

Facility Runoff Control Plan **FRCP**

City of Papillion Public Works Facility



Facility Draft FRCP
October 13, 2015

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Facility Runoff Control Plan

Table of Contents

OVERVIEW OF FACILITY OPERATIONS	1
Introduction	1
Facility Information	1
Facility Runoff Control Plan Information.....	3
POTENTIAL POLLUTANT SOURCES AND BMPs	5
Overview	5
A. Building and Grounds Management	5
B. Vehicle and Equipment Management	7
C. Product Material Management	9
D. Bulk Storage Tank Management.....	11
E. Waste Materials Management	13

List of Figures

Figure 1 - Vicinity Map	2
Figure 2 - FRCP Monthly Inspection Form.....	13

Overview of Facility Operations

INTRODUCTION

The Papillion Public Works Facility serves as a base for all street maintenance operations, as well as the office for all managerial and administrative positions within the Public Works Department. The facility is utilized for the purpose of storing, staging and maintaining vehicles, equipment and materials necessary for their operations. Street maintenance operations include street cleaning, repair, winter road salt application, sign maintenance, as well as litter, debris, and graffiti cleanup. Vehicle maintenance provides repair and routine maintenance activities for equipment and vehicles used by various departments throughout the city.

FACILITY INFORMATION

Facility: Papillion Public Works Facility

Main Facility Contact: Marty Leming, Public Works Director

Facility Address:

Street: 9909 Portal Road

City, State, Zip: Papillion, NE 68046

Mailing address: 9909 Portal Road

City, State, Zip: Papillion, NE 68046

Latitude:

Longitude:

Name of

Receiving Water Body: Papillion Creek

Facility Size: 25.3 Acres

Precipitation Information: Average Annual Precipitation- 30 inches
Wet Season- April through October

Monitoring Requirements: None required

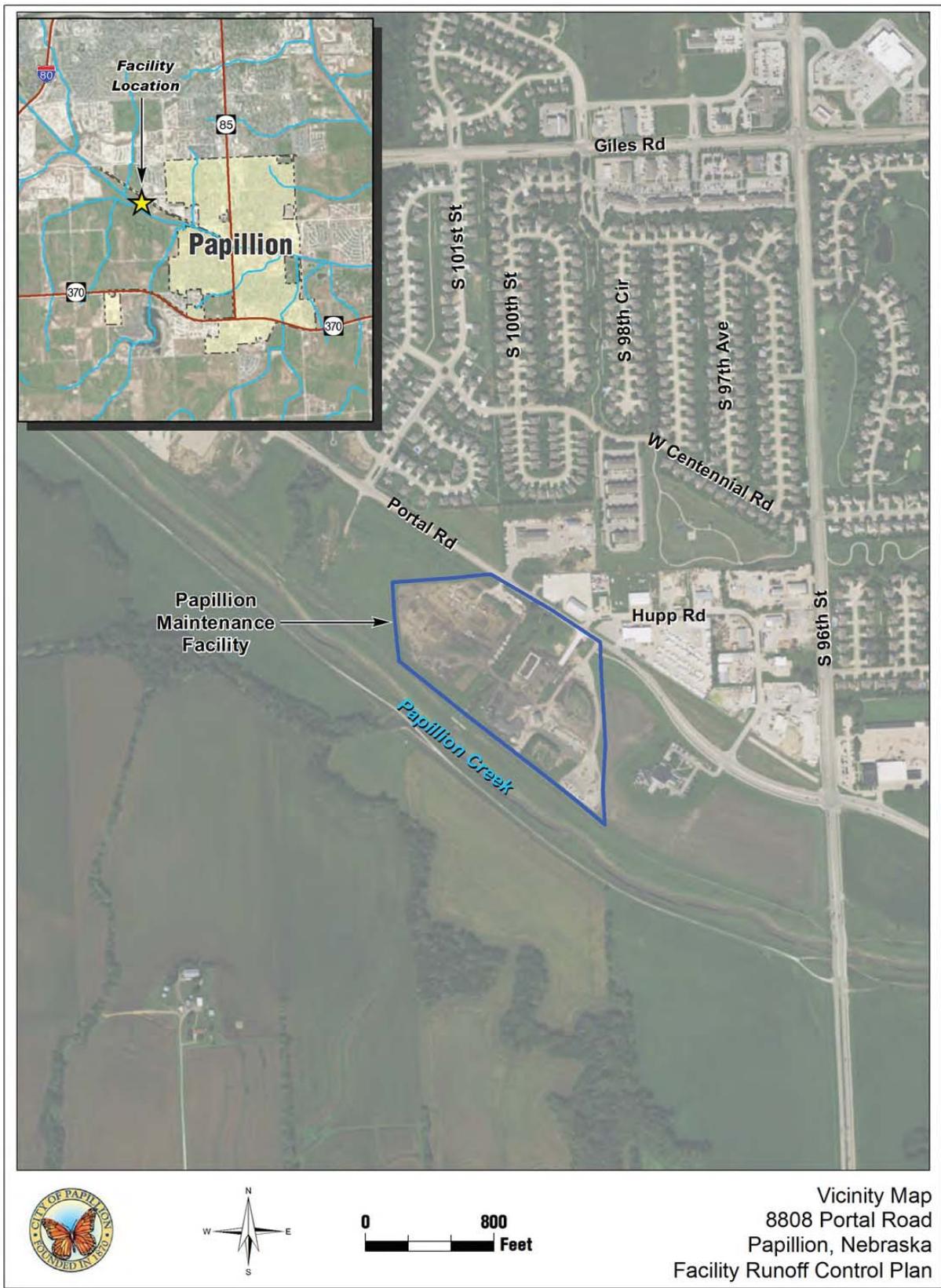


Figure 1 – Vicinity Map

FACILITY RUNOFF CONTROL PLAN INFORMATION

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

- Conduct inspections required by the City,
- 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 **each month at approximately 30 day intervals** using the form provided in this FRCP. A Facility Inspector is considered qualified at the discretion of the FRCP Development Team. 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 the City. The following personnel will be involved in managing and conducting the monthly inspections as well as participating in random Audit Inspections scheduled by the FRCP Development Team:

Division Supervisor

Marty Leming

Main Site Contact

Mark Freese

Alternate Contact

Mike Grieb

Qualified Facility Inspectors:

1. _____

5. _____

2. _____

6. _____

3. _____

7. _____

4. _____

8. _____

An FRCP Monthly Inspection form must be completed as part of every 30 day 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 monthly 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 for at least three years.

Qualified inspectors may encounter difficult or complex issues that will take longer than a month 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 Main Site Contact, Alternate Contact, Division Supervisor, or the Environmental Quality Control Division to discuss priorities and available funding for alternative management practices.

If a corrective action is not completed by the end of the month, 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 month to month until is completed and dated.

Potential Pollutant Sources and BMPs

OVERVIEW

Target pollutants enter the environment 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 and some structural Best Management Practices (BMPs).

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 could 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 and/or potential pollutant conveyances are included in the FRCP:

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

Infiltration, Retention and Detention BMPs

Paved Areas

Exposed Soil, Gravel and Millings

Floor Drains, Trench Drains, and Oil-Water Separators

A. BUILDING AND GROUNDS MANAGEMENT cont.

Suggested Best Management Practices (BMPs):

- a. Keep culverts, ditches, gutters, drain inlets, catch basins, and outfalls as well as infiltration, retention and detention areas 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. Do not wash or spray materials into the storm drain system.
- c. Inspect and identify areas of erosion, or off-site discharge of sediment or aggregate, that need preventative maintenance.
- d. Keep floor drains, trench drains, and oil-water separators clear of build-up or debris to ensure proper drainage.
- e. Clearly mark storm drain inlets with a message (paint, stamp, adhesive discs, etc.) to protect location from target pollutants.
- f. Keep emergency clean-up materials such as drain covers, absorbent booms, rags, or sandbags conveniently located near drain inlets, catch basins and outfalls to stop pollutants from entering in the event of a spill.
- g. Install grates over inlets that will keep trash and debris from entering storm drains.
- h. Keep paved surfaces in good condition. Protect slopes, flat areas, exposed soil areas, or transportation corridors with pavement if vegetation or aggregate are not an option or are inadequate solutions.



B. VEHICLE AND EQUIPMENT MANAGEMENT

Municipal maintenance facilities are regional staging areas for all vehicles and equipment used to operate and maintain streets, parks, trails, sewers, fleets, waste collection and other properties owned by the City. All vehicles and equipment require operation and management of some type, which may include storage, fueling, cleaning, maintenance, and repair.

Poor management practices 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.

Suggested Best Management Practices (BMPs):

- a. Wash vehicles in designated areas (preferably under cover with a pipe to a collection pit and the City sanitary sewer) away from storm drain inlets, catch basins, outfalls, and areas that are prone to flooding or ponding.
- b. Minimize water use during cleaning operations and use dry clean-up methods to remove sediments, clippings and debris.
- c. Use phosphate-free biodegradable detergents if cleaning agents are necessary.
- d. Keep parts, equipment, and vehicles stored indoors or within designated outdoor areas away from storm drains, inlets, or catch basins.
- e. Inspect all connectors and liquid reservoirs on stored equipment and vehicles for leaks. Move leaking equipment and vehicles indoors or capture leaking materials and dispose of properly
- f. Immediately contain and clean up any spills or releases when they occur, and properly dispose of the cleaning materials.
- g. 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.
- h. Keep spill response kits and/or clean-up materials in close proximity to areas where spills or leaks are most likely to occur. Dispose of properly after use.
- i. Park vehicles and/or equipment close to the pump when refueling.
- j. Conduct all maintenance on vehicles and equipment indoors whenever possible. 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 liquid and soluble products that could be harmful to the environment if they come into contact with surface waters. Materials that may be stored include pesticides, petroleum products, paints, concrete and asphalt products, solvents and others. Storage and handling practices that minimize exposure of these materials to stormwater significantly minimize the potential for pollution of receiving water.

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; soil; 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, soil

Weed & Pest Management Chemicals- fertilizers, herbicides, pesticides

Paints, Adhesives, & Solvents

Petroleum, Oils, & Fluids

C. PRODUCT MATERIAL MANAGEMENT cont.

Suggested 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. Reduce the exposure of stockpiles and limit the amount of stockpiled materials during the rainy season.
- d. To the extent possible, store materials indoors or cover piles with storm resistant coverings to prevent exposure to precipitation.
- e. Minimize the amount of pesticides and fertilizers that are stored on-site at all times.
- f. Store and dispose of pesticides and fertilizers per manufacturer's instructions and any state requirements.
- g. 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.
- h. When receiving new product materials, check drums, tanks, and containers for leaks.
- i. Ensure all containers are clearly and accurately labeled according to contents.
- j. Close containers between filling and emptying events.
- k. Keep an adequate supply of dry absorbent material and spill response kits on-site and dispose of properly once used.



D. BULK STORAGE TANK MANAGEMENT

Bulk storage tanks full of stock products are a typical feature of many 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 discharging pollutants 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

Underground Storage Tanks – fuel

D. BULK STORAGE TANK MANAGEMENT cont.

Suggested 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 containment water that is free from visual evidence of pollution is being removed (see SPCC requirements, if applicable). Collected water can be discharged after any evidence of pollution has been removed. Immediately replace plug or close valve once water is drained.
- c. Protect tanks from traffic using bulkheads, jersey barriers, or other substantial barriers.
- d. Educate tank fillers to use wheel blocks during unloading and where the overfill warning devices and alarms are located.
- e. When possible, locate aboveground storage tanks on paved, impermeable surfaces with secondary containment.
- f. Inspect 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.
- g. Maintain and inspect integrity of all underground storage tanks as per state fire marshal requirements.
- h. Periodically check to make sure the ball float valve is functioning properly and that it will restrict fuel flow according to manufacturer's specifications.
- i. Make sure automatic shutoff devices for all tanks are functioning properly.



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 and debris, empty product containers, and rinse water.

Personnel should reference the Departmental Procedures to determine the appropriate methods for managing all types of waste since federal and state waste management regulations require specific disposal practices. For any material that poses a significant threat to human health and the environment, contact Hazardous Materials Response. If unsure of disposal requirements, contact the Environmental Services Division for direction. **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, street sweepings, vacuum truck waste, empty product containers, rinse water, used oil filters

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

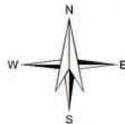
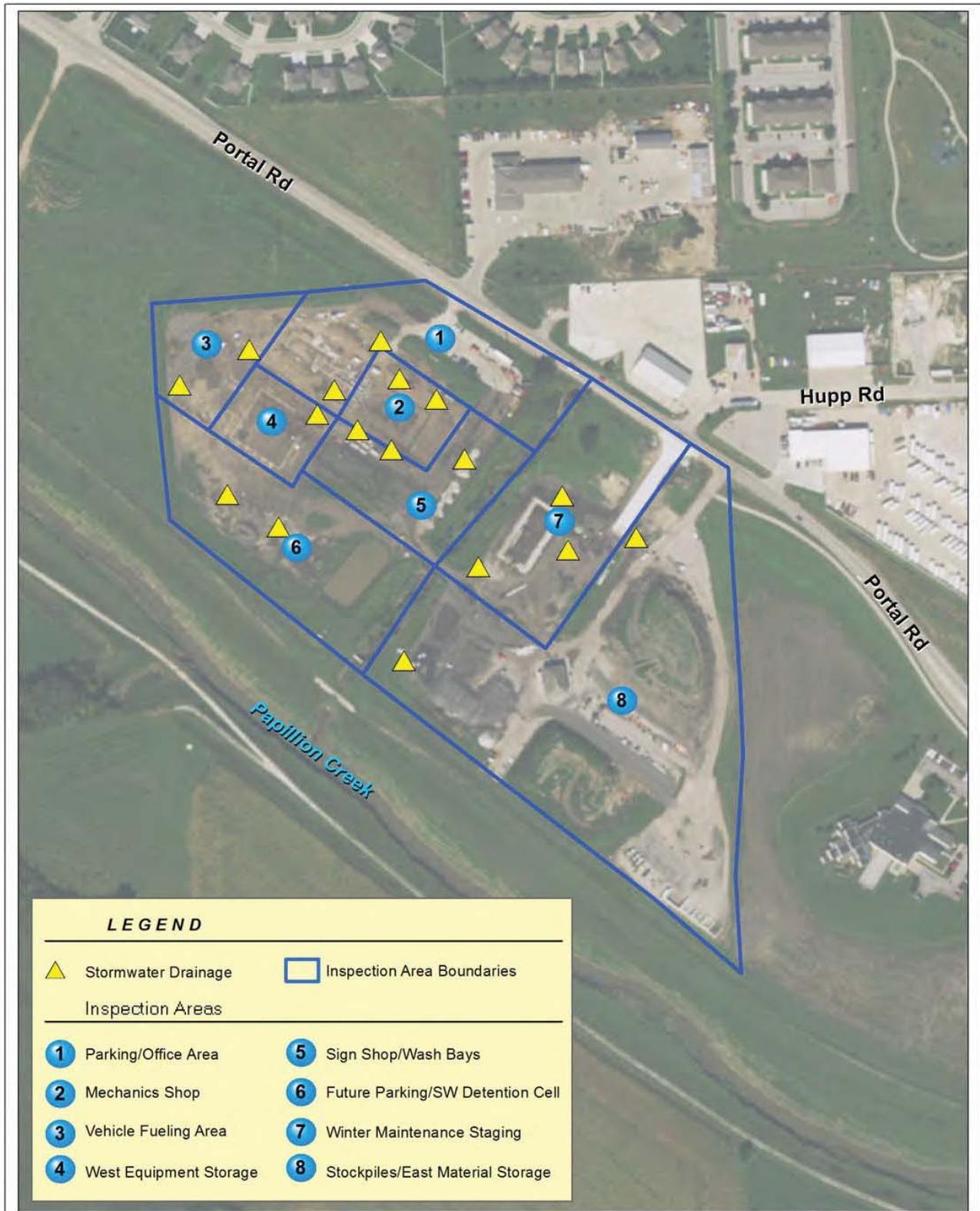
Recyclables- scrap metal, used batteries, tires, spent solvent, used oil

E. WASTE MATERIALS MANAGEMENT cont.

Suggested Best Management Practices (BMPs):

- a. Cover and clearly label all waste receptacles according to waste type.
- b. Collect all litter that accumulates around the facility grounds and dispose in properly labeled containers.
- c. Ensure that trash bins are used and not overflowing by scheduling regular pick-up and disposal of waste materials.
- d. Store containers, material, and salvage away from direct traffic routes, drain inlets, catch basins, outfalls, areas prone to flooding or ponding, 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. Develop a plan to reuse or dispose of irregular waste material as soon as the material is brought on-site.
- g. Store batteries in an upright position in leak-proof covered containers.
- h. Schedule regular pick-up for waste tires, scrap metal, used oil, used antifreeze and other waste intended for recycling.
- i. If any waste material may be hazardous, complete a waste determination prior to disposal according to Departmental Procedures and keep records at the facility. For any material that poses a significant threat to human health and the environment, contact Hazardous Materials Response. If unsure of disposal requirements, contact the Environmental Services Division for direction.
- j. Store hazardous waste containers (preferably in a covered area) on pallets or in containment devices to prevent corrosion of the containers by contact with moisture or other chemicals.
- k. Immediately contain and clean up any spills that may occur, and properly dispose of the cleaning material.





Facility Inspection
 8808 Portal Road
 Papillion, Nebraska
 Facility Runoff Control Plan



Month _____ Year _____

Facility: Papillion Public Works Facility

FRCP Monthly Inspection

Answer the following questions for each facility area shown on the Facility Site Map. 1

Enter Yes (Y) or No (N). Record needed corrective actions(s) on the last page. Include Area 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. Do outfall structures or adjacent waterways show signs of pollutant migration?

Indoor Collection System:

3. Do floor 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 systems?

B. VEHICLES AND EQUIPMENT

Outdoor Storage:

6. Are there any leaks, spills or fluid residues from parked vehicles or equipment?
7. Are leaking vehicles parked near storm drains, inlets, catch basins, known ponding areas 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 swept up & disposed?

Maintenance and Repair Bays:

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

Fueling:

11. Does the area where fueling occurs show evidence of staining from fuel or vehicle fluids?
12. Are hoses and nozzles showing signs of wear, cracks, or damage?

Facility Areas							
Parking/Office Area	Mechanics Shops	Vehicle Fueling Area	West Equipment Storage	Sign Shop/Wash Bays	Future Parking/SW Detention Cell	Winter Maintenance Staging	Stockpiles/East Material Storage
1	2	3	4	5	6	7	8
X	X	X	X	X		X	
X		X			X	X	X
	X	X		X			
					X		X

1	2	3	4	5	6	7	8
					X	X	
					X	X	
X					X	X	
X		X			X	X	X
X		X			X	X	X
X			X	X	X	X	X
X					X	X	



Month _____ Year _____

Facility: Papillion Public Works Facility

FRCP Monthly Inspection (continued)

Facility Areas							
Parking/Office Area	Mechanics Shops	Vehicle Fueling Area	West Equipment Storage	Sign Shop/Wash Bays	Future Parking/SW Detention Cell	Winter Maintenance Staging	Stockpiles/East Material Storage
1	2	3	4	5	6	7	8
X	X	X	X	X			
X	X	X	X	X			
X	X	X	X	X			
		X					
X							
X					X		

C. PRODUCT MATERIALS

Stockpiles:

- 13. Do material storage areas need to be contained or protected to prevent erosion?
- 14. Is there any loose material outside the designated area?
- 15. If the material is not actively being used, does the stockpile need covered or reduced in size? (Stockpiles containing chlorides should be covered between April 15th and Oct. 1st)

Other Products: Consider fertilizer, pesticide, paint, solvent, petroleum, vehicle fluids and any other products.

- 16. Are containers located in traffic areas or near drains?
- 17. Do materials need to be reduced?
- 18. Are there leaks, spills, damaged, uncovered or unlabeled containers?

D. BULK STORAGE TANKS

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

1	2	3	4	5	6	7	8
X					X	X	X
X					X	X	X
X					X	X	X

E. WASTE MATERIALS

Waste, Construction Salvage, Recyclables

- 22. Has trash, litter or debris accumulated along the boundary of the facility?
- 23. Is there evidence of leaks, spills, damaged, unlabeled or uncovered waste containers?
- 24. Are waste materials located near floor or trench drains, outfalls, traffic areas or in areas prone to flooding or ponding?
- 25. Can the amount of waste materials or recyclables be reduced to minimize exposure?

1	2	3	4	5	6	7	8
	X		X	X			
X					X	X	

