to keep aircraft, vehicles and equipment operating at peak efficiency it is necessary to routinely replace parts, oils, and fluids. The following general requirements must be followed while performing these activities:

- Always perform maintenance activities at designated vehicle or aircraft maintenance areas such as shop hangars and auto repair shops.
- If possible store/park vehicles and equipment under covered areas and over a surface that prevents liquids from penetrating the surface and does not allow the liquid to seep into the ground.
- Cover wrecked or damaged vehicles so they have minimal impact or contact with storm water.
- Place drip pans under vehicles stationed for a long period of time. Ensure drip pans are inspected weekly and “full” drip pans are properly disposed of.
- Store used parts, batteries and tires in designated covered areas not exposed to storm water.

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GUIDELINES (continued)

- Collect and properly manage used grease, oil, oil filters, antifreeze, cleaning solutions, automotive batteries, hydraulic and transmission fluids and tires. Consult Fort Belvoir's hazardous waste management team if you are not sure what to do with the waste product.
- Appropriately drain and crush oil cans and oil filters before disposal in solid waste containers.
- Train all current employees who perform maintenance on vehicles or equipment (including mechanics who service equipment in the field) on this BMP.
- Furnish all maintenance vehicles and site area with an adequate supply of spill response equipment.
- Make sure spill kits or lockers are easily accessible by employees and located where spills of automotive fluids are possible and regularly inspect content in spill kits for container condition and replenishing spill materials.

MAINTENANCE/GOOD HOUSEKEEPING

Storing Hazardous Waste

- Designate hazardous waste collection site or Satellite Accumulation Area (SAA) and submit to Hazardous Waste Program for approval. Note that SAA must be located at point of generation.
- Store hazardous waste in secure area, protected from vandalism and in compliance with fire and hazardous waste codes.
- Ground highly flammable waste.
- Segregate incompatible waste (i.e. segregate acids from caustics, segregate reactive from ignitable, segregate corrosive from flammable).
- Ensure hazardous waste is placed in secondary containment.
- Ensure Safety Data Sheet (SDS) is available for each product on site.

Outdoor Unloading/Loading of Waste Materials (Spill Prevention)

- Park vehicles and conduct loading/unloading only in designated areas so spills or leaks can be contained.
- Cover the loading/unloading docks to reduce exposure of materials to rain.
- Clean loading/unloading areas regularly to remove potential sources of pollutants.
- Use drip pans underneath hose and pipe connections and other leak-prone spots during liquid transfer operations.
- If possible, conduct loading and unloading in dry weather.
- The area where truck transfers take place should be concrete/paved and free of cracks and gaps.
- Make sure the emergency spill kit is fully stocked and readily available in loading/unloading area.
- Position roof downspouts to direct stormwater away from the waste storage area
- Avoid placing loading/unloading areas near storm drains.

Waste Disposal, Reduction and Recycling

- Whenever possible, recycle waste. Many types of waste including lead-acid batteries, waste oil, gasoline and antifreeze can be recycled or repurposed.
- Materials that cannot be recycled should be disposed of at a properly permitted landfill.
- Turn-in waste before volume or time limit has been reached (hazardous waste must be removed within 72 hours of meeting this threshold).
- Label container with the date container was filled and the contents inside the container.

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INSPECTIONS

The Spill Prevention, Control and Countermeasure Plan (SPCC) rule requires that you:

- Test or inspect **each** aircraft, vehicle, and equipment for integrity on a regular schedule and whenever you make material repairs.
- Frequently inspect the outside of equipment for signs of deterioration and discharges. This visual inspection is intended to be a routine walk-around and include the equipment's supports and foundations.
- Identify in your SPCC Plan the type and frequency of testing and inspection for each aircraft, vehicle and equipment and the appropriate qualifications of personnel performing the tests and inspections. Testing and inspection records must be kept for 3 years at the facility. EPA recommends formal test records or reports be kept for the life of the container.
- Integrity testing is required for all above-ground bulk storage containers to determine if the container (e.g. a tank) is suitable for continued use until the next visual inspection.

SPILL RESPONSE PROCEDURES

In the event of a spill or leak, follow the appropriate Spill Response Procedures posted at your facility or refer to the BMP Factsheet Overview.

- **Survey the incident** from a safe distance. Identify the source of release and the material being released.
- Call the Ft. Belvoir Fire Department if spills are *greater than 5 gallons OR greater than 5 square feet*. If ANY amount of leaked material has entered a storm drain or waterway call the Ft. Belvoir Fire Department at 703-781-1800 and DPW Environmental Division (Env. Div.) at 703-806-3694.
- Provide the Safety Data Sheet of the spilled material to the spill response personnel.
- Fill out Spill Incident Report in your SWPPP.
- **REPORT ALL SPILLS REGARDLESS OF SIZE TO DPW/ENV. DIV.**

REPORT SPILLS TO DPW/ENV. DIV. BY:

- E-mailing your Spill Incident Report to zachary.d.witman..civ@army.mil
- Calling 703-806-3694