Facility Runoff Control Plan (FRCP)

Facility

Date

Facility Runoff Control Plan

Table of Contents

List of Figures

Overview of Facility Operations

INTRODUCTION

The X Maintenance Facility is the Operations Headquarters and a base for highway maintenance operations providing many support services to the X District such as building bridge, rotomill, and drilling crews, landscaping and mowing, fleet maintenance and repair, fueling, sign shop activities, a surplus auction lot, and hazardous materials and hazardous waste storage facility. These operations occur within the boundaries of the facility's service area (Figure 2).

FACILITY INFORMATION

Facility:	X
Maintenance Supervisor	X
Maintenance Superintendent	X
Facility Address:	
Street:	X
City, State, Zip:	X
Mailing Address:	X
City, State, Zip:	X
Latitude:	X
Longitude:	X
Adjacent MS4 Operator:	X
Name of Receiving Water Body:	X
Facility Lot Size:	X

Figure 1 – Facility Service Area Map

FACILITY RUNOFF CONTROL PLAN INFORMATION

This Facility Runoff Control Plan (FRCP) supports the MoDOT TS4 program. The document provides education, inspection, and corrective action guidance for the X Maintenance Facility to help implement the Good Housekeeping/Pollution Prevention Measures required of MoDOT under their TS4. Facility staff can use the site-specific information provided in this document to:

- Conduct inspections required by the Department of Transportation,
- Identify potential target pollutants and sources, and
- Take personal actions for managing pollutants and sources.

Facility Good Housekeeping/Pollution Prevention inspections will be conducted by Qualified Facility Inspectors **at least every 6 months** using the form provided in this FRCP. A Facility Inspector is considered qualified at the discretion of the Maintenance Supervisor. At a minimum, a Qualified Facility Inspector will have read this FRCP; be familiar with, *if applicable*, the Spill, Prevention, Control, and Countermeasure (SPCC) Plan; receive a briefing from a Qualified Facility Inspector on the inspection process; and participate in Stormwater Pollution Prevention Training when offered by MoDOT. The following personnel will be involved in managing and conducting the bi-yearly inspections as well as participating in random Audit Inspections scheduled by the Environmental Section or District Maintenance staff:

Hazardous Waste Specialists
Maintenance Supervisor
Environmental Specialist - Stormwater

Additional Qualified Facility Inspectors:

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____
16. _____
17. _____
18. _____
19. _____
20. _____

A FRCP bi-yearly (once every 6 months) Inspection form must be completed as part of every inspection. When problems are identified during an inspection, the last page of the form will be used to note corrective actions that can be done to quickly reduce risk that the problem poses. Personal actions (sometimes called non-structural best management practices) are encouraged as the first line of defense against stormwater pollution. If structural best management practices, which typically require capital expenditures, are necessary, the inspection forms can be used as a demonstration of such a need. Corrective actions must be clear, descriptive, and specific. Write corrective actions in such a way that anyone can understand exactly what needs to be done and where it needs to be done.

Problems identified on the inspection form should be addressed or resolved before the next rain event and no later than the next inspection. Mark the date that each corrective action was taken and attach a more detailed description of the problems to the form if necessary. Completed inspection forms will be kept at the facility or on sharepoint for at least three years.

Qualified inspectors may encounter difficult or complex issues that will take longer than anticipated to resolve. It is important that the inspectors and the facility supervisor work together to identify a corrective action that can be accomplished before the next inspection takes place. Some possible examples of intermediate steps may include:

- Research alternative products available, costs, and possible distributors
- Order new part or product through purchasing
- Contact Maintenance Superintendent, Environmental Specialist or Hazardous Waste Specialist to discuss priorities and available funding for alternative management practices.

If a corrective action is not completed by the next inspection, it must be moved over to the next inspection report. Place an asterisk (*) in the Date Implemented box and move the incomplete corrective action to the next month's form. Carry the incomplete corrective action until is completed and dated. Caution is suggested in determining when to carry over items that are a higher severity or have the potential to cause immediate effects to waters of the state. Those items should be addressed immediately.

Potential Pollutant Sources and BMPs

OVERVIEW

Target pollutants are generated through the day-to-day operation and maintenance activities conducted within maintenance facilities. The following five groups of target pollution categories include a range of pollution sources that can be managed to reduce the risk of stormwater pollution by minimizing the exposure of target pollutants to the environment.

A. BUILDING AND GROUNDS MANAGEMENT

Maintenance facilities require building and grounds management, which includes care of landscaped areas around each facility, cleaning of parking areas and pavements, and maintenance of the stormwater drainage system.

Tasks to perform these activities include equipment operation, litter/trash pickup and maintenance landscaping, which can in turn result in spills, leaks, trash, sewage, chemical vegetation control, and erosion.

Potential target pollutants include sediment, litter, trash, sewage, pesticides, fuel, hydraulic fluid and oil. Buildings and grounds must be maintained in a manner that reduces the risk of discharging pollutants to the stormwater drainage system.

The following potential pollution sources are included in the FRCP:

Stormwater Drainages – drain inlets, catch basins, drainage swales, ditches, outfalls

Paved Areas

Exposed Soil and Gravel

Floor Drains, Trench Drains, and Oil-Water Separators

A. BUILDING AND GROUNDS MANAGEMENT cont.

Minimum Required Best Management Practices (BMPs):

a. Keep existing culverts, ditches, gutters, drain inlets, catch basins, and outfalls free of target pollutants and in good structural condition.

b. Sweep paved areas to remove sediment and other materials that could be tracked or dispersed across the facility.

c. Inspect soil and gravel areas to locate erosion and off-site discharge of sediment or aggregate that needs to be prevented.

d. Keep floor drains, trench drains, and oil-water separators clear of build-up or debris to ensure proper drainage.

e. Use cleaning methods such as sweeping instead of water cleanup (hosing down), when possible.

B. VEHICLE AND EQUIPMENT MANAGEMENT

Maintenance facilities are the regional staging areas for all vehicles and equipment used to operate and maintain roads and properties owned by MoDOT. All vehicles and equipment require operation and management of some type, which may include storage, fueling, cleaning, maintenance, and repair.

Haphazard management actions can quickly lead to substantial spills, leaks, and non-stormwater discharges. **Vehicle fluids at fueling areas as well as equipment washing, storage, and maintenance areas must be managed to reduce the risk of discharging pollutants to the stormwater drainage system.**

The following potential pollution sources are included in the FRCP:

Vehicle & Equipment Washing

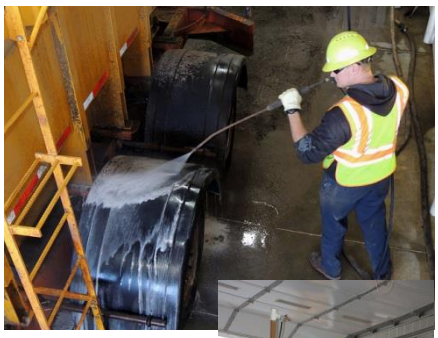
Parked Vehicle & Equipment Storage

Vehicle & Equipment Fueling

Vehicle & Equipment Maintenance and Repair

B. VEHICLE AND EQUIPMENT MANAGEMENT cont.

Minimum Required Best Management Practices (BMPs):



a. Wash vehicles in designated areas.

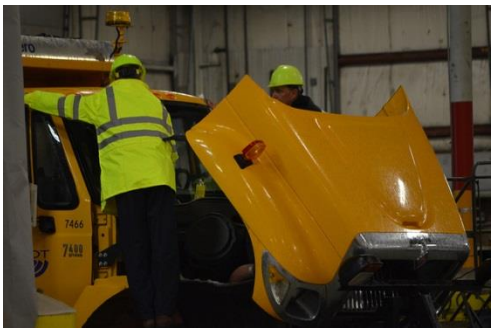
b. Minimize water use during cleaning operations.

c. Keep parts, equipment, and vehicles stored indoors or within designated outdoor areas away from storm drains, inlets, or catch basins.

d. Cleanup evidences of fuel or oil residues on surfaces by grinding absorbent into the surface (typically using the sole or heel of your shoe or boot) and sweeping up material and disposing of it in a trash can.

e. Park vehicles and/or equipment close to the pump when refueling.

f. Do not repair or maintain vehicles and equipment near drain inlets, catch basins, or outfalls.



C. PRODUCT MATERIAL MANAGEMENT

Maintenance facilities store a large variety of products that could be harmful to the environment if they come into contract with surface water.

Materials that may be stored include pesticides, petroleum products, paints, concrete and asphalt products, and solvents. Storage and handling practices that minimize exposure of these materials to stormwater can significantly minimize the potential for receiving water contamination.

Large stockpiles of materials located on maintenance lots require responsible management just as much as products that are stored indoors or under cover. Large stockpiles of material may include sand or gravel mixed with de-icing chemical such as salt, magnesium chloride, etc.; asphalt cold patch material; mulch; or millings. Stockpiles of material containing chlorides or other potential pollutants should be covered to prevent leaching between April 15th and October 1st in all cases and year-round when practical. **All product materials must be managed to reduce the risk of discharging pollutants to the stormwater drainage system.**

The following potential pollution sources are included in the FRCP:

Stockpiled Materials – sand or gravel mixed with de-icing chemical, asphalt cold patch, mulch, millings

Weed & Pest Management Chemicals – fertilizers, herbicides, pesticides

Paints, Adhesives, & Solvents

Petroleum, Oils, & Fluids

C. PRODUCT MATERIAL MANAGEMENT cont.

Minimum Required Best Management Practices (BMPs):

a. Locate raw material stockpiles away from drain inlets catch basins, and outfalls.

b. Sweep up loose product that is outside of designated area to prevent tracking.

c. Store and dispose of pesticides, and fertilizers per manufacturer's instructions and any state requirements.

d. Store materials in a dedicated area away from direct traffic routes to prevent accidental damage or spills and store materials indoors or under a covered area when possible.

e. When receiving new product materials, check drums, tanks, and containers for leaks.

f. Close containers between filling and emptying events.

D. BULK STORAGE TANK MANAGEMENT

Bulk storage tanks full of stock products are a typical feature of most maintenance facilities and they generally come in all shapes and sizes. Substances contained in storage tanks may include soil stabilizers, dust suppressants, herbicides, fertilizers, de-icing chemicals, fuels, lubricants and other petroleum products.

A Spill Prevention, Control, and Countermeasure (SPCC) Plan may be in place to reduce the risk of pollution from certain petroleum products, but all bulk storage tanks generate a certain level of risk of discharge to adjacent drainages and receiving waters. **Storage tanks must be protected and maintained in a manner that reduces the risk of discharging pollutants to the stormwater drainage system.**

The following potential pollution sources are included in the FRCP.

Aboveground Storage Tanks – fuel, winter road maintenance chemicals, and road, motor, or tack oils

Weed & Pest Management Chemicals – fertilizers, herbicides, pesticides

D. BULK STORAGE TANK MANAGEMENT cont.

Minimum Required Best Management Practices (BMPs):

a. Inspect storage tanks, pumps, pipes, and valves for leaks, signs of corrosion, support or foundation failure, or other deterioration.

b. Keep valves or plugs on secondary containment closed at all times except when collected water is being removed per SPCC Plan, if applicable. Collected water can be discharged after any oil sheen has been removed. Immediately replace plug or close valve once water is drained.

c. Inspect paved surfaces near storage tanks for visible signs of residues. Cleanup fuel or oil residues on surfaces by grinding absorbent into the surface and sweeping up material.

d. Maintain and inspect integrity of all underground storage tanks.

e. Make sure automatic shutoff devices are functioning properly.

f. Protect tanks from traffic using bulkheads, jersey barriers, or other substantial barriers.

E. WASTE MATERIALS MANAGEMENT

Activities at maintenance facilities generate many types of wastes that accumulate or may be discharged into the environment. Types of waste that must be managed include construction salvage materials such as rubble, fencing, soil, aggregate; recyclables such as scrap metal, tires, spent parts-washer solvent, used oil, and used batteries. Waste materials can also include trash debris, empty product containers, and rinse water.

Personnel should consult with your Hazardous Waste Specialist to ensure waste management compliance for your respective maintenance facility. Both hazardous and non-hazardous wastes must be managed to reduce the risk of discharging pollutants to the stormwater drainage system. **Both hazardous and non-hazardous wastes must be managed to reduce the risk of discharging pollutants to the stormwater drainage system.**

The following potential pollution sources are included in the FRCP:

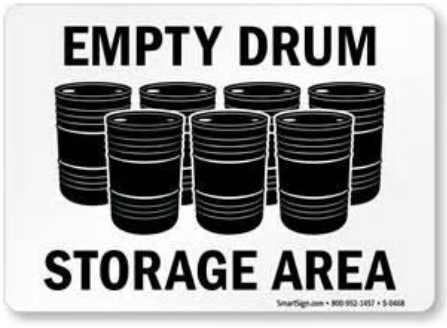
Waste Materials – trash, debris, empty product containers, rinse water

Construction Salvage – rubble, fencing, replaced equipment, soil, aggregate

Recyclables – scrap metals, used batteries, tires, spent solvent, used oil

E. WASTE MATERIALS MANAGEMENT cont.

Minimum Required Best Management Practices (BMPs):



a. Cover and clearly label all waste receptacles according to waste type.

b. Ensure that trash bins are used and not overflowing by scheduling regular pick-up and disposal of waste materials.

c. Develop a plan to reuse or dispose of construction salvage, drums and other accumulated wastes as soon as the material is brought on-site.

d. Store containers, material, and salvage away from direct traffic routes and floor and trench drains to prevent accidental damage or spills.

e. Educate and train every employee that it is their daily responsibility to be aware of materials, residues, and trash that could be washed away in stormwater.

f. Store batteries in an upright position in leak-proof covered containers.

g. Schedule regular pick-up for waste tires, scrap metal, used oil, used antifreeze and other waste intended for recycling.

Figure 2 –Inspection Site Map (Can re-use SPCC map). Needs to show flow paths.

Figure 3 – FRCP Inspection Form

Answer the following questions for each Facility Area.

Enter Y for Yes, N for No, or X for Not Applicable. Record needed corrective action(s) on page 20. Include Area Name and Question Number with each corrective action. All "Yes" responses require some type of corrective action.

A. BUILDING AND GROUNDS

Storm Drains:

1. Do storm drains, inlets, catch basins, or drainage ditches need to be cleaned out or repaired?

2. Are there signs of pollutant migration at the outfall structure or in the adjacent waterway?

Outdoor Collection System:

3. Do inlet drains, trench drains, or oil/water separators need to be cleaned out or repaired?

Exposed Soil and Gravel:

4. Do areas of exposed soil or gravel show signs of erosion?

Paved Surfaces:

5. Do paved surfaces need to be swept to prevent stormwater from carrying loose debris or materials to storm drain system?

B. VEHICLES AND EQUIPMENT

Outdoor Storage

6. Are there any leaks, spills or fluids from parked vehicles or equipment?

7. Are leaking vehicles parked near storm drains, inlets, catch basins, known ponding acres or drainage ditches?

8. Is there damage or leaks to equipment lines or connectors?

Washing:

9. Do wash areas have accumulated gravel, salt, grass clippings or other materials that need to be cleaned up?

Maintenance and Repair Bays:

10. Are there loose materials or leaks on the floor that could be tracked outdoors?

Fueling:

11. Is the area clean and any spills cleaned up immediately?

12. Are hoses and nozzles showing signs of wear, cracks, or damage?

(*Facility Name*)

Facility Areas						

FRCP Inspection (continued)

Facility Areas						

C. PRODUCT MATERIALS

Stockpiles:

13. Are material storage areas uncontained or unprotected from erosion potentials?
14. Is there any loose material outside the designated area?
15. If the material is not actively being used, is it protected by BMPs?

Other Products:

16. Are containers located in traffic areas or near drains or is there evidence of leaks, spills, damaged or unlabeled product containers for:

a.Fertilizers & Pesticides

b.Paint, Adhesives, or Solvents

c.Petroleum Oils & Fluids

d. Other Products

D. BULK STORAGE TANKS

17. Have stored materials/residues accumulated on the ground surface near the storage tank areas?
18. Are there signs of leaks, corrosion, support or foundation failure, or other deterioration on tanks, pumps, pipes or valves?
19. Do storage tanks need to be protected from traffic by location or barriers?

E. WASTE MATERIALS

Waste, Construction Salvage, Recyclables

20. Has trash, litter or debris accumulated along the boundary of the facility?
21. Is there evidence of leaks, spills, damaged or unlabeled waste containers?
22. Are waste materials located near floor or trench drains, outfalls, traffic areas or in areas prone to flooding or ponding?
23. Can the amount of waste materials or recyclables be reduced to minimize exposure?
24. Are street sweeping records being kept for at least 3 years?

(*Facility Name*)

Corrective Actions(s) or Comments

Area Name	Question Number	Corrective Action or Comment	Date Implemented*
2	1	Clean debris and excess sediment from storm drain inlet and dispose of debris and excess sediment appropriately	9-22-15

Example

*Move incomplete corrective actions to the next inspection form.

Inspection Team Members present during inspection: _____

_____

_____

_____

Maintenance Facility Name: _____

Report completed by: _____ _____

Inspector's Name Inspection Date