



Fort Lauderdale-Hollywood International Airport

Sustainable Operations and Green Practices Guidance Manual

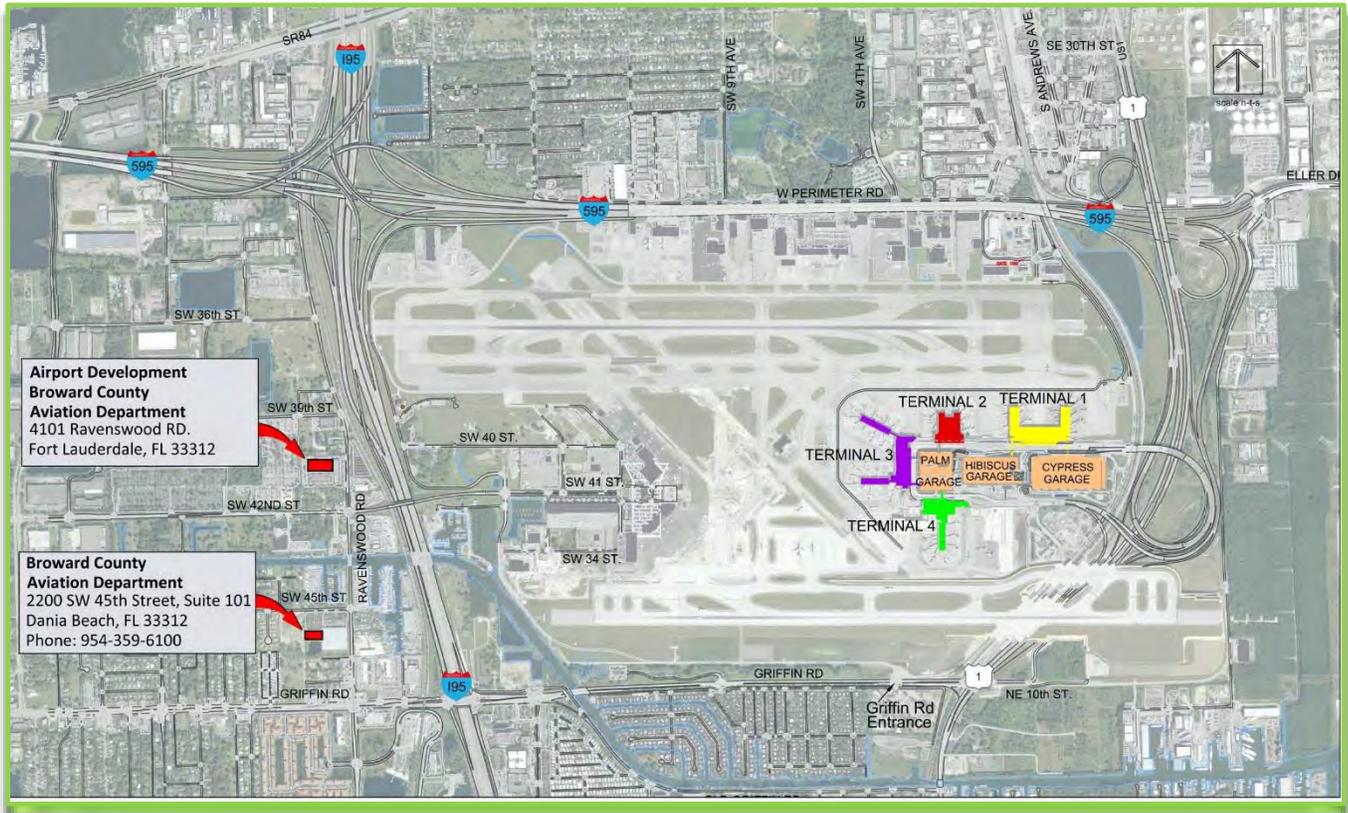
Table of Contents

<u>Chapter</u>		<u>Page</u>
1.0	Introduction	1-0
	1.1 What is Environmental Protection?	1-1
	1.2 Why is Environmental Protection Important?	1-2
	1.3 What are the Environmental Initiatives at FLL?	1-3
2.0	Green Operations for General Activities	2-0
	2.1 Water Conservation & Quality	2-1
	2.2 Energy Efficiency	2-2
	2.3 Waste Reduction, Reuse & Disposal	2-3
3.0	Green Operations for Specific Activities	3-0
	3.1 Aircraft Cleaning & Washing	3-1
	3.2 Lavatory Station Cleanout & Waste Disposal	3-2
	3.3 Equipment Maintenance & Repair	3-3
	3.4 Aircraft & Equipment Fueling	3-4
	3.5 Equipment Painting	3-5
	3.6 Loading & Unloading Material	3-6
	3.7 Waste Management & Disposal	3-7
	3.8 Maintenance & Construction Activities	3-8
4.0	Green Operations for Stormwater Pollution Prevention	4-0
	4.1 How is Stormwater Pollution Prevented?	4-1
	4.2 Who is Required to Part	4-2
	4.3 How Do I Apply for a NPDES Program?	4-3
5.0	Green Operations for Chemical Storage	5-0
	5.1 Where Should I Start?	5-1

<u>Chapter</u>		<u>Page</u>
	5.2 How Should Chemicals Be Stored?	5-2
	5.3 What Do I Do If I Have a Release	5-3
6.0	Food Preparation	6-0
7.0	Additional Resources	7-0

1.0 Introduction

*“Airport sustainability is a holistic approach to managing an airport to ensure **Economic viability, Operational efficiency, Natural resource conservation, and Social responsibility.**”*



Welcome to your guide for becoming a **“Green Operator”** at the Fort Lauderdale-Hollywood International Airport (FLL). This guide will help you understand how you can reduce the environmental impact from the activities that you perform as a vital contributor to the success of FLL. There are a variety of methods that can be implemented to reduce or eliminate the environmental impact from all airport operations. The purpose of this guidance manual is to provide all operators at FLL the necessary information to implement environmentally friendly, “green” operations at their facility.

By increasing the number of green operators at FLL, the Broward County Aviation Department (BCAD) will improve environmental quality and efficiency at FLL, and become a community model for sustainable development.

1.1 What is Environmental Protection?



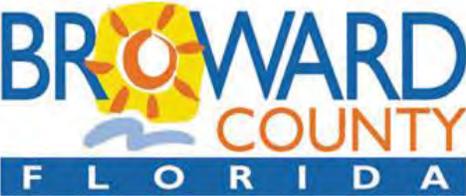
The ever increasing need for water, energy, and waste disposal puts pressure on our limited natural resources. The purpose of environmental protection is to prevent the degradation of natural resources from the activities of society. Efficient resource management and proper disposal methods greatly reduce or eliminate impact to our environment.





1.2 Why is Environmental Protection Important?

If environmental impacts from common business activities are not addressed, the limited natural resources that we rely on to maintain our quality of life will become contaminated, and could eventually cease to exist. In order to protect our natural resources, the Environmental Protection Agency (EPA) has developed a regulatory framework that involves the oversight of most business activities that can impact our natural resources. One of the benefits of implementing the Best Management Practices (BMPs) presented in this guidance manual will be to help the operators of FLL maintain compliance with the environmental regulations developed by the EPA, state, and local environmental regulatory programs.





1.3 What are the Environmental Initiatives at FLL?

A variety of environmental initiatives are currently implemented at FLL to accomplish the air transportation activities at FLL in an environmentally sensitive approach. BCAD's environmental initiatives include the following:

WATER CONSERVATION

- Water conservation and irrigation efficiency

AIR QUALITY AND ENERGY USE

- Pay on foot program for the parking garage
- Consolidated rental car center
- Cell phone waiting area
- Bus and taxi holding area
- Biodiesel and hybrid vehicles implementation
- Increased cooling and heating efficiency
- Energy efficient lighting

WATER QUALITY PROTECTION

- Stormwater pollution prevention
- Surface water quality monitoring

WASTE REDUCTION

- Hazardous materials waste management
- Recycling and waste reduction

NATURAL RESOURCE MANAGEMENT AND SUSTAINABLE GROWTH

- LEED standard construction
- Construction of the Green Belt



2.0 Green Operations for General Activities

Water, energy, and waste disposal are required for all businesses to operate. In order to efficiently utilize these resources the following tips are recommended.





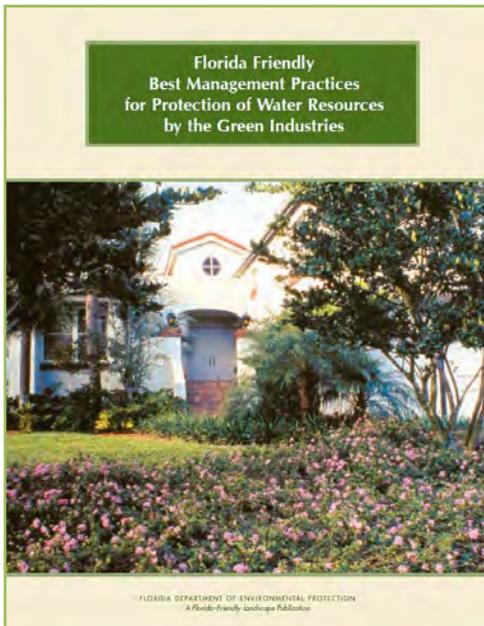
2.1 Water Conservation & Quality

In order to more efficiently use water, the following can be done:

- 💧 Perform a water use audit and try to pinpoint where leaks or unnecessary losses may be occurring.
- 💧 Take advantage of water conservation information offered by the South Florida Water Management District and the Broward County Water Resources Division:
 - [Link to South Florida Water Management District website.](#)
 - [Link to Broward County website showing multiple ways to conserve water in your area.](#)



- 💧 Reuse water where possible (rain barrels).
- 💧 Use automatic shutoff controls for sinks and other rinse areas to reduce consumption.
- 💧 Use dry washing techniques when possible.
- 💧 Use high pressure washing to reduce the amount of water required.
- 💧 Check for leaks.
- 💧 Replace old water guzzling toilets with low flow toilets.



-  Link to [Use Florida Friendly landscaping and use the information at this website.](#)
-  Use rain sensor controlled irrigation to reduce overwatering of landscape.
-  Perform an irrigation system audit for efficiency.
-  Plant non-fruit and nut bearing plants on bare ground.
-  Minimize the use of pesticides and insecticides, if possible.
-  Do not use or minimize the use of fertilizers.

2.2 Energy Efficiency



You can save between 5% and 30% of your energy bill by making efficient upgrades identified in your energy audit

Simple energy efficiency methods and practices include:

Perform an energy audit for your facility and make system or process modifications to conserve energy.

Link to [DO-IT-YOURSELF Energy Audits](#)

Link to [Ways small businesses can help save energy.](#)

10 STEPS TO ENERGY CONSERVATION



- 💡 Install energy efficient equipment/appliances during equipment/appliance replacement.
- 💡 Ensure equipment (including computers) is turned off when not in use.
- 💡 Enable the “sleep mode” feature on your computer, allowing it to use less power during periods of inactivity.
- 💡 Service HVAC systems and change all air filters regularly.
- 💡 Use programmable thermostats to reduce heating and cooling requirements when the building is unoccupied.
- 💡 Set the thermostat of your water heater between 120°F and 130°F.

- 💡 Set your refrigerator temperature between 38°F and 42°F and your freezer between 0°F and 5°F.
- 💡 Use energy efficient light bulbs (LED, energy saving incandescent, CFL, LED flood, etc.) and appliances.

2.3 Waste Reduction, Reuse & Disposal

The following methods can be applied to waste processing to reduce environmental impacts and improve process efficiency:

- ♻️ Establish purchasing guidelines to encourage waste reduction. Buy durable, concentrated, reusable, recycled and high-quality products.
- ♻️ Track material usage to eliminate unnecessary purchases.
- ♻️ Consider length or warranty and available repair services when purchasing equipment.
- ♻️ Modify processes to incorporate reusable products.



- ♻️ Implement a regular maintenance program for equipment and do not purchase new equipment if cost of repair is reasonable.
- 💡 Reduce printing requirements by relying solely on electronic documents when possible.
- 💡 Rent equipment if it will be used infrequently rather than purchasing it.
- 💡 Donate or recycle items when possible. [Find your local recycling options at Earth911.](#)



- Substitute less toxic material for toxic materials such as vegetable-based inks, water-based glue, markers and paints. [Find green products at Green Seal's certified products and services database.](#)
- 💡 Use plastic can liners made of recycled HDPE (they cost less).
- 💡 Start your own Recycling Program. [Track your recycling efforts and get recognized. Visit the Florida DEP Business Recycling Tool or Re-TRAC.](#)
- 💡 Use lightweight packaging to conserve materials.

3.0 Green Operations for Specific Activities



The operators at FLL can typically be divided into three categories:

-  Air transportation providers
-  Airside operations
-  Terminal services

Certain activities performed at FLL for each of these categories require special attention to environmental stewardship. Methods to increase environmental protection for some of these activities are provided below.

3.1 Aircraft Cleaning & Washing



Aircraft washing is **prohibited** at FLL unless prior approval has been obtained through BCAD. The approval process is necessary because washing of aircraft and other equipment can pollute storm water if not done in an appropriate manner.

Wash water from washing aircraft can contain harmful substances and therefore is considered wastewater. The high concentrations of solvents, oil and grease, detergents, and metals that are present in wash water can pollute the groundwater if aircraft are washed over an unpaved surface. Also, paved surfaces allow the pollutants from wash water to be washed into storm drains that empty into the surrounding canals.

- ➔ Wash aircraft using a self-contained system that is designed to collect all wash water that is generated.
- ➔ Cover storm drains in the area while washing is ongoing if using an outdoor, portable contained wash system.
- ➔ Consider filtering and recycling wash water in order to reduce water usage and save money on waste water disposal cost.
- ➔ Use phosphate-free biodegradable detergents to prevent algal blooms and fish kills in

the event of a wash water leak.

- ➔ Wash Aircraft indoors using dry washing techniques if a self-contained area is not available.

3.2 Lavatory Station Cleanout & Waste Disposal

Lavatory station cleanout and waste disposal activities are closely monitored by BCAD. Any operators that cause or allow the release of lavatory station fluids are subject to fines and other enforcement actions.

- ✓ Regularly inspect lavatory transfer trucks/carts to ensure that all equipment is in proper working order.
- ✓ Close all valves before leaving the disposal station.
- ✓ Stock spill pans and absorbent pads on the trucks/carts in the event of a leak or spill.



- ✓ Ensure proper training of operators, including education concerning the ramifications of discharging lavatory wastes to a stormwater drain.
- ✓ Immediately clean up any and all spills that occur.



3.3 Equipment Maintenance & Repair



- ✎ Perform all equipment maintenance and repair indoors to avoid possible contact with stormwater, if possible.
- ✎ Designate an area for vehicle fluid changes that is not connected to the storm drain or sanitary sewer and where drips and spills can be easily contained and cleaned up.
- ✎ Consider cleaning vehicles and parts using non-caustic detergents, detergent or water based cleaning systems.
- ✎ Recycle cleaning agents.
- ✎ Clean spills, equipment, and parts with rags, a wire brush, or bake oven to conserve water if possible.
- ✎ Place a drip pan under any vehicle being worked on, stored or repaired to prevent spills and drips from reaching the ground.
- ✎ Store wrecked or damaged vehicles under a roof and drain all fluids to prevent leaks

from reaching the ground.



-  Collect leaking or dripping fluids in drip pans separated by type to facilitate proper disposal or recycling.
-  Cover all waste drums and locate in a controlled area with a concrete slab and secondary containment to prevent leaks and spills.
-  Drain all oil filters completely before disposing or recycling of them.
-  Store all cracked or dropped batteries in secondary containment.
-  Never pour liquid wastes down the drain. Install proper signage near sinks and storm drains to inform employees.
-  Consider purchasing recycled products and recycling degreasers, used oil and oil filters, antifreeze, cleaning solution, automotive batteries, and hydraulic fluid.

3.4 Aircraft & Equipment Fueling



Any tenant or agency requesting to handle or dispense fuel at FLL must comply with BCAD's Mobile Fueler Program, and all requirements under NFPA 407 and CFR 14 Part 139.

-  Avoid topping off tanks as this often results in fuel spills.
-  Train employees about overfilling.
-  Install overflow prevention equipment to prevent/minimize spills.
-  Build a roof over the fuel area and pave with concrete instead of asphalt, when possible. Asphalt can soak up or be dissolved by fuel.
-  Position berms, roof downspouts, and valley gutters to direct stormwater runoff away from the fueling area.
-  Install and maintain oil/water separators or oil and grease traps in storm drains within the fueling area to reduce the amount of oil entering the stormwater system.
-  Know where the water drains are in your fueling area.
-  Consider using a damp cloth or mop to clean the fueling area rather than hosing it down. Be sure to dispose of wash water properly.
-  Control spills immediately and do not wash them into storm drains or sanitary sewer systems.
-  Recycle fuel from preflight checks rather than disposing it on the ground.
-  Place a spill kit in the fueling area.

 Keep the spill kit well stocked.

3.5 Equipment Painting



- ➔ Contain wastes from sanding.
- ➔ Avoid sanding in windy weather and enclose outdoor sanding areas with tarps or plastic sheeting. Move the sanding activity indoors if possible but be sure to always provide adequate ventilation and personal safety equipment for employees.
- ➔ Keep workshops clean of sanding waste. Stormwater runoff polluted by dusts from sanding and grinding can contain toxic metals which harm fish and wildlife.
- ➔ Use tarps, drip pans, or other spill collection devices to prevent paint from contaminating storm water runoff. Dispose of collected wastes properly.
- ➔ Inspect the part or vehicle before painting to ensure that it is dry, clean and rust free to ensure a longer-lasting paint job.
- ➔ Reduce painting waste by using efficient painting tools such as electrostatic spray equipment, air-atomized spray guns, high-volume/low-pressure spray guns, and gravity fed guns. Conventional airless spray guns can lose as much as 70% of their paint as overspray which can then contaminate storm water.
- ➔ Ensure proper training of operators to reduce overspray and the amount of paint used per job.
- ➔ Recycle paint, paint thinner, and solvents, when possible.
- ➔ Use recycled products when available.
- ➔ Separate wastes for easier and less costly recycling and disposal.

- ➔ Reduce the number of solvents you use can also reduce hazardous waste management costs.

3.6 Loading & Unloading Material



-  Locate loading/unloading equipment and park vehicles on paved areas where leaks can be contained.
-  Check loading/unloading vehicles and equipment regularly for leaks, especially at valves, pumps, flanges and connections.
-  Check for dust and fumes as these are common signs that material is being lost during loading/unloading operations.



-  Cover loading/unloading docks and areas to prevent exposure of materials, vehicles and equipment to rain.
-  Install berms, roof downspouts and valley gutters to direct stormwater away from crossing the loading/unloading area.

3.7 Waste Management & Disposal

-  Perform a waste reduction assessment and implement a program to reduce waste by following waste reduction BMPs.
-  Implement a recycling program.
-  Locate waste dumpsters on paved areas away from a storm drain.
-  Check waste management areas often for spills and leaks.
-  Change out rusty, corroded, damaged containers and be sure to keep dumpster lids closed when not in use.

-  Cover the waste management area with a permanent roof.
-  Cover the waste piles with a tarpaulin, visqueen or plastic.
-  Position berms, roof downspouts, and valley gutters to direct storm water away.
-  Place spill prevention equipment (such as baffles, sealed gates, spill guards, and tarps) on all vehicles used to transport wastes.
-  Use vacuum transfer systems to minimize waste loss during loading or unloading.





3.8 Maintenance & Construction Activities



You can prevent or reduce the discharge of pollutants to stormwater from building and grounds maintenance by:

- 🌴 Implementing cleaning practices that use little to no water
- 🌴 Planting native vegetation can reduce irrigation, fertilization, and pesticide needs
- 🌴 Cleaning up spills immediately and keeping paved surfaces swept, the amount of contaminants and sediments that reach stormwater drains can be reduced

🌴 **Structural Controls**

- 🌴 • **Retention Ponds:** Permanent structures designed to allow time for sediments to settle and water to infiltrate into the ground.
- 🌴 • **Temporary Sediment Basins:** Structures designed to control the release of stormwater and detain sediment-laden runoff long enough for sediments to settle out.
- 🌴 • **Entrance/Exit Controls:** Temporary controls (such as gravel) used to stabilize

entrances/exits to the site to reduce the amount of soils “tracked-out” onto paved roads.

🌴 • **Silt Fencing:** A temporary control used to

🌴 The following are structural and non-structural controls that can be used at construction sites to minimize stormwater impact:



Non-structural Controls

- **Stabilization:** Techniques (such as sodding, mulching, and stone cover) which reduce the erosion of exposed soils and steep grades.
- **Phased Construction:** Scheduling construction to occur during the dry season or to minimize the amount of land cleared at any one time.





4.0 Green Operations for Stormwater Pollution Prevention



Stormwater drains prevent flooding by allowing rain water to run off of impervious surfaces (for example: concrete) and into natural water bodies (for example canals).



There is a common misconception that the water that flows into storm drains is channeled to a wastewater treatment plant before coming into contact with the environment. However, stormwater runoff typically flows directly into canals, streams, rivers and bays without going through any treatment or filtering process.

Rainfall in industrial areas, such as airports, can wash chemicals and contaminants off of machinery, vehicles and ground surfaces and is then carried down stormwater drains and flows directly into the surrounding canals and ponds with the potential to cause health risks and negative impacts on the environment.

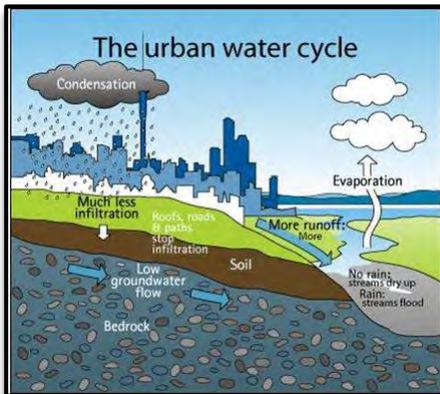


Due to the potential impact to the environment from stormwater systems at airports, operators at airport facilities are required to participate in the National Pollutant Discharge Elimination Service (NPDES) Stormwater Pollution Prevention Program.



As part of this program, airport operators are required to apply for a Multi-Sector Generic Permit (MSGP) for industrial stormwater activities, and maintain a Stormwater Pollution Prevention Plan (SWPPP). Broward County and airport tenants are not co-permittees. Airport tenants must submit their own MSGP Notice of Intent. BCAD does not allow industrial non-stormwater discharges to enter the stormwater or sewer system at FLL. As such, all **industrial non-stormwater generated wastewater must be disposed of off-site**. Waste disposal facilities that accept wastewater are located throughout Broward County, and are listed in the phonebook under waste disposal.

4.1 How is Stormwater Pollution Prevented?



Chemical pollutants have the potential to cause health problems amongst both humans and wildlife, and can negatively impact drinking water sources. Beyond bacteria and chemicals, sediments washed into rivers and streams can cloud water, blocking the light needed for water plants to survive and having a negative effect on the food chain.

Some examples of common stormwater pollutants from airports are:

- Jet fuel
- Oil
- Hydraulic and transmission fluid
- Lavatory wastes, wash water and debris from aircrafts
- Sediment or debris from industrial or construction activities
- Deicing chemicals

Possible source areas for stormwater pollution present at FLL include areas used for:

- Maintenance, cleaning, or storage of aircraft, ground vehicles or equipment
- Materials/chemical storage
- Fuel servicing activities or other operations in support of airport fuel system
- Waste storage
- Runway operations



Stormwater pollution can be minimized or prevented by:

- Reducing the sources of potential contaminants
- Reducing the exposure of contaminant sources to rainfall
- Managing contaminated runoff

Some potential BMPs to reduce stormwater pollution:

- Post proper signage near storm drains to inform employees to never eliminate liquid waste in stormwater drains
- Perform maintenance of vehicles, machinery and aircrafts indoors to minimize rainwater interaction with spills and contaminants
- Use alternative dry cleanup methods (for example: rags and mops) to clean machinery
- Use spill pans for all activities where fluid leaks may occur

4.2 Who is Required to Participate in the BCAD Stormwater Pollution Prevention Program?

The typical activities that the Stormwater Pollution Prevention Programs cover include: Aircraft Fueling Aircraft maintenance and repair, Lavatory Services Vehicle and equipment operations, repair and maintenance.



In order to confirm whether your facility is required to participate in the NPDES Stormwater Pollution Prevention Program, first determine your facility's Standard Industrial Classification (SIC) code. All facilities with a SIC code starting with 45 are required to participate in the BCAD Stormwater Pollution Prevention Program!

4.3 How to Apply for a NPDES Program?



[Further information about NPDES program for Industrial Activity.](#)

[The website contains the NPDES Multi-Sector Generic Permit \(MSGP\) Notice of Intent application form and additional information about the program. Specific information for Airports can be found at this website.](#)

[You can **apply** for an NPDES MSGP online at this website.](#)

Once the MSGP permit application has been submitted to FDEP, please contact the Environmental Division of BCAD to request a Stormwater Pollution Prevention Plan (SWPPP) template.

Complete the SWPPP template in order to make it specific to your site, update the plan as needed (typically once a year) and train facility personnel annually on stormwater pollution prevention!

5.0 Green Operations for Chemical Storage



In order to reduce or eliminate the environmental risks associated with chemical storage, proper storage and handling practices should be used. Storage information for each chemical can usually be obtained from the Material Safety Data Sheet (MSDS) or label. [MSDSs should be provided by the chemical manufacturer but if they are not provided they can be easily found online using this link.](#)



General safe chemical storage practices include:

- 🔑 Keeping incompatible chemicals separate
- 🔑 Storing liquids in unbreakable containers or double-contained packaging

- 🧪 Storing acids, flammables, and toxins in specially designated cabinets
- 🧪 Storing volatile chemicals in ventilated cabinets
- 🧪 Labeling and dating all chemicals upon receipt and opening
- 🧪 Storing chemicals out of sunlight and rain, and away from extreme heat or cold

5.1 Where Should I Start?

A materials inventory system involves the identification of all sources and quantities of significant materials (such as chemicals, fuels and raw materials) which are used at the facility; especially those that may be exposed to direct precipitation or storm water runoff. Identification of these materials helps determine sources of potential contamination and is the first step in pollution control.

The basic steps in developing a materials inventory are:

Identify and list all chemical substances used, stored, or processed in the workplace and obtain the material safety data sheet (MSDS) for each one.

Properly identify all containers with the name and type of substance, stock number, expiration date, health hazards, suggestions for handling and first aid information.

Clearly note on the inventory the chemicals that require specific handling, storage, use, and disposal considerations.

List materials that have been exposed to stormwater in the past three years.

Provide a description of methods and locations of storage and disposal areas and management practices



5.2 How should chemicals be stored?

Outdoor container storage/Above Ground Tanks:



- **E**nsure that all storage of oil and hazardous materials meet State and Federal regulatory standards for preventing contact with stormwater and collecting and treating runoff from hazardous waste storage areas.
- **D**evelop a Spill Prevention Control and Countermeasures Plan and train appropriate individuals on how to safely contain and cleanup spills.
- **E**nsure training of operators on proper chemical disposal and storage techniques.
- **I**nstall safeguards against accidental releases such as overflow protection devices, protective guards around tanks and piping to prevent vehicle damage, and clearly tag and label valves.
- **I**nspect tank systems and check tank integrity regularly.
- **P**erform visual inspections and audit newly installed tank systems.

- **S**urround tanks with a secondary containment system or berms to prevent leaks and runoff.

Hazardous Waste Storage BMPs:

- Store hazardous waste in approved containers with closed lids at all times.
- Store hazardous containers under a roof with proper ventilation to protect hazardous from the elements (rain, wind, heat, humidity).
- Inspect containers at least weekly for damage or leaks.
- Post proper signage near hazardous waste storage areas (such as: “No Smoking”, “Fire Hazard”, and “Hazardous Waste”).
- Post spill clean up contractor phone number and keep it current.
- Separate waste containers by a berm, dike, or wall to prevent reactions among waste.
- Provide adequate aisle space in chemical storage areas should have adequate aisle space and spill response materials nearby.
- Do not dispose of chemicals (hazardous waste) in dumpsters or trash cans.
- Do not mix dissimilar waste streams (such as organic solvents and aqueous solutions) in one container. Some non-compatible wastes if mixed could cause dangerous chemical reactions.
- Do not mix non-hazardous waste with hazardous waste. If mixed, all the waste becomes hazardous and the cost of disposal increases

5.3 What Do I Do If I Have A Release?

Cleaning up after a release is the second line of defense between contaminants and the environment when pollution prevention practices have failed. It is necessary to plan for spills and design a comprehensive Spill Prevention Control and Countermeasures Plan (SPCCP)

following the federal guidelines defined in 40 CFR 112.7, if applicable. See **Chapter 6.0** for a web link to 40 CFR 112.7.



When a release occurs, a series of BMPs should be followed to avoid or minimize contamination of stormwater. Post the current clean-up contractor contact information so you know who to call in case of a spill. Be aware that spills of certain toxic chemicals are covered under regulations, including those imposed under the Superfund Amendments and Reauthorization Act (SARA), the Comprehensive Environmental Responsibility, Compensation, and Liability Act (CERCLA), and the Resource Conservation and Recovery Act (RCRA).

Methods of spill mitigation include:

1. Sweeping

- 🧹 Useful for removing small quantities of dry chemicals and solids.
- 🧹 Use proper precautions and appropriate protective equipment (gloves, face shields, etc.) when sweeping hazardous chemicals.
- 🧹 Sweeping work areas regularly can reduce the amount of hazardous material exposed to rain fall and prevent tracking of hazardous material outside the work area.
- 🧹 Clean and store brooms properly after use.



2. Shoveling

- 🛠️ Useful for removing larger quantities of dry chemicals, dry solids, wet solids, and sludge, especially from sites not easily accessible by mechanical cleanup methods.
- 🛠️ Plan for the transport and disposal or reuse of the shoveled materials.
- 🛠️ Clean and store shovels properly after use.

3. Excavation Practices

- 🏗️ Useful for large releases of dry materials or areas contaminated by liquid material releases.
- 🏗️ Removal of contaminated materials using mechanical equipment (excavators and backhoes).
- 🏗️ Store all equipment and machinery appropriately to avoid exposure to precipitation
- 🏗️ Dispose of excavated materials properly.



4. Vacuum and Pump Systems

- 🧹 Useful for cleaning up spilled or exposed dry or wet materials.
- 🧹 Portable, simple and a fast way to clean up a spill.
- 🧹 Dispose or reuse collected materials properly.



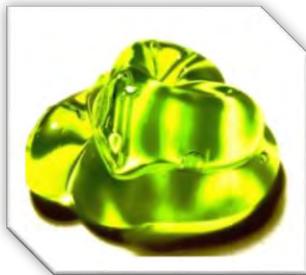
5. Sorbents

- Useful to clean up spills in water environments through the chemical process of adsorption and absorption.
- Examples of absorbent materials are: clay, polymers, activated carbon, and silicate glass foam.
- Train employees on which sorbents are correct to use for each potential type of spill.
- Dispose of the contaminated sorbents properly.



6. Gels

- Useful for facilities with significant amounts of liquid materials stored onsite.
- Used to stop a material's movement by interacting with liquids by concentrating or congealing it into a semisolid.
- Remove solidified semisolid via mechanical or manual methods.
- Train employees in proper use and application of different gel types.
- Dispose of contaminated gels properly.

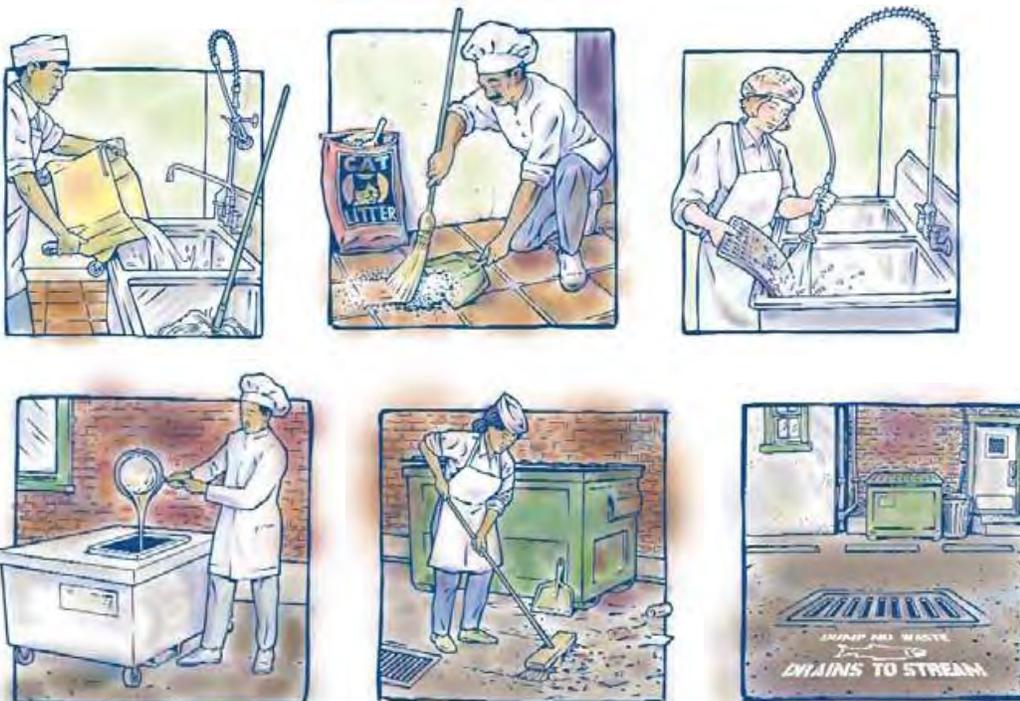


6.0 Food Preparation

Good Cleaning Practices to stop stormwater pollution, for the environmentally responsible restaurant.

Our actions within our watersheds have a direct impact on our rivers and streams. These Best Management Practices help prevent pollution from going down the storm drains and into our rivers.

- Pour wash water into a utility sink or curbed cleaning facility with a floor drain. Don't pour it out onto a parking lot, alley, sidewalk or street.
- Use dry methods for spill cleanup (sweeping, cat litter, etc.) Don't hose down spills.
- Clean floor mats, filters and garbage cans in a utility sink or curbed cleaning facility with a floor drain. Don't wash them in a parking lot, alley, sidewalk or street.
- Recycle grease and oil. Don't pour it into sinks, floor drains, or onto a parking lot or street.
- Keep dumpster area clean and lid closed. Don't fill it with liquid waste or hose it out.



Stormwater Pollution Prevention Starts with You!