Guidance for Preparing

Spill Response and Prevention Plan (SRPP)

For Control of Stormwater Pollutants at Municipal Facilities

Version: 1.0

Municipality: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Facility Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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Contact Person: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Telephone Number(s): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Prepared/Reviewed By: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Preparation/Revision Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*This document was developed under a FY-16 EPA grant. Upon EPA approval, GCSA notations were added for distribution to INCOG’s GCSA Members.*

**Emergency Contact Information**

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Title | Office Phone | Cell Phone |
| Emergency Services | Police, Fire, Ambulance | 911 | 911 |
|  | Facility Manager/Supervisor |  |  |
|  | Stormwater Manager |  |  |
|  | Stormwater Engineer |  |  |
|  |  |  |  |
|  |  |  |  |
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**Acronym Table**

|  |  |
| --- | --- |
| BMP | Best Management Practice |
| CWA | 1972 Federal Water Pollution Control Act, or Clean Water Act |
| EPA | United States Environmental Protection Agency |
| MS4 | Municipal Separate Storm Sewer System |
| OSHA | Occupational Safety and Health Administration |
| SDS | Safety Data Sheet |
| SRPP | Spill Response and Prevention Plan |
| SWMP | Stormwater Management Program |
| TMDL | Total Maximum Daily Load |

**1.0 Introduction**

This document is written for and intended to be used as a template by any municipality or county needing to develop and implement a Spill Response and Prevention Plan (SRPP) for control of stormwater pollutants released from municipal facilities. It is a good compliment to a municipal Stormwater Management Program (SWMP). Keep in mind the purpose of the SRPP is to eliminate or minimize stormwater pollution, so activities under cover, inside a building or not exposed to rain or runoff are not dealt with in this document. The exception to this would be indoor, covered or protected activities that could release pollutants to an outdoor area where the pollutants would be exposed to rain and runoff. Suggestions and ideas are presented, but since every facility and activity is different, this template should be customized to fit individual needs. Individual needs will be based upon the chemicals and materials present, storage facilities and activities at each facility.

To aid in this process, each section will start with a summary of what is needed in that particular section and why and examples will be given to help you get started. For any portion that is not pertinent, explain why or state not applicable. Once you have customized this document and it meets your needs, make it a living document by reviewing it annually and updating it whenever conditions change. In each section you may choose to use verbiage, maps, tables, flow charts or any combination of these.

* 1. **Organization of the SRPP**

Section 1 provides general information regarding stormwater requirements and review and revision of this SRPP. Section 2 describes this facility, the individuals responsible for maintaining and complying with this document and best management practices (BMP) that have been implemented to minimize spills and cleanup any releases that do occur. Section 3 defines OKR04 permit authorized and unauthorized non-stormwater releases from this facility. Section 4 describes facility operations, potential pollutants and the measures taken to eliminate or minimize the discharge of pollutants to the municipal separate storm sewer system (MS4). Section 5 discusses facility and activity assessments and contains forms for these activities.

**Stormwater Regulations**

The 1972 Federal Water Pollution Control Act (Clean Water Act, or CWA) prohibits the discharge of pollutants to “waters of the United States” from any point source unless the discharge is in compliance with a United States Environmental Protection Agency (EPA) or a state issued permit. In 1987 the CWA was amended and Section 402(p) established the framework for regulating the industrial and municipal discharge of pollutants to stormwater. The State of Oklahoma has primacy and is authorized by the EPA to administer this permitting program on non-tribal lands. At this time a SRPP is a recommendation, but not a requirement in Oklahoma’s MS4 General Permit.

Oklahoma Department of Environmental Quality Water Quality Division,

General Permit OKR04

Phase II Small Municipal Separate Storm Sewer System Discharges

Within the State of Oklahoma

November 1, 2015

The Oklahoma OKR04 Phase II Stormwater Permit mentions a spill response and prevention plan (SRPP) regarding municipal operations two times under recommendations, but at this time it is not a requirement for municipal operations to have a written plan. However, preparation of a spill response and prevention plan is a good exercise. The OKR04 permit does prohibit the discharge of unpermitted pollutants to municipally owned stormwater collection systems from municipal facilities and operations. Preparation of an SRPP helps identify materials (volumes, locations, uses, and storage conditions) that could cause stormwater pollution if spilled, thus a permit violation, and leads responsible parties through the process of determining the best methods to stop, contain, clean up and report accidental releases. The OKR04 Phase II Stormwater permit states:

3. Illicit Discharge Detection and Elimination

b. Recommendations

(1) Develop and implement a written *spill response and prevention plan* to ensure the appropriate actions that will take place when a spill occurs within your small MS4.

6. Pollution Prevention/Good Housekeeping For MS4 Operations

b. Recommendations

(2) Establish procedures for proper use, storage, and disposal of both petroleum and non-petroleum products at schools, town offices, police and fire stations, pools, parking garages and other permittee-owned or operated buildings or utilities. Develop or continue to implement a *Spill Response and Prevention Plan* to ensure that appropriate actions will take place when a spill occurs within your small MS4.

OKR04 permitted municipalities are responsible for a wide variety of land uses and activities which may include: roadways, parking lots, transportation and equipment garages, maintenance and storage facilities, fueling areas, cemeteries, stockpiles of salt, sand and other raw materials, snow disposal areas, waste handling and disposal facilities, parks, fire departments, public swimming pools, airports, water plants and wastewater treatment plants. If practices are not in place to contain spills, manage trash or handle non-stormwater discharges, municipal facilities can be sources of stormwater pollutants.

* 1. **Review and Revision of the SRPP**

It is recommended that the SRPP will be reviewed at least annually and revised whenever the circumstances warrant it. Changes in operations at the facility, a change in chemical/material volume or storage, or introduction of new chemicals are a few things that could justify a revision. Control all copies of this plan so when revisions are made, outdated versions can be recalled so only the current and up-to-date version is in use. A version number and date on the cover page should make it easy to recognize outdated copies.

*Describe who will review this document, how often it will be reviewed, who can make revisions to it and who is authorized to sign off on any changes*. *Describe how copies will be tracked* so you will be confident old versions are not in circulation and won’t accidentally be used. Somebody should have the master SRPP and a list of all copies and their locations so when a revision is made they will know where to find all of the outdated versions and can replace them with the most current version. Copies of the SRPP should be kept at locations that are easily accessible to employees at all times. Except for the master copy, all copies should have a watermark or stamped “Do Not Copy.”

1. **Site and Facility Description**

**2.1 Location Description**

*Describe your facility’s physical location*. In addition to the address, include details including the items listed below. Include aerial photos and maps.

* Surrounding topography;
* Nearby waterways (include names and waterbody IDs if they have been assigned);
* Roads and names;
* Sensitive or protected areas;
* Identify buildings and outside work areas;
* Show which surfaces are impervious;
* Show drainage patterns and flow using arrows;
* Show storm drains, discharge points and outfalls;
* Structural controls designed to minimized or eliminate stormwater pollution (ponds, swales, flow diversions, sediment traps);
* Show run-on from offsite areas;
* Include a north arrow and scale.

**2.2 Facility Description**

*Describe your facility, structures and what operations could expose pollutants to rain or runoff*. Identify chemical storage areas, process areas and locations where spills and unintentional releases could result in stormwater pollution.

Examples of outdoor activities that could result in stormwater pollution include:

* Loading docks where chemicals are handled;
* Fuel storage and refueling areas (above and underground tanks);
* Significant machinery (potential oil leaks)
* Outdoor chemical storage areas;
* Vehicle and equipment parking and storage areas;
* Vehicle wash areas;
* Parks and lawn care storage areas (fertilizer, pesticides, herbicides);
* Animal shelters where stray pets are housed (or animal waste is stored);
* Vehicle maintenance areas (fuels, used oil, anti-freeze, cleaning solvents, batteries, etc.);
* Tire and battery storage areas;
* Material transfer sites;
* Green waste storage areas;
* Hazardous material storage areas;
* Trash, debris or recycling material storage;
* Outdoor swimming pools, pool chemical storage areas (chlorine), filter maintenance and backwash activities;
* Asphalt storage areas.

**2.3 Pollution Prevention Team**

*List the title of the person responsible for implementing the SRPP and any spill response team members that will be assisting in these activities*. The responsible party could be the stormwater manager, facility manager, department supervisor, or anybody with the authority to make decisions and direct others. Team members could be any employee that understands this program, will be available when the need arises or has the skills and knowledge required. This might include anybody that could aid in the early detection, prevention and cleanup of stormwater pollution.

Spilled chemicals should be quickly and effectively contained and cleaned up, but only by individuals that are properly trained and wearing the necessary protective gear. Employees that are not trained in spill cleanup procedures should report the spill to a responsible person(s), warn other employees of potential hazards and then leave the area. If the nature of the spill justifies evacuation, evacuation procedures should begin as quickly as possible. If reportable quantities of a hazardous material are spilled, notify the appropriate state or federal agency.

List the responsible person’s responsibilities. This might include:

* Annual review and revisions of the SRPP;
* Monthly inspections to insure BMP effectiveness;
* Conducting stormwater training for others;
* Maintaining records and files;
* Delegating these or other responsibilities to other.

Spill Response Team member’s responsibilities could include:

* Minimizing the threat of chemical spills to personnel (first priority) and then the environment;
* Protecting storm drains, the stormwater collection system in general and receiving waters;
* Inspecting work areas on a daily basis for potential problems.

**2.4 Pollution Prevention through BMPs**

**2.4.1 What are BMPs?**

Stormwater BMPs are the practices, procedures, policies, prohibitions, schedules of activities, structures or devices that are implemented to prevent or minimize pollutants coming in contact with precipitation or stormwater runoff. BMPs can be thought of as either “source control” or “treatment control.”

Source control BMPs include all types of measures designed to prevent pollution at the source, which means preventing pollutants from contacting or mixing with stormwater. Source control is generally less expensive than treatment control and should be your first defense. Good housekeeping is a good example of a non-structural source control BMP. Installing a canopy over chemicals thus sheltering them from precipitation and the use of containment pallets would be considered structural source control.

Treatment control BMPs are methods of treating stormwater runoff to *remove* pollutants and are frequently more costly to design, install, and operate than source control measures. In addition, treatment control is generally not as effective as source control. A sedimentation pond is an example of a treatment control BMP.

**2.4.2 Good Housekeeping**

Good housekeeping practices include activities that are intended to maintain a clean site and keep equipment in good working order to prevent stormwater quality problems from occurring. Daily cleanup and inspections are the most effective means of achieving good housekeeping and should be implemented on an ongoing basis. Good housekeeping practices include:

* Tools and materials should be returned to designated storage areas after use;
* Waste materials should be collected and properly disposed after the completion of each job, shift, or day as appropriate;
* Spills should be promptly cleaned up and disposed of properly;
* Indoor work areas should be neat, uncluttered, and well ventilated to discourage outdoor work and to allow leaks and spills to be quickly detected and controlled;
* Outdoor work areas should be swept regularly (not hosed) and kept neat and clean;
* Outdoor waste or trash receptacles should be covered and emptied regularly and the adjacent areas inspected for misplaced or wind-blown litter;
* Labeling storm drains and keeping them free of debris.

*List your Good Housekeeping BMPs and explain their purpose and how they will be implemented and maintained*.

**2.4.3 Preventive Maintenance**

Preventive maintenance BMPs include regular inspections and maintenance intended to minimize stormwater pollution by performing maintenance activities before problems arise. Equipment failures or equipment that functions poorly may result in a discharge of pollutants to the stormwater collection system. To reduce the likelihood of a breakdown or failure, major equipment should have a preventive maintenance schedule for inspection, repair, or replacement of fluids, greases, seals, hoses, filters, pressure gauges, piping, etc. Storage containers and pipes should be checked for damage or corrosion to avoid failures and leaks. Landscaped areas should be maintained to minimize soil erosion. Structural BMPs, storm drains and collection systems should be inspected regularly and repaired as needed.

*List your Preventive Maintenance BMPs and explain their purpose and how they will be implemented and maintained*.

**2.4.4 Proper Material Handling and Storage**

Material handling and storage BMPs relate to controlling the potential for leaks, spills and losses of materials delivered, used, and stored at a facility. Spills and leaks can accumulate in soils or on solid surfaces and be washed away during rain events or blown offsite by wind. Material handling and storage BMPs could include:

* Only acquire the amount of material needed to finish a particular job;
* Limit waste generation by keeping good records and reviewing activities;
* Recycle materials whenever possible;
* Read and follow manufacturer’s directions for use of materials and review the associated Safety Data Sheet (SDS);
* Store materials indoors or in a covered area where materials will not be exposed to precipitation or runoff;
* Store lead-acid batteries indoors and within secondary containment;
* Use hazardous material storage lockers with spill containment and flammable material lockers when appropriate;
* Locate storage areas away from vehicle and equipment paths to reduce the potential for accident-related leaks or spills;
* Protect tanks and vessels from bumps and punctures in areas where fork trucks are commonly used;
* Do not store drums, trash receptacles or other containers close to storm drain inlets;
* Provide informational signage, labels, restricted access, locks, inventory control, overhead coverage, and secondary containment for all hazardous material storage;
* Conduct regular inspections for leaks and damage to containers, pipes and equipment that could result in a future leak.

*List your Material Handling and Storage BMPs and explain their purpose and how they will be implemented and maintained*.

**2.4.5 Proper Waste Handling**

Waste handling BMPs relate to properly documenting, controlling, collecting, storing, and disposing of wastes that are generated at a facility. All facility personnel should be aware that disposing any waste (including wash water) into a storm drain inlet or stormwater conveyance (e.g., street, ditch) could be considered illegal dumping. Likewise, disposing of waste (including wash water) onto a paved or unpaved surface such that it may be carried to a storm drain inlet or stormwater conveyance could also be considered illegal dumping. Proper Waste Handling BMPs could include:

* Sweep or vacuum (dry methods) work areas to collect metal, wood, and other particulates and debris frequently;
* Limit waste generation by keeping good records and reviewing activities;
* Recycle materials whenever possible;
* Separate and segregate different types of wastes;
* Store waste materials indoors or in a covered area where they will not be exposure to precipitation and runoff;
* Handle (pour, mix, transfer) hazardous materials over an impervious surface where cleanup will be easy if anything is spilled;
* Arrange for regular waste disposal and pickup;
* Use hazardous material storage lockers with spill containment or flammable material lockers when appropriate;
* Locate the waste storage areas away from vehicle and equipment paths to reduce the potential for accident-related releases;
* Provide informational signage, labels, restricted access, inventory controls, overhead coverage, and secondary containment for all hazardous waste storage areas;
* Conduct regular inspections for leaks and damage to containers, pipes and equipment that could result in a future leak.

*List your Waste Handling BMPs and explain their purpose and how they will be implemented and maintained.*

**2.4.6 Spill Prevention and Response**

Spill clean-up can be labor-intensive and costly. It can involve expenses to contain the spill, collecting the spilled substance, proper disposal of spill materials, and report filing to regulatory agencies, not to mention possible monetary fines and the potential health risks to employees. Once a spill has occurred, it must be determined whether or not the spill is small enough to be safely handled without outside assistance. It might be as simple as up-righting a container and using floor dry or big enough to require assistance from police, fire and a HAZMAT team.

Only employees with the proper training should attempt to contain or cleanup a spill. Consider the nature of the material, ventilation on site, employee safety, what personal protective gear is required and available and what control and cleanup resources are available.

All hazardous substance containers should be labeled pursuant to OSHA hazardous communication guidelines so the contents are easily identified. Wherever significant quantities of hazardous materials are received, stored or used, containment and cleanup supplies should be available. These supplies might include Safety Data Sheets (SDS), absorbents, over-pack containers, container patch kits, spill dams, shovels, dust pans, floor dry, acid/base neutralizers, and “Caution – Keep Out” signs.

Proper Spill Prevention and Response BMPs could include:

* Place bollards, beams and containment features around structures or areas where fluids are stored, so releases can be prevented, easily detected, and controlled;
* Have storm drain covers available or a means to divert a spills around storm drains;
* Install leak detection alarms for early warning;
* Install containment vessels under overflow pipes or relief valves for fuel and chemical tanks;
* Use drip pans for maintenance operations involving fluids and under leaking vehicles and equipment waiting repair;
* Place spill kits in areas where fluids are stored or in areas where activities may result in a spill;
* Provide training for proper use of materials and equipment used during operations and maintenance activities;
* Provide training for proper use of spill response equipment and supplies;
* Conduct outdoor maintenance activities on paved surfaces to allow for easy detection, control, and cleanup of spills;
* Inspect storage vessels for leaks, spills, corrosion and otherwise deteriorating conditions that could result in a leak;
* Have a protocol to activate and mobilize a spill response clean-up team, responsibilities, chain-of-command and means of communication.

Spill prevention, control, and cleanup applies to all materials and wastes, not just hazardous materials like acids, oils, grease, fuels, solvents, pesticides and herbicides, etc. Non-hazardous materials like sand, litter, soap, etc. can also negatively impact water quality.

If a spill or unintentional release does occur, record the following information:

* Date and time of the incident;
* Location of the release;
* Name and description of the material(s) released;
* Photos of the incident;
* Weather conditions;
* Duration of the spill/leak/discharge;
* Cause of the spill/leak/discharge;
* Response procedures implemented;
* Persons notified and responding;
* Any environmental problems associated with the spill/leak/discharge;
* Any corrective actions taken and dates.

*List additional BMPs you have in place that will help prevent spills and how they will help in your cleanup response.*

**2.5 Other Relevant Facility Plans**

In addition to this SRPP, other facility specific environmental compliance plans (like an Emergency Response Plan) that complement the goal of reducing and preventing pollutant discharges should be identified and listed below along with where they can be found.

*List other relevant facility plans.*

**2.6 Personnel Training**

List the title of the position or person responsible for stormwater management training. In addition explain how often training will be provided to existing employees and when new hires will receive training. Well-trained employees are less likely to make human errors that can lead to unintentional releases resulting in stormwater pollution. Employee training at all municipal departments should focus on recognizing and reporting potential or current spills/leaks and who they should contact if they see something that might be a problem. Response personnel should also be trained in identifying pollutants and how to safely contain and cleanup a spill. Just as important is the ability to recognize a situation where even trained employees are not properly prepared to handle the spill and how to get the necessary help from other agencies or individuals.

*List who will do stormwater training and how often it will be performed.*

1. **Definition and Categories of Non-Stormwater Discharges**

A non-stormwater discharge is any discharge or flow to a stormwater collection system that is not composed entirely of stormwater runoff. The MS4 Permit prohibits the discharge of non-stormwater (including discharges from municipally owned facilities) into a permitted MS4 or waters of the state unless the discharge is authorized by a respective discharge permit.

**3.1 Authorized Non-Stormwater Discharges**

The OKR04 permit allows certain types of non-stormwater to be discharged to an MS4 if they are listed in the Stormwater Management Program (SWMP). However, non-stormwater discharges identified as a significant source of pollutants are not permitted, even if they are listed in the SWMP. OKR04 lists the following types of authorized non-stormwater discharges:

a. Water line flushing;

b. Landscape irrigation;

c. Diverted stream flows;

d. Rising ground waters;

e. Residential building wash water without detergents;

f. Uncontaminated pumped ground water;

g. Uncontaminated ground water infiltration;

h. Discharges from potable water sources;

i. Foundation drains;

j. Air conditioning condensate;

k. Irrigation water;

l. Springs;

m. Water from crawl space pumps;

n. Footing drains;

o. Lawn watering;

p. Individual residential car washing;

q. De-chlorinated swimming pool discharges;

r. Street wash water;

s. Fire hydrant flushing;

t. Non-commercial or charity car washes;

u. Discharges from riparian areas and wetlands;

v. Discharges in compliance with a separate Oklahoma Pollutant Discharge

 Elimination System (OPDES) or National Pollutant Discharge Elimination System

 (NPDES) permit;

w. Unless otherwise permitted or regulated by DEQ discharges of gray water from

 municipal splash pads (aka, spray parks or spray grounds) as defined in Oklahoma

 Statutes §27A-2-6-107 provided the discharges comply with all applicable

 municipal or county ordinances enacted pursuant to law, Discharges from

 recirculating systems shall be de-chlorinated prior to discharge; and

x. Discharges or flows from emergency firefighting activities provided procedures are

 in place for the Incident Commander, Fire Chief, or other on-scene firefighting

 official in charge to make an evaluation regarding potential releases of pollutants

 from the scene. Measures must be taken to reduce any such pollutant releases to the

 maximum extent practicable subject to all appropriate actions necessary to ensure

 public health and safety. These procedures must be documented in your SWMP.

 Discharges or flows from firefighting training activities are not authorized by this

 Permit.

*List your authorized non-stormwater discharges*.

1. **Municipal Activities and Materials, Potential Pollutants and Associated BMPs**

**4.1 Significant Materials**

A variety of materials may be used or stored onsite. Table 4-1 summarizes these materials and how they are received or stored at the facility. Materials with a high potential for pollution, either because of storage, transfer or use should be discussed in more detail in Table 4-2. For instance, diesel storage and fueling practices could have a high potential for stormwater pollution because of spilled product. A spill could occur in the transfer from the transport vehicle to the storage tank or from the storage tank to a municipal vehicle and leaks could occur at any point. Low potential materials might be ones that are only stored and used indoors with the only risk coming from shipping and receiving. Examples are listed below in both tables. Table 4-2 has a number of examples. These are only suggestions, so delete the ones that are not pertinent to your activities, modify ones that are and add others that are not shown.

**Table 4-1 List of Significant Materials**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Typical Quantity | Receiving and Shipping Location | Storage Location | Potential to Cause Stormwater Contamination (1 through 5)1= Low Potential 5= High Potential |
| EXAMPLE: HNO3 (Nitric Acid) | 12 Gallons | Maintenance Shop | Maintenance Shop | 2 |
| Acid |  |  |  |  |
| Adhesive & Sealants |  |  |  |  |
| Aggregate |  |  |  |  |
| Animal Wastes |  |  |  |  |
| Asphalt |  |  |  |  |
| Aviation Fuel |  |  |  |  |
| Base/Caustics |  |  |  |  |
| Brake Fluid |  |  |  |  |
| Concrete |  |  |  |  |
| Coolant (new) |  |  |  |  |
| Coolant (used) |  |  |  |  |
| De-icing Agents |  |  |  |  |
| Detergents |  |  |  |  |
| Diesel Fuel |  |  |  |  |
| Fertilizers |  |  |  |  |
| Gasoline |  |  |  |  |
| Gravel |  |  |  |  |
| Hydraulic Fluid |  |  |  |  |
| Kerosene |  |  |  |  |
| Lubricants |  |  |  |  |
| Motor Oil (new) |  |  |  |  |
| Motor Oil (used) |  |  |  |  |
| Paint Products |  |  |  |  |
| Pesticides & Herbicides |  |  |  |  |
| Sand |  |  |  |  |
| Soil Amendments |  |  |  |  |
| Solvents |  |  |  |  |

**Table 4-2 Materials with a High Potential for Contamination**

|  |  |  |  |
| --- | --- | --- | --- |
| Area/Activity | Pollutant Source | Pollutant | BMPs |
| **Vehicle & Equipment Fueling** Diesel and gasoline pumps are covered by a raised roof, but stormwater runs across the fueling area. | Spills created by topping off fuel tanks | Diesel and gasoline | Train employees in proper fueling and cleanup procedures;Discourage “topping off” tanks;Use absorbent materials on spills instead of hosing down; Place spill kits next to fueling area. |
| Spills and leaks during deliveries | Fuel and oil |
| Hosing or washing down fuel area | Fuel and oil |
| Rainfall running onto and off of fueling area | Fuel and oil |
| **Waste Handling & Disposal**Performed at the waste oil storage tank, the hazardous waste storage container and the trash dumpster in the northeast corner of the yard. | Waste oil and hazardous waste container spills or leaks, uncovered trash container or dumpster | Trash, oil, hazardous waste (i.e., solvents, detergents, pesticides, etc.) | Keep the Spill Response and Prevention Plan (SRPP) current;Train employees in proper cleanup of spills and leaks;Sweep up daily;Put spill kits in waste oil and hazardous waste storage areas;Reduce the amount of waste generated and recycle more;Inspect waste management areas for leaks and spills;Repair leaking equipment including valves, lines, seals or pumps promptly. |
| **Vehicle & Equipment Washing**Performed in the northeast section of the yard. Washing area is uncovered and not bermed. | Washing particulates and debris off vehicles and equipment | Sediment, metals, toxic materials, vehicle fluids | Wash vehicles and equipment at an off-site commercial washing location whenever possible;When washing on-site, direct wash water towards surrounding, existing vegetation;Evaluate the feasibility of constructing a bermed or covered wash area draining to the sanitary sewer. |
| **Landscape, Garden, & General Maintenance & Cleaning**Performed throughout the facility. | Irrigation runoff, spills and leaks. | Fertilizers, pesticides, detergents, solvents | Promote the use of less harmful products and products that contain little or no Total Maximum Daily Load (TMDL) pollutants;Choose cleaning agents that can be recycled;Use proper lawn management and landscaping, including the use of native vegetation;Use pest management techniques that will minimize pollution potential;Properly recycle yard waste and trimmings;Recycle residual paints, solvents, lumber, and other materials whenever possible. |
| **Material, Chemical, Vehicle & Equipment Handling & Storage**Located at the north and east sections of the yard. All areas are covered. See Table 4-1 for materials stored. | Container spills or leaks | Antifreeze, oil, pesticides, solvents, etc. | Develop an operations plan that describes procedures for loading and unloading;Conduct loading and unloading in dry weather if possible;Store materials in enclosed or covered areas;Pave loading areas with concrete instead of asphalt;Avoid placing storm drains in loading/unloading and storage areas;Train employees in spill containment and cleanup during loading and unloading activities; |
| Vehicle and equipment leaks | Gasoline, oil and other vehicle fluids | Use drip pans underneath leaking vehicles and equipment. |

*List all potential pollutants in Table 4-1 and materials with a high potential for stormwater pollution in Table 4-2*.

1. **Annual Facility or Activity Stormwater Assessment**

An annual stormwater assessment helps to assure that significant changes in facilities or activities are identified and can then be reflected in the SRPP. Assessments are then recorded in Table 5-1 (Assessment Log) and Form 5-1 (Annual Facility/Activity Stormwater Assessment Form and Checklist). Examples are provided on each of these forms, but should be adjusted to meet each facility or activity need. The annual stormwater assessment could include:

* Visual inspection of all potential sources of pollutants that may enter the stormwater drainage system;
* A review and assessment of all BMPs to determine whether the BMPs are adequate, properly implemented and maintained, or whether additional BMPs are needed;
* Visual inspection of equipment needed to implement the SRPP, such as spill response equipment, drip pans, brooms or vacuum cleaners, and containers for used absorbents;
* Review of the education and training program to determine if all necessary personnel are being adequately trained.

The annual facility or activity stormwater assessment documentation could include:

* Identification of personnel performing the evaluation;
* The date(s) of the evaluation;
* Findings of the evaluation;
* Recommended modifications of the SRPP;
* Schedule for implementing SRPP revisions;
* Any incidents of non-compliance and the corrective actions taken.

**Table 5-1 Assessment Log**

|  |  |  |  |
| --- | --- | --- | --- |
| Assessment Date(mm/dd/yyyy) | Assessor(Name & Position) | Revisions Required?(Y/N) | Follow Through(Date or N/A) |
|  |  | 🞎 Yes 🞎 No |  |
|  |  | 🞎 Yes 🞎 No |  |
|  |  | 🞎 Yes 🞎 No |  |
|  |  | 🞎 Yes 🞎 No |  |
|  |  | 🞎 Yes 🞎 No |  |
|  |  | 🞎 Yes 🞎 No |  |
|  |  | 🞎 Yes 🞎 No |  |
|  |  | 🞎 Yes 🞎 No |  |
|  |  | 🞎 Yes 🞎 No |  |
|  |  | 🞎 Yes 🞎 No |  |
|  |  | 🞎 Yes 🞎 No |  |
|  |  | 🞎 Yes 🞎 No |  |
|  |  | 🞎 Yes 🞎 No |  |
|  |  | 🞎 Yes 🞎 No |  |

**Form 5-1 Annual Facility/Activity Stormwater Assessment Form and Checklist**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (Facility or Activity Name)

1. Name of Building or Operation: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Operation Representative: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Position: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Phone Number: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Yes No Not

 Applicable

1. Facility’s SRPP easily accessible in each building? 🞎 🞎 🞎
2. Awareness of SRPP by facility personnel? 🞎 🞎 🞎

(Random survey of employees onsite)

Number of employees surveyed: \_\_\_\_\_\_\_

1. Facility’s Emergency Response Plan easily accessible in 🞎 🞎 🞎

necessary buildings?

1. Awareness of Emergency Response Plan by facility 🞎 🞎 🞎

personnel?

(Random survey of employees onsite)

Number of employees surveyed: \_\_\_\_\_\_\_

1. Was any stormwater pollution prevention training 🞎 🞎 🞎

conducted during the year?

1. Were visual observations of non-stormwater discharges 🞎 🞎 🞎

conducted? List dates: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Were visual observations stormwater discharges 🞎 🞎 🞎

conducted? List dates: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Are facility inspections performed as required? 🞎 🞎 🞎

Evaluation Notes: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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Corrective Measures Recommended: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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Evaluation Conducted By: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

This completed evaluation was reviewed with me on: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (Date)

Operation Representative (Signature): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Assessment Checklist**

|  |  |
| --- | --- |
| **Activities** – Check each activity present at the site. | **Effectiveness Rating** |
| **1** | **2** | **3** | **4** | **5** |
| **Vehicle and Equipment Fueling:** |
| 1. Fueling area is designed to prevent run on of stormwater and runoff off of spills |  |  |  |  |  |
| 2. Employees are trained in proper fueling and cleanup procedures |  |  |  |  |  |
| 3. Absorbent materials are used on small spills rather than hosing down |  |  |  |  |  |
| 4. Daily inspections are performed |  |  |  |  |  |
| Pump island is inspected regularly for spill and/or leaks |  |  |  |  |  |
| **Vehicle and Equipment Washing/Steam Cleaning** |
| 1. A designated wash area is being used |  |  |  |  |  |
| 2. Wash area is equipped with a clarifier and connected to a sanitary sewer |  |  |  |  |  |
| 3. The designated wash are is properly designed |  |  |  |  |  |
| 4. The clarifier is cleaned regularly |  |  |  |  |  |
| **Vehicle and Equipment Maintenance and Repair** |
| 1. Maintenance is performed in a designated area only |  |  |  |  |  |
| 2. Equipment is kept clean with no build-up of oil and grease |  |  |  |  |  |
| 3. Drip pans and containers are used under areas that are dripping |  |  |  |  |  |
| 4. Used oil, oil filters, antifreeze, batteries, fluids, etc. are recycled |  |  |  |  |  |
| **Outdoor Loading/Unloading of Materials** |
| 1. Delivery vehicles are parked so spills and leaks can be contained |  |  |  |  |  |
| 2. Loading/unloading dock is covered to reduce exposure of materials to rain |  |  |  |  |  |
| 3. Loading/unloading area is designed to prevent stormwater run on |  |  |  |  |  |
| 4. Fork lift operators are properly trained |  |  |  |  |  |
| **Outdoor Container Storage of Materials** |
| 1. Materials are covered and protected from rainfall |  |  |  |  |  |
| 2. Materials are protected from run on and runoff of stormwater |  |  |  |  |  |
| 3. Waste dumpsters are covered |  |  |  |  |  |
| 4. Hazardous materials are stored in a properly designated storage area |  |  |  |  |  |
| 5. Secondary containment is provided where necessary |  |  |  |  |  |
| **Outdoor Process Equipment O & M** |
| 1. The area is covered with a permanent roof |  |  |  |  |  |
| 2. Berming and drainage routing is used to minimize contact with stormwater |  |  |  |  |  |
| 3. Equipment area is swept when needed and after each shift |  |  |  |  |  |
| **Outdoor Storage of Raw Materials/Products** |
| 1. The storage area is covered with a roof |  |  |  |  |  |
| 2. Materials are covered with a temporary plastic covering |  |  |  |  |  |
| 3. Berms/curbing are used to prevent materials from entering storm drains |  |  |  |  |  |
| 4. Hard surfaces are swept regularly near material storage areas |  |  |  |  |  |
| **Waste Handling and Disposal** |
| 1. Usage and disposal inventory is used to limit waste generation |  |  |  |  |  |
| 2. Materials are recycled whenever possible |  |  |  |  |  |
| 3. Storage areas are covered and bermed |  |  |  |  |  |
| 4. Barrels, tanks and containers are properly labeled |  |  |  |  |  |
| **Contaminated or Erodible Surface Areas** |
| 1. Erosion is controlled by preservation of natural vegetation |  |  |  |  |  |
| 2. Surface areas are regularly inspected to determine if revegetation is needed |  |  |  |  |  |
| 3. Geosynthetics are used in erosion prone areas |  |  |  |  |  |
| **Building and Grounds Maintenance** |
| 1. Pesticides and fertilizers are used and stored properly |  |  |  |  |  |
| 2. Paved areas are swept instead of washed down |  |  |  |  |  |
| 3. Wash water, sweepings and sediments are disposed of properly |  |  |  |  |  |
| **Building Repair, Remodeling and Construction** |
| 1. Materials used in repair and remodeling (paints, etc.) are stored properly |  |  |  |  |  |
| 2. Soil erosion control measures are used |  |  |  |  |  |
| 3. Good housekeeping practices are used |  |  |  |  |  |

1 = No BMPs are used and stormwater pollution is likely

2 = Some BMPs are used, but not effective

3 = Some BMPs are used and moderately effective

4 = Source control BMPs are used and very effective, but structural BMP are needed

5 = All necessary BMPs are in place and effective

Comments: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*Perform annual assessments and document the activity.*