

Preventing Storm Drain Pollution

Guidelines for Commercial, Residential, and Light Industrial Facilities at Fort Stewart and Hunter Army Airfield, GA

The following basic housekeeping guidance manual has been prepared for Fort Stewart and Hunter Army Airfield commercial, light industrial and residential facilities as part of a program to reduce the amount of pollutants flowing through the storm drain system and local water bodies.



Savannah River

By following proper housekeeping practices, your facility or residence can help reduce pollution flowing into local water bodies, preserve the ecosystem for animal and plant life, and protect our quality of life for future generations.

Your Facility or Residence and Georgia's Waters:

What's the Connection?



Whether your facility or residence is two blocks or twenty miles from the water, it has two connections to local water bodies. Indoor drains, such as sinks, toilets and most floor drains, convey wastewater through the sanitary sewer system into a treatment plant where the water is treated or a septic system before it is discharged into local waters.

Outside your facility or residence, stormwater and wash water from buildings, road surfaces, vehicles, and equipment pick up oil, grease, cleaning compounds, pesticides, paint, garbage and other pollutants. Storm drains carry these pollutants through the storm conveyance system directly into local canals, creeks, streams, and other waters — they are not filtered or treated in any way.

So what's the big deal?

Stormwater and wash water in the storm conveyance system can pick up all sorts of pollutants — soap, pesticides, fertilizers, cleaning compounds, coolants, degreasers, automotive fluids, paint, oil, trash, and other materials. Even products labeled nontoxic or biodegradable can be harmful to sensitive marine ecosystems. Polluted runoff is toxic to fish and wildlife. It can harm the environment and threaten us and the health of our children.

Soap, coolant, or oil running into the storm drain from your specific facility or property may not seem like a big deal, but when commercial, residential, and light industrial facilities in Georgia fail to clean up their work sites, a lot of pollutants end up in Georgia's waters. In other words, seemingly small problems at your facility or residence add up to big problems for Georgia's waters.

It's also against the law!

Allowing discharge of wastes into storm drains is also against the law. If your facility allows anything other than uncontaminated stormwater into the storm drain, you could be cited and held liable under Federal, State, and local regulations. The procedures outlined in this guidance manual offer some simple suggestions to help you ensure that our Installation's facilities and residents *doing the right thing*.

Doing the right thing...

If Units, tenants, residents, employees and contractors follow these guidelines, you can help prevent storm drain pollution and keep our Installation in compliance. You also help protect Georgia's valuable aquatic ecosystem — and the plant and animal life that it supports — for future generations. Remember, clean water isn't just good business — it's everybody's business.

Cleaning



Residential Family Housing

Wash water from cleaning often contains solvents, detergents, and metals. Wash water should never be discharged into a street, gutter, or storm drain. Always wash vehicles at a designated car wash or (at least) wash vehicles with low-phosphate soap, in a vegetated area where the water will soak into the ground and surrounding vegetation. Contact the DPW Environmental Division for discharge guidance.

Equipment Cleaning

- If possible, clean equipment inside and dispose of wash water into a sink or floor drain that connects into the sanitary or industrial sewer. Contact the DPW Environmental Division for guidance.
- If you must clean equipment outside, utilize tarps to capture waste from maintenance or grinding work. If pressure washing use steam only with no chemicals and try to wash in a bermed area where wash water can be collected and then disposed of properly. Contact the DPW Environmental Division for discharge and disposal guidance.

Vehicle Cleaning

- If possible, wash vehicles at a commercial car wash where wash water is treated and recycled.
- If you routinely clean vehicles onsite, ensure vehicle cleaning is performed within a designated wash area with a wastewater collection and treatment system (such as an oil/water separator) which drains into the sanitary or industrial sewer system. Contact the DPW Environmental Division for guidance of washrack locations for vehicle fleets.
- In residential areas, do not allow soapy wash water to run into the street, gutter, or storm drain. Wash where water will flow into a lawn, gravel, or unpaved area. Or, wash vehicles within a designated wash area, which discharges into the sanitary or industrial sewer. Contact the DPW Environmental Division for discharge guidance.
- Do not use solvents or acid-based degreasers in an area where wash water could flow into a street, gutter, or storm drain. Instead, confine wash water within a designated wash rack area where it can be discharged to the industrial treatment or sanitary treatment facility. Before using solvents or acid-based degreasers, contact the DPW Environmental Division for wash water disposal options.
- Reuse or recycle wash water to minimize discharges into the sanitary or industrial sewer.



Washracks

Building and Surface Cleaning

When cleaning sidewalks, plazas, and building surfaces, wash water is permitted to go into a street or storm drain **ONLY IF ALL** of the following conditions are met:

1. Oil or chemical spills have been cleaned up utilizing spill absorbents or some other dry cleaning method before cleaning with water. When oil or chemicals are absorbed, sweep the material up and dispose of it as hazardous waste.

2. Surfaces are free of fresh oil stains and debris.
 3. You have swept the area thoroughly prior to cleaning with water.
 4. Wash water does not contain soap or other cleaning materials.
 5. No paint chips are removed from the surface during cleaning (see Building Repair and Maintenance: Painting).
- If you must use water for cleanup, use a damp mop instead of hosing down the area. Empty your bucket of wash water into an indoor floor drain or sink that drains into the sanitary or industrial sewer. Contact the DPW Environmental Division for guidance.
 - When using a cleaning compound, direct wash water runoff into a landscaped or dirt area, or cover storm drains with filter fabric, and vacuum or pump wash water into a sanitary or industrial sewer drain. Contact the DPW Environmental Division for guidance — harsh cleaning compounds may require permitting and/or pretreatment.
 - Never hose or sweep interior floor debris onto an outside area. Use a broom or vacuum for inside floor cleaning. Collect and dispose of all debris into the garbage or as hazardous waste as appropriate.
 - Use a street sweeper to clean parking areas and roadways. Do not use water.
 - When wet sand blasting, minimize the quantity of water used. Direct runoff into a vegetated landscaped or dirt area or filter runoff through a filter fabric to keep sand out of the storm drain. When finished, sweep up sand and debris.

"WHEN SHOULD YOU CALL THE DPW ENVIRONMENTAL DIVISION?"

Contact the Environmental Division (912) 767-2010:

- *For information about what can and can't go into the sanitary or industrial sewer.*
- *To find out whether you need to pretreat wash water before it goes down an indoor drain (especially when degreasing or using harsh cleaning compounds).*
- *Before altering drains or sewer lines.*
- *To report a spill of hazardous materials, such as petroleum's, oils or lubricants*
- *To report illicit discharges into the stormwater collection systems*
- *Prior to any conveyance system maintenance*
- *To report damages or repairs needed to the stormwater collection system*

Building Repair and Maintenance

Use and dispose of paint, paint thinner, metal filings, cutting oil, and concrete properly to prevent them from entering the stormwater collection system where they will harm local waters. Also, make sure that your contractors follow these guidelines; you are responsible for your contractors' actions!

Clean paint brushes and equipment that have been used with water-based paint in an indoor sink or another approved area such as a washrack that discharges to the industrial or sanitary sewer systems.

Painting

- When pressure washing to prepare surfaces for painting, first the painted surfaces should be tested for the presence of lead (contact the DPW Environmental Division for guidance). If lead is present, the materials must be disposed of as hazardous waste. If lead is not present, pressure wash using no chemicals and place a protective cover of filter fabric over the drain to catch paint chips and dispose of the chips into the garbage. It is best to, use a dry cleaning method such as scraping and sweeping, and dispose of paint chips as hazardous waste.
- If utilizing a water-based paint, brush out excess paint, then wash brushes and equipment in the appropriate designated area such as a sink or a wash rack which discharges to sanitary or industrial sewer systems. Use or recycle leftover paint. *Never dispose of paint or rinse water into a landscaped area, street, gutter, or storm drain.*
- If utilizing an oil-based paint, brush out excess paint before cleaning with paint thinner. Filter and reuse thinner when possible. Dispose of paint sludge and thinner as hazardous waste.

Plumbing and Pipe Fitting

Prevent pipe thread cutting oil and metal shavings from entering storm drains by placing a tarp or protective cover underneath equipment to collect filings, dust, metal shavings, and cutting oil. If necessary, use berms or storm drain covers to protect storm drains. Shovel or vacuum collected material into a solid waste. When you are finished or at the end of each day, collect all waste at one location and schedule disposal.

Concrete

- Store concrete, grout, and mortar under cover and away from storm drains.
- Wash out concrete equipment, and tools in a designated area where rinse water will flow into a landscaped area or dirt pit. Let the water seep into the soil, leaving the cement residue behind. When the residue dries and hardens, dispose of it at the appropriate facility. For construction sites, the utilization of a designated concrete wash out area for the trucks must be utilized. If you generate a large quantity of concrete, contact the DPW Environmental Division for disposal guidance. Alternatively, take the concrete to a concrete recycling facility.

- When washing exposed aggregate concrete, divert water into a suitable area where it will not run into a street, gutter, or storm drain. If a suitable area is not available, use sand bags to dam up the flow of wash water. Use a wet vac to collect the remaining sludge, and then dispose of it as solid waste.

Saw-Cut Slurry

- Completely cover or barricade storm drain inlets when saw cutting. Use filter fabric, blocks with filter fabric, sand bags, or other appropriate best management practices to keep slurry out of the storm drain system.
- Shovel or vacuum saw-cut slurry into a solid waste bin. When you are finished at one location or at the end of each work day, collect all waste and schedule disposal.
- If saw cut slurry enters a storm drain catch basin, immediately shovel or vacuum slurry into a solid waste bin.

Facility Equipment

Following an inspection and maintenance schedule and disposing of equipment byproducts (e.g., blowdown water, condensate, residues, melt water, etc.) properly will help keep pollutants out of storm drains and local waters, where they can harm animal and plant life.

Air Compressors

- Routinely inspect and maintain air compressors.
- Air compressors produce small quantities of automatic blowdown water, which commonly contains lubricating oil or other potential pollutants and this **cannot be discharged into the storm drain.** Discharge all blowdown water into the sanitary or industrial sewer after contacting the DPW Environmental Division for guidance.
- If the compressor has a frequent small bleed, use a drip pan to collect the water. Dispose of accumulated water into the sanitary or industrial sewer.
- Repair all fuel and oil leaks immediately. Use a drip pan until repairs are made. Clean any spilled fuel or oil utilizing a spill absorbent or some other dry cleaning method. When the spill is absorbed, sweep up the saturated absorbent and dispose of it as hazardous waste.

HVAC, Chillers, Boilers, & Refrigerator Units

- Existing buildings with air conditioners can discharge uncontaminated condensate (e.g., condensate which does not contain de-scaling or anti-algal agents) into the storm drain.
- New buildings should be designed so that all discharges from air conditioner condensation lines drain into the sanitary or industrial sewer. Contact the DPW Environmental Division for more information.

- Direct HVAC maintenance personnel to dispose of flushing agent residues (e.g., de-scaling or anti-algal agents) into the sanitary or industrial sewer. **The use of chemicals containing copper and tributyl tin is prohibited.**
- Melt water from deicing refrigeration units, cryogenic tanks, etc., may be disposed of into a storm drain as long as it does not contain any type of pollutant or come into contact with a pollutant (from drum and equipment storage nearby, for example).
- All treated boiler discharge and blowdown, including condensation, must be discharged into the sanitary or industrial sewer or reused and/or recycled within a closed loop system approved by the permitting agency.

Cooling Towers

- **Use of biocidal cooling tower additives (e.g., those containing copper, tributyl tin, or chromium) is prohibited.** Contact the DPW Environmental Division for more information.
- Drain all cooling tower discharges into the sanitary or industrial sewer. Do not drain discharges into the parking lot, street, gutter, or storm drain.
- Cooling tower chemicals should not be stored adjacent to storm drains.

Landscaping

- Never apply chemicals or rinse water to vegetation from equipment that has contained fertilizers, pesticides, or herbicides within a 24-hour period of forecasted rain, especially when handling liquids and powders.
- Use the least hazardous product for the job.
- Use the recommended amount of chemical for the job. If using concentrate, mix only the amount you need, and spray out the entire product. Rinse equipment over a landscaped area. Never pour rinse water down a storm drain.
- Dispose of excess lawn and garden chemicals as hazardous waste.
- Keep leaves, grass clippings, and other yard waste out of the streets, gutters, and storm drains.
- Rinse tools and equipment over a landscaped area, away from storm drains.

Spill Prevention and Cleanup

The majority of pollution that flows off a site can usually be avoided by taking precautions to prevent spills and cleaning spills up promptly if they do occur.

Use dry absorbents to clean up spills.

- Exercise care and planning to avoid potential spills, especially when handling liquids and powders.

- Maintain a regular inspection and repair schedule to prevent leaks from equipment and storage containers.
- Provide employees and contractors with absorbent materials for spill containment and cleanup. Keep spill prevention and cleanup materials at a location that is easy to find and easily accessible.
- Clean up spills immediately with a spill absorbent material. When the spill is absorbed, sweep up saturated absorbents, and dispose as hazardous waste.
- Keep a supply of absorbent booms, socks, pads, storm drain covers or plugs on hand. Make sure personnel know where they are stored and how to utilize them. Keep these materials in a high profile location.
- If your facility routinely handles liquids, it may be a good idea to install an emergency shut-off valve or storm drain plug which can be opened and closed in the nearest storm drain.

Storm Drain Maintenance

Show your commitment to a clean facility and healthy Georgia waters by maintaining the storm drain inlets on your property.

- Locate and identify all storm drain inlets at your facility.
- Sweep or pick up debris from parking lots, driveways, and other paved areas regularly.
- Clean out all storm drain inlets on your property with a vacuum or shovel at least twice a year — just before the start of the rainy season and after the first major rain.

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Sharing Information

- Ensure all personnel and contractors know where to clean equipment and properly dispose of wash water.

Educating and training

- Storm drain pollution prevention begins and ends with effective education and training.
- Train new personnel on the procedures in this manual.
- Review the guidelines in this manual regularly with all personnel.

Overseeing contractors

- You are responsible for your contractor's actions.

- Before beginning work, show contractors where to clean equipment and properly discharge wash water or process waters.
- Make sure contractors know where emergency spill equipment is stored and how to utilize it.
- Consider incorporating pollution prevention practices into contract specifications.

The Bottom Line...

- Assert your reputation as a clean facility:
- Let people know what you're doing to prevent water pollution and encourage them to adopt clean water practices too. Where appropriate, itemize charges for hazardous waste handling and disposal.

Spill Response Numbers to Call

To report a hazardous materials spill that is causing an immediate threat to human health or the environment Fort Stewart/Hunter Army Airfield Installation hard lines Dial 911.

Stormwater Pollution Prevention and Control Requirements For Fort Stewart and Hunter Army Airfield

The DPW Environmental Division, Prevention and Compliance Branch
Stormwater Program Manager
912-767-2010/0271