

WHAT IS STORM WATER?

Storm water is precipitation from rain or snow, and melt-water, that flows over the ground and pavement. This water either seeps into the ground or flows through the storm sewer system (storm drains, ditches, swales, culverts, etc.) and into lakes, streams, rivers, wetlands, or coastal water.

When it rains...it drains.

STORM SEWER SYSTEM VS. SANITARY SEWERS

The storm sewer and sanitary sewer systems have two distinct functions, and it's important to understand the difference.

Storm sewer systems are intended to collect and transport runoff from rainfall and snow melt. Storm sewer systems do *NOT* remove pollutants from water before it is discharged into lakes, streams, wetlands, or oceans. Storm drains and ditches are typical entry points to the storm sewer system.

Sanitary sewers collect wastewater from indoor plumbing such as toilets, sinks, washing machines, and floor drains, and direct it to a sewage treatment plant. The treatment plant removes most pollutants from wastewater before it is discharged to a lake, stream, or ocean.

KEEP POLLUTANTS FROM VEHICLE MAINTENANCE FACILITIES OUT OF STORM WATER

Potential pollutants at maintenance facilities include antifreeze, hydraulic fluids, motor oil, and other automotive fluids. Cleaning products, brake dust, and oil and grease from automobile parts are also significant, potential pollutants. Alaska state law and federal regulation prohibit discharging these pollutants into Fort Wainwright's storm sewer system.

All waters flowing into Fort Wainwright's storm sewer system remain *UNTREATED* and could potentially end up in the Chena River or a wetland.

CONTACT INFORMATION

For more information on storm water pollution prevention, contact the Fort Wainwright Water Program Manager (DPW Environmental) at (907) 361-9949.

For disposal of hazardous materials and waste, contact the Fort Wainwright hazardous waste storage facility (Building 3489, operated by the waste turn-in contractor) at (907) 356-2023.

Storm Water Compliance at Maintenance Facilities

U.S. ARMY GARRISON
FORT WAINWRIGHT ALASKA



GOOD PRACTICES TO PREVENT CONTAMINATED STORM WATER

Storage

Appropriate storage practices protect your facility from hazardous spills.

- Keep lids closed on all waste containers including dumpsters, when not in use. Store waste containers under cover to reduce exposure to rain.
- Store hazardous materials and wastes indoors, or where they are protected from rain and snow, with secondary containment, to prevent spills or leaks from reaching the sanitary sewer or storm drains.
- Keep stocked spill kits readily available.
- Label all hazardous waste containers according to applicable regulations. Containers used to accumulate used oil must be labeled as such.
- Never mix used oil with fuel, antifreeze, or chlorinated solvents. Keep wastes separate to increase your waste recycling/disposal options and to reduce your costs.
- Keep storage areas clean and dry. Conduct regular inspections so that leaks and spills are detected and addressed as soon as possible.
- Vehicles for cannibalizing should be properly drained of all fluids in a contained environment, prior to outdoor storage.
- Drain all fluids from engine blocks and other parts, which you may store for reuse or reclamation, in a contained environment. Keep these components under cover and on a drip pan or sealed floor, indoors.
- Store batteries securely to avoid breakage and acid spills. Store used batteries indoors to avoid contact with precipitation. Keep them in a plastic tray to contain leaks. Turn in old batteries to the hazardous waste storage facility for recycling (contact information on back).
- Minimize the distance between waste collection points and storage areas.
- Recycle solvents, antifreeze, motor oil, and lubricants.
- Keep accurate records of all recycling and disposal.

Keeping a Clean Shop

- Good housekeeping practices minimize liability, reduce costs, and make it easier to detect spills and potential problems.
- Sweep or vacuum the shop floor frequently.
- Apply absorbents ("kitty litter" or absorbent pads) on spills and then dry sweep the floor.

- Remove unnecessary hoses to discourage washing down floors and outside paved areas.
- Regularly sweep parking lots and areas around your facility. Hosing dirt, oil, grease, and other pollutants into the storm drainage system is *PROHIBITED* and can result in a fine.

Hazardous Materials and Wastes

All hazardous materials and wastes must be stored, used, and disposed of according to federal, state, and installation regulations, including, but not limited to, fire codes, and hazardous materials and waste laws. To learn more and for contact information, see the back of this brochure.

Changing Oil and Other Fluids

- Whenever possible, change vehicle fluids indoors, on impermeable surfaces using drip pans. Avoid working over asphalt and dirt surfaces that absorb vehicle fluids.
- If vehicle fluids must be drained outdoors, always use drip pans. Prevent accidental spills from flowing to the surrounding area by working over an absorbent mat or working in a bermed area. If necessary, you can use absorbent socks to create a bermed area.
- Transfer fluids drained from vehicles to a designated recycled-material storage point in the shop. Drain pans and other open fluid containers must be properly labeled and should not be left unattended.
- Store wastes or bulk fluids over/in secondary containment to prevent leaks or spills from reaching the storm drain system or sanitary sewer.
- *NEVER* pour vehicle fluids or other hazardous wastes into storm drains, sanitary sewers, or into dumpsters. These substances must be kept in designated waste storage containers until recycled or properly disposed of.
- Drain fluids from leaking or wrecked vehicles as soon as possible. Use drip pans under leaking vehicles to capture fluids.

Vehicles

- Use approved cleaners at motor pool wash racks because they have been tested to meet requirements for dissolved oils to quickly come out of suspension and remain within the oil/water separator. Contact the Fort Wainwright Water Program Manager for a list of approved soaps.
- Do not hose sediment into storm drains.
- Position drip pans under active vehicle leaks. Consider placing absorbent pads or boom in the pan to absorb the fluids and for easier clean up.

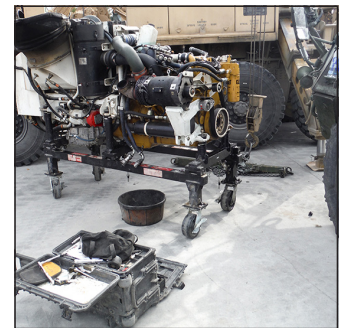
- When possible, park fuel trucks within portable secondary containment. Check daily to ensure secondary containment is intact and able to store a sufficient amount of fluids.

Parts Cleaning and Radiator Flushing

- Handle, store, and dispose of solvents properly. Solvents are hazardous to humans and can ignite in sanitary sewers.
- Eliminate discharges from parts cleaning and flushing operations to the storm drain system or sanitary sewer.
- *NEVER* discharge cleaning solutions or wastewater from steam cleaning or engine/parts cleaning to a ditch, street, gutter, or storm drain.

SANITARY SEWER

Although many pollutants are ultimately removed at the sanitary sewer treatment plant, restrictions also apply to sanitary sewer discharges. Hazardous wastes must *NEVER* be discharged to the sanitary sewer. Facilities with oil/water separators must comply with the installation's industrial wastewater discharge permit. If your facility has an oil/water separator, ask the Fort Wainwright Water Program Manager what may and may not be discharged to it (contact information on back).



Drip pans must be placed under tactical vehicles. Winter temperatures can increase the rate of leaks – regularly monitor parked vehicles. Properly store all hazardous materials. Use dry methods to clean up spills ASAP and properly dispose of contaminated materials. Oily engine parts should not be exposed to weather, which could result in contaminated storm water runoff.