# Trine University SWPPP

Pollution Prevention & Good Housekeeping

1 University Ave Angola, IN 46703

This plan was prepared by: [Nicholas Wentworth, Assistant Director of Campus Operations, Trine University]

## **CONTENTS**

1 Important Phone	Numbers	4
2 Stormwater Pollu	tion Prevention Plan Overview	4
2.1 Organizat	ion of the SWPPP	4
3 Municipal Wide C	ontrols & Assessment	5
3.1 Good Hou	usekeeping	5
3.2 Preventat	tive Maintenance	6
3.3 Best Man	agement Practices	6
3.4 Employee	e Training	7
4 Trine University C	ampus Operations Department	7
4.1 Facility Su	ummary & Description	7
4.2 Facility St	ructures	8
4.3 Site Activ	ities	8
4.3.1 Facility,	Building Maintenance	9
4.3.2 Fueling	Operations	9
4.3.3 Landsca	ping	10
4.3.4 Painting	S	10
4.3.5 Salt Sto	rage	11
4.3.6 Solid W	aste Management	11
4.3.7 Vehicle	and Equipment Storage	12
4.3.8 Vehicle	and Equipment Maintenance/Repair	12
4.3.9 Vehicle	and Equipment Washing	13
4.3.10 Waste	Handling and Disposal	14
4.4 Site Drain	age and Storm Water Collection System	15

	4.4.1 Zollner Golf Course Drainage	15
	4.5 Material Inventory & Storage	16
	4.6 Sediment & Erosion Control	17
	4.7 Site Inspection, Recordkeeping and Reporting	17
5 Ap	ppendix	18
	5.1 Facility Annual Inspection Form	19

# 1 Important Phone Numbers

IDEM Emergency Response 888-233-7745

IDEM General Information 800-451-6027

MS4 Coordinator 260-624-2663

Assistant Director of Campus Operations 260-665-4998

Campus Operations 260-665-4155

## 2 Stormwater Pollution Prevention Plan Overview

The purpose of this document is to give all university employees and university departments a resource to use when conducting good housekeeping measures regarding stormwater management. This document complies with Indiana's Rule 13, the Municipal Separate Storm Sewer System (MS4), as well as the Clean Water Act. City departments should follow all best management practices and good housekeeping measures outlined in this document.

The following departments are covered within this Storm Water Pollution Prevention Plan (SWPPP):

• Trine University Campus Operations

This SWPPP satisfies the required regulatory components for the Minimum Control Measure #6 Pollution Prevention and Good Housekeeping. The objectives of the SWPPP are to identify sources of pollution potentially affecting the quality of storm water discharging from the facilities, describe and implement best management practices (BMPs) to minimize and control pollutants in storm water discharges, and prevent non-storm water discharges from entering the storm drain system.

Additionally, encompassed within the university's MS4 permit is a partnership with City of Angola. City of Angola has their own SWPPP that details proper best management practices, as well as good housekeeping procedures.

## 2.1 Organization of the SWPPP

Included in each section are detailed facility assessments pertaining to vehicle storage, fueling operations, material storage, transportation of oil and other materials, or other activities that have the potential to cause stormwater pollution.

Additionally, there is a section that will cover training requirements, as well as non-structural BMPs for all facilities describing good housekeeping, preventative maintenance, and other policies that are in place in all facilities covered by this SWPPP.

## 3 Municipal Wide Controls & Assessment

#### 3.1 Good Housekeeping

Good housekeeping practices are activities, often conducted daily, or on a routine basis, that help maintain a clean facility and prevent stormwater pollution problems. The following is a list of good housekeeping measures practiced at all facilities within the university.

- All washing of vehicles is performed within the designated vehicle wash area.
- All fluid products and wastes are kept indoors.
- Fueling of small equipment is completed indoors or appropriate alternative measures are taken.
- Spill materials and cleanup kits are maintained at all locations where oil materials are used, stored, or may be present.
- Used spill cleanup materials are disposed of properly.
- Lead-acid batteries are stored indoors and within secondary containment.
- Storage drums and containers are not located close to storm drain inlets.
- All hazardous material storage areas and containers have proper signage, labels, restricted access, locks, inventory control, overhead coverage, and secondary containment.
- All materials, waste oil storage containers, and gas cans are properly labeled.
- Oil/water separators and catch basins are maintained regularly and properly.
- Spill absorbent is readily available and used for appropriate spills.
- Spill kits are located in areas where fluids are stored or where activities may result in a spill.
- Tools and materials are returned to designated storage areas after use.
- Waste materials are properly collected and disposed of.
- Different types of wastes are separated as appropriate.
- Regular waste disposal is arranged.
- Work areas are clean and organized.
- Work areas are regularly swept or vacuumed to collect metal, wood, and other particulates and materials.

- Only the appropriate amount of materials required to complete a job are obtained.
- Materials are recycled when possible.
- Staff is familiar with manufacturer directions for proper use of materials and associated Safety Data Sheets (SDS).
- Staff is familiar with proper use of equipment.
- Bollards, berms, and containment features are in place around areas and structures where fluids are stored.
- Drip pans are used for maintenance operations involving fluids and under leaking vehicles and equipment waiting repair.

#### 3.2 Preventative Maintenance

Preventative maintenance can minimize the occurrence of stormwater pollution by addressing issues before they become problems. Vehicles and equipment should be regularly inspected to prevent leaks of fuel, oil, and other liquids. Structural stormwater controls should be regularly maintained to prevent inadequate performance during storm events.

The following is a list of preventative maintenance procedures practiced at all facilities within the university.

- All staff members are aware of spill prevention and response procedures.
- All staff members have received formal spill prevention and response procedure training.
- All equipment fueling procedures are completed by qualified personnel trained in spill response procedures.
- Hydraulic equipment is kept in good repair to prevent leaks.
- Vehicle storage areas are inspected frequently for evidence of leaking fluids.
- Material storage tanks and containers are regularly inspected for leaks.
- All material and bulk deliveries are monitored by facility employees.
- All waste oil is fully contained, and the containers are inspected regularly.

#### 3.3 Best Management Practices

In a SWPPP, existing and planned BMPs are identified that will prevent or reduce the discharge of pollutants in storm water runoff for each area of concern listed in each subsequent section of this plan.

To prevent or reduce the potential of storm water contamination from petroleum products, the following BMPs shall continue to be followed:

- 1. Follow Standard Operating Procedures(s) during delivery of waste oil to the equipment/waste oil storage location, if applicable.
- 2. Follow Standard Operating Procedures during delivery of bulk oil to the emergency generator and bulk fuel.
- 3. Minimize the volume of gasoline stored within the buildings and on the site.
- 4. Clean up any oil spills observed in the parking lot, garages, or other surfaces in a timely
- 5. Monitor all material deliveries.
- 6. Inspect all storage tanks prior to filling activities for spills, leaks and corrosion.

### 3.4 Employee Training

The MS4 Coordinator is responsible for stormwater management training for the university employees. Coordination of training related to stormwater management is required on at least an annual basis. The purpose of this training is to review specific responsibilities for implementing the SWPPP, how to accomplish those responsibilities, including BMP implementation.

Additionally, general awareness training may be provided to all employees whose activities may impact stormwater discharges. The purpose of this training is to educate workers on activities that can impact stormwater discharges and to help implement BMPs. Topics for training sessions may include such topics as spill prevention and response, good housekeeping, and materials management practices. The type and mode of training will be determined through discussions between the MS4 Coordinator and the Department Head.

# **4 Trine University Campus Operations Department**

## 4.1 Facility Summary & Description

Trine University Campus Operations Department manages approximately 200-acre golf course, 105-acre campus, 24-acres of athletic fields, and 7 miles of sidewalks within the university. Some of the other amenities included in these areas are baseball/softball diamonds, two practice football fields, a soccer field, volleyball court, and an artificial football field. Maintenance of the university includes lawn mowing and landscaping, building maintenance, painting, as well as other general maintenance operations.

#### 4.2 Facility Structures

The primary purpose of the Operations Department is to operate and maintain the university. Basic grounds maintenance also occurs including but not limited to landscaping, fertilizer and pesticide spraying, and routine cleaning and maintenance.

The following map illustrates the building grounds as well as the location for various activities that occur within the facility.



#### 4.3 Site Activities

The following activities may occur at the facility:

- Facility/Building Maintenance
- Fueling Operations

- Landscaping
- Painting
- Salt Storage
- Solid Waste Management
- Vehicle and equipment storage
- Vehicle and equipment maintenance/repair
- Vehicle and equipment washing
- Waste Handling and Disposal

Trine University does not store hazardous materials other than those noted previously, and no obsolete vehicles or other potential sources of pollutants are kept in any structure on the facility grounds.

## 4.3.1 Facility/Building Maintenance

Facility and building maintenance incorporate several of the other activities described within this section, such as landscaping and painting. Care should be taken to ensure that all maintenance activities are completed without causing harm or pollution to the water and stormwater system within the university facilities.

#### 4.3.2 Fueling Operations

Potential Sources of Stormwater Pollution:

Fueling operations at municipal facilities present a potential source of gasoline and diesel fuel pollution to receiving waters. Incidents can occur during fuel deliveries to both underground and above ground storage tanks, and while fueling vehicles, equipment, and generators. Both large spills and small leaks can be associated with fueling operations. Precipitation can transport these contaminants to engineered storm drain systems.

#### **Pollution Prevention:**

Fueling deliveries and activities at Campus Operations Department are located in an area where proper site security is maintained, and constant monitoring is provided by appropriate personnel. Fueling operations should occur on an impervious surface with proper surrounding containment.

Fueling of small equipment should occur indoors in a space with proper drainage that is not connected to the storm drain system. Fueling areas are covered to prevent exposure to precipitation and site drainage should not allow runoff to be directed towards fueling areas. Any drainage that does come into contact with fueling areas should be directed to an oil/water separator. If it is infeasible to fuel small equipment indoors spill kits should be available and proper precautions taken to ensure that any spills are properly cleaned.

Spill materials and cleanup kits should be maintained at all locations where fueling occurs and facility personnel should be properly trained to efficiently respond to spills and leaks.

#### 4.3.3 Landscaping

Potential Sources of Stormwater Pollution:

Landscaping activities, such as mowing, fertilizing, and pesticide application, has the potential to contribute to local stormwater pollution. When lawn mowers, weed trimmers, and other landscaping equipment with small engines are used at municipalities, gasoline and oil have a risk of being spilt during fueling. Poorly maintained equipment may leak liquids during use.

Unwanted materials may enter the stormwater system during regular applications of fertilizers and pesticides to the property. If fertilizers and pesticides are not used in accordance with relevant regulations and instructions, or if they are not applied by properly trained personnel, these chemical treatments can enter stormwater in large quantities.

#### **Pollution Prevention:**

To prevent contamination of stormwater by gasoline and oil during operation, all equipment and containers shall be regularly maintained and inspected to ensure that no leaks are present. Handling of gasoline and oil, including filling fuel tanks, shall be conducted on impervious surfaces with proper containment of the surrounding area in the event of a spill or a leak. If it is infeasible to fuel small equipment indoors spill kits should be available and proper precautions taken to ensure that any spills are properly cleaned.

Fertilizer and pesticide use at this facility is in strict accordance with the manufacturer's instructions and with local regulations, and these materials are never over-applied.

Vehicles transporting landscaping equipment, pesticides, fertilizer, or paint should be equipped with a spill response kit in case a spill or leak of any of the aforementioned materials does occur.

#### 4.3.4 Painting

Potential Sources of Stormwater Pollution:

When conducted outdoors, the preparation of surfaces for painting and the final application of paints and finishes represent potential sources of stormwater pollution. Grit from sanding and overspray from painting and finishing are two common contaminants resulting from painting operations. Painting in areas which are not covered or contained adequately may result in the introduction of grit, overspray, and chemicals to the stormwater system.

Handling and use of paints and finishes by improperly trained personnel increase the potential for spills and incorrect use. Contamination of stormwater can also occur during storage, when the paints are not being directly handled. Leaks and spills from faulty containers can migrate to the stormwater collection system or receiving waters if not promptly controlled.

#### Pollution Prevention:

To avoid contamination of stormwater by paints and finishes, all preparation and application activities should take place in an area that has been covered and contained to the greatest feasible extent. Simple brush-based painting needs less containment than spray painting and sand blasting, which must adhere to air pollution control and OSHA enclosure requirements.

Ground cloths or drop cloths should be used at each painting site to collect debris and spills. Runoff control devices can be used around catch basins to prevent spilled paint from entering the storm collection system. In case a spill or leak does occur, storage areas and any vehicles transporting paints should be equipped with a spill response kit.

During precipitation events, painting materials should be stored either indoors or under cover to avoid contact with stormwater. Permanent storage can be in cabinets or in other high, dry locations and in accordance with the manufacturer's instructions. Cabinets and storage area floors should be watertight, impervious, and provide spill containment.

#### 4.3.5 Salt Storage

Potential Sources of Stormwater Pollution

Salt stored in piles for use during winter plowing and deicing operations represents a potential major contributor to stormwater pollution. When stored unprotected outdoors, salt is exposed to precipitation, causing leachate with high chloride that can be discharged to the receiving water. Salt delivery and loading

activities can contribute pollutants to stormwater if the material is not handled with care, and if spills from handling operations are not promptly cleaned up.

#### **Pollution Prevention**

To prevent stormwater pollution, all salt piles should be enclosed and covered in sheds to prevent exposure to precipitation. If it is not feasible to fully enclose the salt pile, the salt should be stored on an impervious base and covered with an impermeable membrane material. Under no circumstances should loose salt be stored outside and exposed to precipitation.

The area should not be hosed down to a storm drain as a cleaning method. To further limit stormwater pollution, an independent runoff collection system may be installed in the area of the salt storage to collect and convey runoff either directly to a treatment best management practice or to a sanitary sewer system, with approval from the operator of the sanitary sewer system.

It is the current practice of the university to purchase salt in sealed bags and stored on pallets within the Maintenance Building. At no times is there loose salt stored in piles or exposed to precipitation.

#### 4.3.6 Solid Waste Management

Potential Sources of Stormwater Pollution:

Solid waste production and storage locations present the threat to contaminate stormwater with pathogens, including bacteria and viruses, nutrients, including phosphorus and nitrogen, metals and sediments. Solid waste may be classified as both hazardous and non-hazardous waste consisting of agricultural, construction and demolition, dead animal, industrial, municipal and tire waste.

#### Pollution Prevention:

To prevent or reduce the potential for stormwater pollution from solid waste management practices the following preventative maintenance procedures are recommended:

- All staff shall be properly trained in correct solid waste management practices, including waste disposal and spill prevention and response. All employees shall also be knowledge of the potential hazards associated with solid waste handling and storage.
- Each waste storage location shall be properly labeled, and all significant sources of pollution shall be kept in a secure, covered and contained area.
- The facility and storage containers shall remain locked at all times other than during normal hours of operation.
- All waste storage containers and waste handling equipment shall be routinely inspected for signs of spills, leaks, corrosion or general deterioration.
- The facility shall maintain spill response materials.

## 4.3.7 Vehicle and Equipment Storage

Potential Sources of Stormwater Pollution:

Vehicle and equipment storage activities are a potential source of pollution due to the diesel fuel, gasoline, oil, hydraulic fluid, antifreeze and similar hazardous material or fuel the machinery may contain. In addition, vehicles or machinery may pick up pollutants during the course of offsite activities or at other facilities, and then deposit these pollutants at the storage facility.

#### **Pollution Prevention:**

Regular visual inspection and maintenance of vehicles and equipment can greatly reduce the potential for pollution by finding and addressing leaks before pollution of the environment occurs. When in storage, vehicles and equipment should be kept on a covered slab or within a building with a common drain. Discharge to this drain shall be managed by an oil/ water separator to remove oils and gasoline.

No equipment should be kept in an area where leaks could result in pollutants entering catch basins, channels leading to outfalls, or the stormwater collection system. If vehicles and equipment are stored outdoors, catch basins or other structures should include devices intended to remove oils and sediments prior to entering the system. These treatment devices should be inspected and replaced at the frequency recommended by the manufacturer.

## 4.3.8 Vehicle and Equipment Maintenance/Repair

Potential Sources of Stormwater Pollution:

Vehicle and equipment maintenance and repair often require the use of harmful liquids such as fuels, oils, and lubricants, and has the potential for producing dust, scrap and by-products that may contain pollutants. Both accidental and purposeful spillage, i.e. a leaky oil pan needing repair vs. draining the pan during an oil change, can lead to situations where pollutants can potentially enter stormwater runoff if the situations are not approached properly. Although there is little potential for effecting stormwater, it should be noted that hazardous gases can be produced during maintenance and repair as well.

Pollution Prevention:

Proper maintenance and repair for vehicles and equipment shall include a preliminary assessment of potential pollutant sources. This assessment shall be used to determine the best means of containing any potential spills or by-products of the situation at hand. Approved containers shall be used to capture hazardous liquids to then be disposed of according to applicable guidelines. If the project may produce hazardous dust that could come in contact and mix with any liquids, the proper containment shall be utilized.

Due to heavy metal accumulation in antifreeze, brake fluid, transmission fluid, and hydraulic oils, it is not recommended that any of these liquids are disposed of in the sanitary sewer system. Contaminated parts removed or replaced on any vehicles or equipment shall be disposed of properly.

All work shall take place on a covered slab or within a building with a common drain. Discharge to this drain shall be managed by an oil/ water separator to remove oils and gasoline.

Maintenance and repairs shall not take place in areas prone to stormwater runoff or where pollutants could enter catch basins, channels leading to outfalls, or a stormwater collection system. All catch basins or collection structures on site that could be affected by accidental spills should include devices intended to remove oils and sediments prior to entering the system. These treatment devices should be inspected and replaced at the frequency recommended by the manufacturer.

#### 4.3.9 Vehicle and Equipment Washing

Potential Sources of Stormwater Pollution

Vehicle and equipment washing activities are a potential source of pollution not only from petroleum products and pollutants deposited on the exterior of the equipment, but also from nutrients and sediment being washed into water bodies from the act of washing itself. Although some cleaning agents are becoming environmentally friendly, many still contain regulated contaminants. Due to the possibility for multiple types of pollutants, vehicle and equipment washing activities have a high potential for degrading stormwater quality.

#### **Pollution Prevention**

Outdoors, the use of a tight tank or other similar structure that can contain the wash water is ideal. If the wash water cannot be contained, it shall not be allowed to directly enter water bodies. Use phosphate free detergents that do not contain regulated contaminants and avoid using solvents where the wash water may enter a sanitary sewer. Impervious services may be used to promote infiltration and treatment before wash water enters the groundwater, but wash water coming from impervious pavement shall be treated to remove nutrients and petroleum products before entering a stormwater collection system. Power washing, steam cleaning and engine and undercarriage washing shall not occur outdoors. Heavily soiled or vehicles dirtied from salting shall not be washed outdoors. All adjacent catch basins should ideally have a sump and be cleaned periodically. All debris and particulate accumulation shall be removed and swept clean in all outdoor washing areas.

Washing vehicles and equipment indoors in the proper facilities is preferred over washing outdoors whenever possible. Indoor facilities shall have a common drain for the wash water. The use of detergents shall be avoided and when the use of detergents cannot be avoided, use detergents free from phosphates and regulated contaminants. All drains that discharge directly to a water body or

stormwater collection system shall be plugged or abandoned. Dry clean-up methods such as vacuuming and sweeping shall be used whenever possible to avoid washing down floors with water.

For both outdoor and indoor washing, maintain absorbent pads and drip pans to collect spills and leaks observed during washing activities. Washing of all facility vehicles is completed in the Maintenance Building. Wastewater from vehicle washing operations is discharged to the sanitary collection system for treatment.

#### 4.3.10 Waste Handling and Disposal

Potential Sources of Stormwater Pollution

Waste handling and disposal facilities and activities present a potential to contaminate stormwater with pathogens (including bacteria and viruses), nutrients, including phosphorus and nitrogen, fertilizers, pesticides and sediments.

There are several classifications of waste which contribute to stormwater pollution, including:

- Solid Waste
- Hazardous Materials and Waste
- Pesticides and Fertilizers
- Petroleum Products
- Detergents

**Pollution Prevention** 

A variety of measures are considered appropriate to prevent pollution from waste handling and disposal activities, based on the waste classifications noted previously.

Solid Waste

- Designate a waste collection area on the site that does not receive a substantial amount of runoff from upland areas and does not drain directly to receiving water.
- Ensure that containers have lids so they can be covered before periods of rain and keep containers in a covered area whenever possible.
- Schedule waste collection to prevent the containers from overfilling.
- Clean up spills immediately and in accordance with Standard Operating Procedures

Hazardous Materials and Wastes

- To prevent leaks, empty and clean hazardous waste containers before disposing of them.
- Never remove the original product label from the container. Follow the manufacturer's recommended method of disposal, printed on the label.

- Never mix excess products when disposing of them, unless specifically recommended by the manufacturer.
- Clean up spills immediately and in accordance with Standard Operating Procedures

Pesticides, Fertilizers and Petroleum Products

- Do not handle the materials more than necessary.
- Store materials in a dry, covered, contained area.
- Clean up spills immediately and in accordance with Standard Operating Procedures

#### Detergents

• Never dump wastes containing detergents to a storm drain system. All wastes containing detergents shall be directed to a sanitary sewer system for treatment at a wastewater treatment plant.

In addition to the pollution prevention requirements a waste management plan is recommended. The plan shall include employee training and signage informing individuals of the hazards associated with improper storage, handling and disposal of wastes. It is imperative that all employees are properly trained and follow the correct procedures to reduce or eliminate stormwater pollution. Routine visual inspection of storage and use areas is critical. The visual inspection process shall include identification of containers or equipment which could malfunction and cause leaks or spills. The equipment and containers shall be inspected for the following:

- Leaks
- Corrosion
- Support or Foundation Failure
- Other Deterioration

In the case a defect is found, immediately repair or replace.

# 4.4 Site Drainage and Storm Water Collection System

#### 4.4.1 Zollner Golf Course

Zollner Golf Course has relatively little impervious area on the facility grounds therefore much of the site drainage is through infiltration. There is a drain on hole 5 that drains into Fox Lake. The drain receives water from hole 7, hole 5, and Maumee St.

# 4.5 Material Inventory & Storage

An inventory of significant materials that are stored onsite are outlined in Table below. This table also reviews the likelihood for each identified material to come in contact with stormwater. The type of container has also been identified.

Material	Storage Location	Quantity	Potential Pollutant	Storage Container	Likelihood of Contact with Stormwater
Petroleum-B	ased Compou	nds			
Diesel fuel	Campus Operations	500gals	Petroleum hydrocarbons	Double-wall Fuel Tank	Moderate
Gasoline	Campus Operations	500gals	Petroleum hydrocarbons	Double-wall Fuel Tank	Moderate
Hydraulic Fluid	Maintenance Building	15 gals	Petroleum hydrocarbons	Tool Cage	Minimal
Motor Oil	Maintenance Building	20 gals	Petroleum hydrocarbons	Tool Cage	Minimal
Lubricants	Maintenance Building	4 quarts	Petroleum hydrocarbons	Tool Cage	Minimal
Transmission Fluid	Maintenance Building	1 quart	Petroleum hydrocarbons	Tool Cage	Minimal
Non-Petrole	um Significant	Materials			
Antifreeze	Maintenance Building	4 gal	Ethylene glycol; potential source of BOD	Tool Cage	Minimal
Spray Lubricant	Maintenance Building	12 Cans	Petroleum hydrocarbons	Tool Cage	Minimal
Brake Fluid	Maintenance Building	1 container	Volatile organic compounds; non- petroleum-based oil	Tool Cage	Minimal
Coolant (new or used)	Maintenance Building	4 gal	Volatile organic compounds	Tool Cage	Minimal
Paint, Latex	Maintenance Building	10 gal	Petroleum constituents, including volatile and	Paint Crib	Minimal
Paint, Spray	Maintenance Building	40 cans	Petroleum constituents, including volatile and semi-volatile organic compounds	Flammable Cabinet	Minimal

Solvents	Maintenance	1 gal	Volatile organic	Flammable	Minimal
	Building		compounds	Cabinet	
Solid Waste,	Behind	Misc. bikes	Miscellaneous	Outside	Moderate
Recyclable	Maintenance	& trash	debris/solids, particulate		
	Building	barrels	matter, metals		
Spill response	Maintenance	20 gal	Particulate matter, solids,	Enclosed	Minimal
material	Building		residual oil.	Trash Can	

## 4.6 Sediment & Erosion Control

Due to the amount of impervious area on this site the likelihood of sediment entering the collection system has the potential to be high. This potential would occur by pollutants that are carried onsite and discharged onto the pavement i.e. mud and dirt from vehicle washing or similar details. Care should be taken to ensure that activities that could produce pollutants or sediment are done away from any storm inlets or other areas that would drain to the collection system.

# 4.7 Site Inspection, Recordkeeping and Reporting

It is required that the entire university facilities be inspected at least once a year. Inspections will be conducted by a representative of the university. The inspection must check for evidence of pollution, evaluate non-structural controls in place at the site, and inspect equipment. The site inspection report must include date of inspection, name of personnel conducting the inspection, observations, assessment of BMP's, and corrective actions taken. The inspection form for this annual inspection is included in the Appendix.

Corrective actions may be required based on evidence of past pollution or the high potential for future stormwater pollution to occur. Information about any issues and the respective corrective actions must be included with the completed inspection forms. The corrective action report must be kept with the SWPPP and must state the problem, the solution, and when the solution was implemented.

# **5 Appendix**

## 5.1 Facility Annual Inspection Form



# **Municipal SWPPP Facility Annual Inspection**

Completed By:					
Print		Signature			
Fill out the following table by identifying if each act Comment any actions that need to be taken to imp Municipal Stormwater Pollution Prevention Plan.					
Activity	Satisfactory	Unsatisfactory	Not Applicable	Comments	
Good Ho	usek	eping			
Outdoor work areas and storage areas are neat and tidy.					
Access roads and parking lots are inspected for excess dirt, debris, and oil drips and are cleaned as necessary.					
General Practices					
Storm drains are free of debris and stains of oil & chemicals					
Nearby water bodies and drainage ditches are free of trash, oily sheen, foam, etc. that may be coming from the facility.					
Materials found in nearby waterbodies and drainage ditches are cleaned up.					
Landscaping	, Mai	ntena	nce		
Landscape waste and materials (grass clippings, compost, mulch) are stored in a covered, bermed, or contained area.					
Piles of mulch, compost, or yard waste are not kept next to streams, channels, or storm drain inlets.					
Grass clippings are left on the grass after mowing.					
Clippings and debris are swept off sidewalks/pavement after mowing					

Facility Name:\_\_\_

Activity	Satisfactory	Unsatisfactory	Not Applicable	Comments
No pesticides/herbicides are sprayed near surface				
waters, creeks, ditches, or storm drains.				
Building N	/lainte	enanc	e	
Wastewater is sent to the sanitary sewer system				
when chemicals or soap are being used or if			i	
materials other than ambient dirt are being				
cleaned from the pavement.				
Dry clean-up methods are performed before				·
pressure washing is performed.		<u> </u>	L.,,	
Materia	al Sto	rage		
Materials that are potential stormwater				
contaminants are stored under cover or in		!		
secondary containment.				
Materials are not loaded or unloaded near storm				
drain inlets unless protected.				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Unused materials are kept in original containers				
which are labeled to identify contents.				
Materials are not stored next to waterbodies.				week-1 category 4
Sand is stored under cover or in bermed location.				
Salt is stored under cover.				
Equipme	nt St	orage:		
Equipment is stored under cover when possible.				
Equipment is inspected regularly for spills and leaks.				
Any spills and leaks are cleaned up promptly.	İ			
Preventative maintenance is routinely performed				
on equipment.				
Vehicle & Equ	Jipme	ent Fu	eling	
Spill prevention kits are available				
Drips and leaks are cleaned promptly and				
disposed of properly.				
Fueling is done in locations to minimize any spills				
or leaks entering into the stormwater collection	1			
system.				·
Vehicle & Equip	ment	Maint	tenar	nce
Vehicle maintenance activities are conducted in				
specified areas which are not exposed to				
stormwater.				
If maintenance is performed outside, drip pans				
are placed under places where spills can occur.				

Activity	Satisfactory	Unsatisfactory	Not Applicable	Comments
Leaking vehicles are reported and fixed promptly.				
Wash water is sent to the sanitary sewer system when chemicals or soap are being used or if materials other than ambient dirt are being cleaned from pavement.				
Waste M	anage	ement	:	
Waste is properly disposed of.				
Dumpsters or outdoor trash containers are				
covered at all times unless in use.				
Hazardous materials are properly labeled to identify material.				
Hazardous materials are stored to prevent exposure to stormwater runoff.				
Spill Cleanu	p & P	revent	ion	
The facility has a spill response plan that is readily accessible.				
Spill kits are complete and restocked.				
Spills are cleaned up promptly.				
All employees know where spill kits are located.				
Employees are trained in proper spill				
containment and cleanup.				