

DRAFT

**RIVERSIDE COUNTY
MUNICIPAL FACILITY
POLLUTION PREVENTION PLAN**

Facility Name: _____

Address: _____

Contact Person: _____

Telephone No: _____

Prepared by: _____

Date: _____

TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
1.0 INTRODUCTION.....	4
1.1 Organization of the Pollution Prevention Plan	4
1.2 Storm Water Regulatory Framework.....	4
1.3 Review and Revision of the Pollution Prevention Plan	6
2.0 SITE DESCRIPTION	7
2.1 Facility Description.....	7
2.2 Pollution Prevention Team	13
2.3 Pollution Prevention through BMPs	15
2.3.1 What are BMPs?	15
2.3.2 Good Housekeeping.....	15
2.3.3 Preventive Maintenance.....	16
2.3.4 Proper Materials Handling and Storage.....	16
2.3.5 Proper Waste Handling.....	18
2.3.6 Spill Prevention and Response	20
2.4 Other Relevant Facility Plans	22
2.5 Training for Facility Personnel	23
3.0 DEFINITION AND CATEGORIES OF NON-STORM WATER DISCHARGES.....	24
3.1 Authorized Non-Storm Water Discharges	24
4.0 MUNICIPAL ACTIVITIES AND MATERIALS, POTENTIAL POLLUTANTS AND ASSOCIATED BMPs	25
4.1 Significant Materials.....	25
4.2 Description of Significant Materials and Assessment of Potential Pollutant Sources.....	27
4.3 Description of Potential Pollutant Sources and Associated BMPs.....	30
5.0 ANNUAL FACILITY OR ACTIVITY STORMWATER ASSESSMENT	34
APPENDIX A TABLE 5-4 FROM THE 2003 SANTA ANA DAMP	
APPENDIX B ANNUAL FACILITY/ACTIVITY STORMWATER ASSESSMENT FORM AND CHECKLIST	
APPENDIX C TRAINING DOCUMENTATION	

LIST OF FIGURES AND TABLES

Table 1-1 Municipal Facilities and Associated Activities 5
Figure 2-1.a Facility Description 9
Figure 2-1.b Site Map (EXAMPLE)..... 11
Figure 2-1.c Site Map 12
Figure 2-2 Pollution Prevention Team..... 14
Figure 2-3 Materials Handling and Storage BMPs 17
Table 2-4 Waste Handling BMPs 19
Table 2-5 Spill Prevention and Control Procedures..... 21
Table 2-6 Other Facility Specific Environmental Compliance Plan(s)..... 22
Table 4-1 List of Significant Materials 25
Table 4-2 Identification of Significant Materials and Assessment of Potential Pollutant Sources 28
Table 4-3.a Identification of Potential Pollutant Sources and List of Current BMPs (EXAMPLE) 31
Table 4-3.b Identification of Potential Pollutant Sources and List of Current BMPs..... 32
Table 5-1 Assessment Log..... 34

1.0 INTRODUCTION

This document is the Pollution Prevention Plan (PPP) developed for (facility name)

located at (street address)

This facility falls under the jurisdiction of the following Municipal Separate Storm Sewer System (MS4) National Pollutant Discharge Elimination System (NPDES) Permit (circle one):

2002 Santa Ana Permit / 2001 Whitewater Permit / 1998 Santa Margarita Permit

This PPP meets the requirements of the MS4 NPDES Permit for the Santa Ana, Santa Margarita, or Whitewater River regions of Riverside County. Throughout the remainder of this PPP, that MS4 NPDES Permit for the Santa Ana Regional Water Quality Control Board Order No. R8-2002-0011 will be referred to as the 2002 Santa Ana Permit; the Colorado River Basin Regional Water Quality Control Board Order No. 01-077 will be referred to as the 2001 Whitewater Permit; and the San Diego Regional Water Quality Control Board Order will be referred to as the 1998 Santa Margarita Permit. (NOTE: The Santa Margarita Watershed Municipal Stormwater Permit is currently in the process of being adopted.)

1.1 ORGANIZATION OF THE POLLUTION PREVENTION PLAN

Section 1 of this PPP provides information regarding storm water regulations, the requirements of the 2002 Santa Ana, 2001 Whitewater and 1998 Santa Margarita Permits, review and revision of the PPP, and availability of the PPP as a public document. Section 2 briefly describes this facility, the Pollution Prevention Team responsible for compliance with the 2002 Santa Ana, 2001 Whitewater, or 1998 Santa Margarita Permit and other environmental programs that indirectly support compliance with the 2002 Santa Ana, 2001 Whitewater, or 1998 Santa Margarita Permit. The section also provides a general discussion of Best Management Practices (BMPs) and identifies those BMPs that are implemented throughout the facility. Section 3 contains the definition and categories for both authorized and unauthorized non-storm water discharges. Section 4 provides a narrative description of the activities conducted, potential pollutants, and the measures taken to eliminate or reduce the discharge of pollutants to storm water drainage systems.

1.2 STORM WATER REGULATORY FRAMEWORK

In 1972 the Federal Water Pollution Control Act (known as the Clean Water Act) was amended to effectively prohibit discharge of pollutants to “waters of the United States” from any point source unless the discharge is in compliance with an NPDES Permit. The United States Environmental Protection Agency (USEPA) has delegated administration of the NPDES Program within California to the State of California. California’s Porter Cologne Act gives the State Water Resources Control Board (SWRCB) and the nine Regional Water Quality Control Boards (Regional Boards) the authority to administer the NPDES Program. The 1987 amendments of the Clean Water Act added Section 402(p), which established the framework for regulating discharges of pollutants via storm water from industrial

activities and MS4s. Section 402(p) required the USEPA to develop permitting regulations for storm water discharges from MS4s and from industrial facilities, including construction sites.

The 1996 Santa Ana Permit required the Permittees to develop a Municipal Facilities Strategy to identify BMPs for activities conducted at municipal facilities. Section XI.N of the 2002 Santa Ana Permit states that the Permittees shall maintain updated site-specific PPPs for their facilities. Furthermore, the 2001 Whitewater Permit requires the Permittees to develop and maintain a Model PPP. Section II.F.14 of the 1998 Santa Margarita Permit states that the Permittees develop a pollution prevention strategy to address their public agency facilities and associated activities which are determined by the Permittees to be sources of concern regarding storm water pollution. As identified in the Santa Ana Drainage Area Management Plan (DAMP), the municipal facilities listed in Table 1-1 (below) should have a site-specific PPP.

Table 1-1 Municipal Facilities and Associated Activities

Municipal Facility	Activities of Concern Conducted
Corporate Yards, including equipment, transit maintenance, public works, fleet maintenance, and parks and recreation equipment yards	Loading, unloading, handling, and storage of animal wastes, anti-freeze, asphalt, batteries, chemicals, concrete, diesel wastes, emulsions, fertilizer, fuel, green wastes, hazardous materials, new and used oil, paint products, pesticides, scrap metal, solvents, trash and debris, and wash water
	Filling of aboveground and underground storage tanks (ASTs and USTs) with fuels
	Dispensing of fuels to vehicles, equipment, and portable fuel containers
	Vehicle and equipment parking and storage
	Vehicle, equipment, and material washing and steam cleaning
	Leak and spill cleanup
	Landscape, garden, and general maintenance and cleaning
Warehouses	Loading, unloading, handling, and storage of materials
	Landscape, garden, and general maintenance and cleaning
Fire and Police Stations	Loading, unloading, handling, and storage of antifreeze, chemicals, new and used oil, scrap metal, and trash and debris
	Filling of ASTs and USTs with fuels
	Dispensing fuel
	Vehicle and equipment maintenance
	Vehicle and equipment parking and storage
	Vehicle washing and steam cleaning
	Leak and spill cleanup
Fire Training Facilities	Fire retardant use/cleanup
	Equipment storage, maintenance and cleaning
Hazardous Materials Storage Facilities	Loading, unloading, handling, and storage of potentially hazardous materials
	Leak and spill cleanup
Parks	Landscape maintenance, paving, painting, solid waste management, fertilizer and pesticide application
Golf Courses	Landscape maintenance, paving, painting, solid waste management, fertilizer and pesticide application, reclaimed water irrigation
Animal Shelters	Loading, unloading, handling, and storage of animal wastes for off-site recycling, chemicals, and fuel

Municipal Facility	Activities of Concern Conducted
	Vehicle, equipment, and material washing
	Leak and spill cleanup
	Landscape, garden, and general maintenance and cleaning
Swimming Pools	Storage and use of chemicals, including chlorine
	Filter maintenance and backwashing
	Landscape, garden, and general maintenance and cleaning
Water Treatment Facilities	Loading, unloading, handling, and storage of materials
	Filling of ASTs and USTs with fuels
	Vehicle washing and steam cleaning
	Leak and spill cleanup
	Landscape, garden, and general maintenance and cleaning

1.3 REVIEW AND REVISION OF THE POLLUTION PREVENTION PLAN

The PPP will be reviewed at least annually to determine if any revision is necessary to reflect changes in the facility or changes in the activities conducted that:

- May significantly increase the quantities of pollutants in storm water runoff;
- Cause a new area of the facility to be exposed to storm water or authorized non-storm water discharges; or
- Start-up of an activity that would introduce a new pollutant source at a facility.

In determining if revision of the PPP is necessary, the Facility/Activity Manager will review the Annual Facility/Activity Stormwater Assessment, which is described in Section 5.

2.0 SITE DESCRIPTION

2.1 FACILITY DESCRIPTION

The Facility Description describes the various facility types including locations and on-site activities.

Examples of outdoor activities at the facility include:

Corporate Yards

- ◆ Loading, unloading, handling, and storage of animal wastes, anti-freeze, asphalt, batteries, chemicals, concrete, diesel wastes, emulsions, fertilizer, fuel, green wastes, hazardous materials, new and used oil, paint products, pesticides, scrap metal, solvents, trash and debris, and wash water
- ◆ Filling of aboveground and underground storage tanks (ASTs and USTs) with fuels
- ◆ Dispensing of fuels to vehicles, equipment, and portable fuel containers
- ◆ Vehicle and equipment parking and storage
- ◆ Vehicle, equipment, and material washing and steam cleaning
- ◆ Leak and spill cleanup
- ◆ Landscape, garden, and general maintenance and cleaning

Warehouses

- ◆ Loading, unloading, handling, and storage of materials
- ◆ Landscape, garden, and general maintenance and cleaning
- ◆ Fire and Police Stations
 - Loading, unloading, handling, and storage of antifreeze, chemicals, new and used oil, scrap metal, and trash and debris
 - Filling of ASTs and USTs with fuels
 - Dispensing fuel
 - Vehicle and equipment maintenance
 - Vehicle and equipment parking and storage
 - Vehicle washing and steam cleaning
 - Leak and spill cleanup
 - Landscape, garden and general maintenance and cleaning
- ◆ Hazardous Materials Storage Facilities
 - Loading, unloading, handling, and storage of potentially hazardous materials
 - Leak and spill cleanup

Animal Shelters

- ◆ Loading, unloading, handling, and storage of animal wastes for off-site recycling, chemicals, and fuel
- ◆ Vehicle, equipment, and material washing
- ◆ Leak and spill cleanup
- ◆ Landscape, garden, and general maintenance and cleaning

Swimming Pools

- ◆ Storage and use of chemicals, including chlorine
- ◆ Filter maintenance and backwashing
- ◆ Landscape, garden, and general maintenance and cleaning

Water Treatment Facilities

- ◆ Loading, unloading, handling, and storage of materials
- ◆ Filling of ASTs and USTs with fuels
- ◆ Vehicle washing and steam cleaning
- ◆ Leak and spill cleanup
- ◆ Landscape, garden, and general maintenance and cleaning

Figure 2-1.a Facility Description

Briefly describe facility including location and on-site activities.

Outdoor activities at the facility include:

Facility Type: _____

Facility Activities: _____

Facility Type: _____

Facility Activities: _____

Facility Type: _____

Facility Activities: _____

Facility Type: _____

Facility Activities: _____

The site map illustrates key features relevant to the storm water drainage system and the municipal activities conducted on a typical site, including potential pollutant sources that may be exposed to precipitation, storm water runoff, or non-storm water discharges, drainage patterns (surface flow and storm drains), discharge locations, and structural control features. Figure 2-1.b is an example of a site map. The site map for this facility is Figure 2-1.c.

The site map should identify the following features:

A Legend with:

- ◆ *Facility Address*
- ◆ *Number of Acres*
- ◆ *List of buildings and uses*
- ◆ *% Impervious Cover*
- ◆ *North arrow*
- ◆ *Map scale (or N.T.S.)*

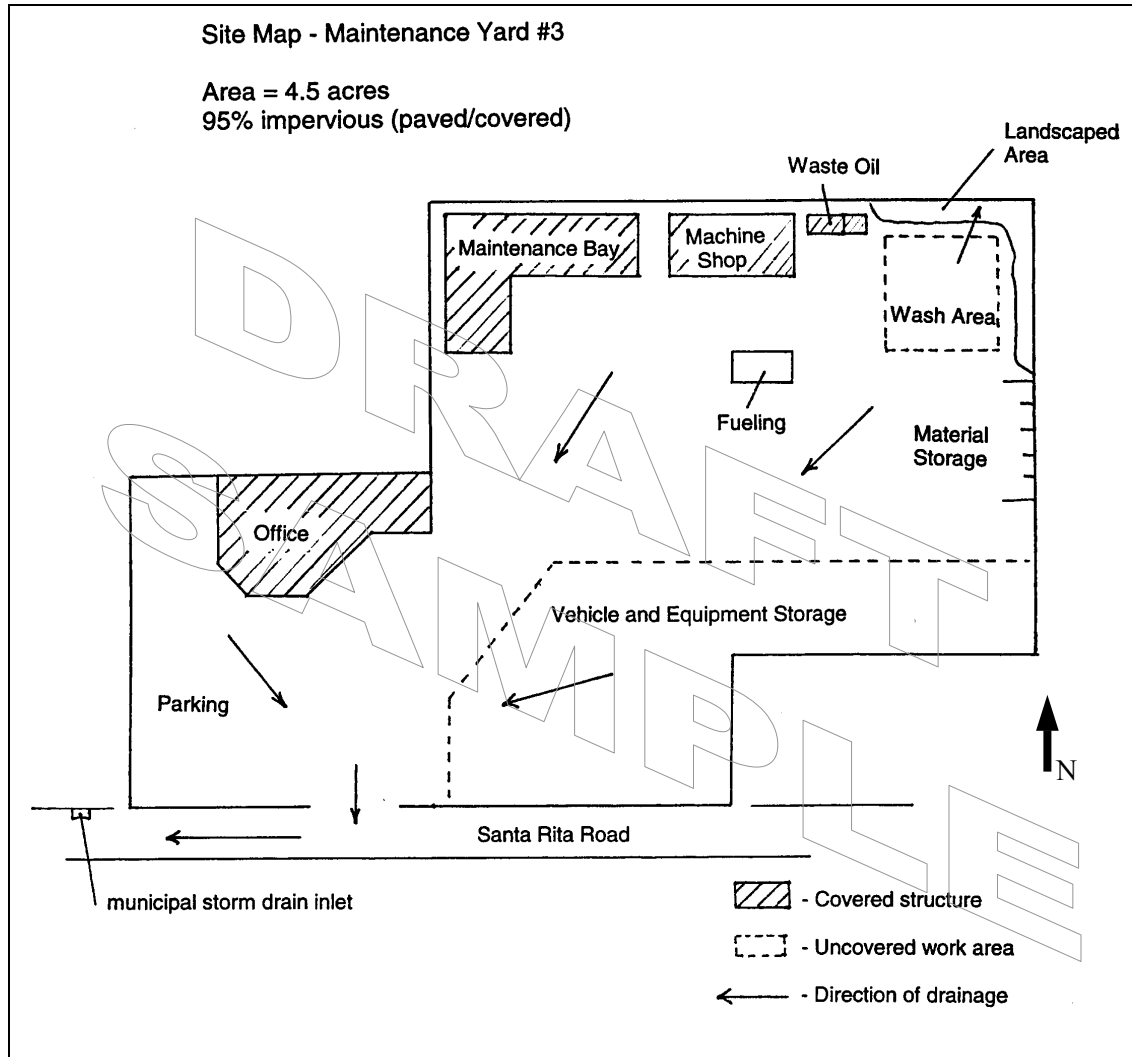
A graphical depiction of:

- ◆ *Location of storm drain facilities and other outfalls (outfalls are point discharges to a surface water or storm drain)*
- ◆ *Drainage area of each outfall and direction of flow*
- ◆ *Location and description of structural storm water pollution control measures (flow diversions, ponds, swales, sediment traps)*
- ◆ *Names of receiving water(s)*
- ◆ *Location of vehicle washing and fueling area(s)*
- ◆ *Location of dirt and aggregate storage area(s)*
- ◆ *Location of above ground/underground storage tank(s)*
- ◆ *Location of outdoor chemical storage area(s)*
- ◆ *Location of waste storage/disposal area(s)*
- ◆ *Location of exposed significant materials*
- ◆ *Location of approved non-storm water discharges*
- ◆ *Location of run-on from offsite area(s)*
- ◆ *Location of material transfers*
- ◆ *Location of significant machinery*

Briefly describe surface drainage at the site, including how drainage leaves the site (e.g., onsite inlets that connect to municipal underground storm drain system, street surface(s), landscaped area(s), etc., including the name of the receiving water body).

Figure 2-1.b Site Map (EXAMPLE)

This site map example will be revised to reflect all of the information that should be on a site map.



Facility Site Map prepared by: _____

Date prepared: _____

Figure 2-1.c Site Map

Place Facility Site Map below figure title

Facility Site Map prepared by: _____

Date prepared: _____

2.2 POLLUTION PREVENTION TEAM

The _____ (Title of Responsible Person) is responsible for implementing the PPP and for the administrative responsibilities associated with the PPP. Other facility personnel also have implementation responsibilities for the PPP.

Examples are provided below:

Site Manager responsibilities include:

- Implementing, administering and revising the PPP;
- Conducting a monthly inspection to ensure that BMPs are appropriate and being implemented consistently throughout the facility;
- Implementing the Emergency Response Plan and Procedures (part of the Hazardous Waste Management Program);
- Conducting Storm Water Training for facility personnel; and
- Maintaining the necessary records and files.

Chemical Spill Response Team responsibilities include:

- Minimizing the threat of chemical spill to personnel and to the surrounding environment; and
- Protecting storm drain inlets and sanitary sewer drains from any spillage or contamination once personnel safety is assured.

Area Supervisors responsibilities include:

- Implementing BMPs for their respective areas of responsibility; and
- Inspecting their respective areas to ensure BMPs are being implemented on a daily basis.

INCLUDE OTHER SUPERVISORS, IF APPROPRIATE

In addition to the personnel listed above, other employees who are trained in storm water issues and play an important role in the detection and prevention of pollution via the storm water drainage system should be identified.

Figure 2-2 Pollution Prevention Team

Provide position titles of other facility personnel also responsible for implementation of the PPP.

Position(s):

_____ responsibilities include:
◆ _____
◆ _____
◆ _____
◆ _____
◆ _____

_____ responsibilities include:
◆ _____
◆ _____
◆ _____
◆ _____
◆ _____

_____ responsibilities include:
◆ _____
◆ _____
◆ _____
◆ _____
◆ _____

_____ responsibilities include:
◆ _____
◆ _____
◆ _____
◆ _____
◆ _____

_____ responsibilities include:
◆ _____
◆ _____
◆ _____
◆ _____
◆ _____

2.3 POLLUTION PREVENTION THROUGH BMPs

2.3.1 What are BMPs?

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, storm water runoff, or non-storm water flows. BMPs are also structures or devices that remove pollutants from storm water runoff before the runoff enters a storm water drainage system or a surface water. Therefore, BMPs are often categorized as either “source control” BMPs or “treatment control” BMPs.

Source control BMPs include all types of measures designed to prevent pollution at the source, that is, to keep storm water from contacting pollutants in the first place. Source control BMPs are generally simple, low-maintenance, cost-effective and are broadly applicable. They may be categorized as either non-structural or structural. Good housekeeping is an example of a non-structural source control BMP; a canopy is an example of a structural source control BMP.

Treatment control BMPs are methods of treating storm water runoff to remove pollutants and are frequently more costly to design, install, and operate than source control BMPs. More importantly, treatment control BMPs are typically not as effective as source control BMPs, and the effectiveness is highly dependent on regular maintenance. Nevertheless, they can be appropriate and effective under certain conditions. However, treatment control BMPs typically do not remove all pollutants from storm water runoff and should not be regarded as disposal systems.

A list of suggested BMPs for vehicle maintenance/materials storage facilities can be found in Appendix A

2.3.2 Good Housekeeping

Good housekeeping practices include activities that are intended to maintain a clean site and keep equipment in good working order to prevent storm water quality problems from occurring. Daily cleanup and inspections are the most effective means of achieving good housekeeping. For the most part, good housekeeping is a day-to-day activity that does not require a large expenditure of time or expense, and should be implemented on an ongoing basis. Examples of good housekeeping practices are:

- 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;
- 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;
- Occasionally outdoor work areas may need cleaning beyond sweeping. In such cases, all wash waters should be contained, collected, and properly disposed; and
- Outdoor waste or trash receptacles should be covered and emptied regularly and the adjacent areas inspected for misplaced or wind-blown litter.

2.3.3 Preventive Maintenance

Preventive Maintenance BMPs include regular inspections and maintenance intended to minimize storm water pollution by performing maintenance activities before problems arise. Equipment failures or equipment that functions poorly may result in the discharge of pollutants to the storm water drainage system. Therefore, to reduce the likelihood of breakdown or failure, major equipment should have a preventive maintenance schedule for inspection, repair, or replacement of fluids (e.g., hydraulic, lubricating, cooling), greases, seals, hoses, filters, pressure gauges, piping, etc. Paved areas and landscaping should not be allowed to degrade to the point where they erode and contribute pollutants to runoff. Leaky roofs, broken doors, cracked pavement and berms, and any other enclosure or structural defects that may impact the quality of storm water runoff should be promptly repaired. Structural BMPs and storm drains within facility boundaries also need to be inspected and maintained regularly.

2.3.4 Proper Materials Handling and Storage

Materials 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 of materials can accumulate in soils or on surfaces and be carried away in storm water runoff or authorized non-storm water discharges.

Examples of appropriate materials handling and storage BMPs are:

Materials Use

- Only obtain the amount of materials needed to finish a particular job;
- Limit waste generation by keeping good records and reviewing activities;
- Recycle materials whenever possible; and
- Read and follow manufacturer directions for use of materials and review the associated Material Safety Data Sheet (MSDS).

Materials Storage

- Store materials indoors or in a covered area where exposure to storm water is minimized;
- Store lead-acid batteries indoors and within secondary containment;
- Use hazardous materials storage lockers with spill containment or flammable materials lockers when appropriate;
- Locate storage areas away from vehicle and equipment paths to reduce the potential for accident-related leaks or spills;
- Do not store drums or other containers close to storm drain inlets;
- Provide informational signing, labels, restricted access, locks, inventory control, overhead coverage, and secondary containment for all hazardous material storage areas or container units; and
- Conduct regular inspections for leaks and control dates.

Figure 2-3 Materials Handling and Storage BMPs

(Attach additional sheets if necessary)

BMPs:

BMP Title _____:

- ◆ _____
- ◆ _____
- ◆ _____
- ◆ _____
- ◆ _____
- ◆ _____

BMP Title _____:

- ◆ _____
- ◆ _____
- ◆ _____
- ◆ _____
- ◆ _____
- ◆ _____

BMP Title _____:

- ◆ _____
- ◆ _____
- ◆ _____
- ◆ _____
- ◆ _____
- ◆ _____

BMP Title _____:

- ◆ _____
- ◆ _____
- ◆ _____
- ◆ _____
- ◆ _____
- ◆ _____
- ◆ _____

2.3.5 Proper Waste Handling

Waste handling BMPs relate to properly 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 waters) into a storm drain inlet or storm water conveyance (e.g., streets) is considered illegal dumping. Likewise, disposing of waste (including wash waters) onto a paved or unpaved surface such that it may be carried to a storm drain inlet or storm water conveyance (e.g., streets) is also considered illegal dumping.

Examples of appropriate waste handling BMPs are:

- 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 exposure to storm water is minimized;
- Arrange for regular waste disposal;
- Use hazardous materials storage lockers with spill containment or flammable materials lockers when appropriate;
- Locate the waste storage area 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 or container units; and
- Conduct regular inspections for leaks and control dates.

2.3.6 Spill Prevention and Response

For spills, the old saying, “an ounce of prevention is worth a pound of cure” is appropriate. Spill clean-up can be labor-intensive and costly involving 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. Spills and leaks are some of the most significant sources of water pollution and are, in most cases, avoidable.

Spill prevention and control procedures include:

- Placing bollards, berms and containment features around structures or areas where fluids are stored, so releases can be prevented, easily detected, and controlled;
- Using drip pans for maintenance operations involving fluids and under leaking vehicles and equipment waiting repair;
- Placing spill kits in areas where fluids are stored or in areas where activities may result in a spill;
- Providing training for proper use of materials and equipment used during operations and maintenance activities;
- Providing training for proper use of spill response equipment and supplies; and
- Conducting outdoor maintenance activities on paved surfaces to allow for easy detection, control, and cleanup of spills.

Spill prevention, control, and cleanup applies to all materials and wastes—not only hazardous substances. The toxic water quality effects from spills of hazardous substances (e.g., acids, oils, greases, fuels, solvents, pesticides) are commonly understood. However, non-hazardous materials—for example, sand, litter, corn oil, sweeteners, soaps, and milk, among others—can also greatly impact water quality.

2.4 OTHER RELEVANT FACILITY PLANS

In addition to this PPP, other facility specific environmental compliance plans that complement the goal of reducing and preventing pollutant discharges should be identified in Table 2-6 below. Where these plans are located should also be identified.

Examples of other facility specific Environmental Compliance Plans and their locations include:

- Emergency Response Plan located at Site Manger's Office.
- Hazardous Materials Business Plan located at Manager's Office.

Table 2-6 Other Facility Specific Environmental Compliance Plan(s)

List other Facility Specific Environmental Compliance Plan(s) and their locations for this facility.

Other Facility Specific Environmental Compliance Plan(s) for this facility include:

- ◆ _____
- ◆ _____
- ◆ _____
- ◆ _____
- ◆ _____
- ◆ _____
- ◆ _____
- ◆ _____
- ◆ _____
- ◆ _____
- ◆ _____

2.5 TRAINING FOR FACILITY PERSONNEL

_____ (Title) is responsible for Storm Water Management training:

The aforementioned position coordinates training related to storm water management on at least an annual basis to review specific responsibilities for implementing this PPP, what and how to accomplish those responsibilities, including BMP implementation. This training typically occurs in September shortly before the start of the wet season (October 1 through May 30).

Additionally, general awareness training is provided annually to all employees whose activities may impact storm water discharges. The purpose of this training is to educate workers on activities that can impact storm water discharges, and to help in the implementation of BMPs.

Attach training attendance sheets and any other training documentation in Appendix C. Include name of instructor, date and time of training, location of training and training participants.

The training records are kept for a period of no less than five years.

3.0 DEFINITION AND CATEGORIES OF NON-STORM WATER DISCHARGES

A non-storm water discharge is any discharge or flow to a storm water drainage system that is not composed entirely of storm water runoff. The MS4 Permits requires that the Permittees prohibit the discharge of non-storm water, including those from public agency activities, into their respective MS4s and to the Waters of the U.S. unless the discharge is authorized by a respective MS4 Permit or regulated under a separate NPDES permit. *Please refer to the appropriate MS4 Permit (e.g., Santa Ana, Santa Margarita or Whitewater) for the complete list of authorized non-stormwater discharges.*

3.1 AUTHORIZED NON-STORM WATER DISCHARGES

The 2002 Santa Ana Permit (Section II.C) and the 2001 Whitewater Permit (Section A.3) provide that certain types of non-stormwater discharges are authorized unless they are identified as a significant source of pollutants.

Examples of “conditionally” authorized non-stormwater discharges include:

- Discharges covered by a NPDES permit, Waste Discharge Requirements, or waivers issued by the Regional or State Board. Unless a Permittee is the discharger, the permittees shall not be responsible for any exceedance of Receiving Water Limitations associated with such discharges;
- Discharges from potable water line flushing and other potable water sources;
- Emergency water flows (i.e., flows necessary for the protection of life and property) do not require BMPs and need not be prohibited. However, appropriate BMPs shall be considered where practicable when not interfering with emergency public health and safety issues;
- Discharges from landscape irrigation, lawn/garden watering and other irrigation waters;
- Air conditioning condensate;
- Rising ground waters and natural springs;
- Groundwater infiltration (as defined in 40 CFR 35.2005(20)) and “uncontaminated pumped groundwater” (as defined in Appendix 4 of the 2002 Santa Ana Permit);
- Passive foundation drains;
- Passive footing drains;
- Water from crawl space pumps;
- Non-commercial vehicle washing, (e.g. residential car washing (excluding engine degreasing) and car washing fundraisers by non-profit organization);
- Flows from riparian habitats and wetlands;
- Dechlorinated swimming pool discharges;
- Waters not otherwise containing wastes as defined in Water Code Section 13050(d); and
- Other types of discharges identified and recommended by the Permittees and approved by the Regional Board.

4.0 MUNICIPAL ACTIVITIES AND MATERIALS, POTENTIAL POLLUTANTS AND ASSOCIATED BMPs

4.1 SIGNIFICANT MATERIALS

A number of materials are used or stored on-site. Table 4-1 summarizes these materials and how they are received or stored at the facility. The table gives examples of the types of materials that should be included in the list of significant materials. It is not all-inclusive. Only fill in those that apply and add those appropriate to this facility that have not already been listed.

Table 4-1 List of Significant Materials

Material Name	Typical Quantity	Receiving and Shipping Location	Handling Location	Frequency
EXAMPLE: Acid	12 gal	Maintenance Shop	Maintenance Shop	Twice weekly
Acid				
Adhesives and sealants				
Aggregate				
Animal Wastes				
Asphalt				
Brake fluid				
Concrete				
Coolant (new)				
Coolant (used)				
Detergents				
Diesel fuel				
Fertilizers				
Gasoline				
Gravel				
Hydraulic fluid				
Lubricants				
Motor oil (new)				
Motor oil (used)				
Paint Products				
Pesticides/Herbicides				
Sand				
Soil amendments				
Solvents				

4.2 DESCRIPTION OF SIGNIFICANT MATERIALS AND ASSESSMENT OF POTENTIAL POLLUTANT SOURCES

Each activity should describe how, when, where and how often each of the materials listed above is delivered, used and stored. In Table 4.2 under an activity heading (e.g., Vehicle and Equipment Fueling) briefly describe how, when, where and how often each of the materials listed above is delivered, used and stored. Using this information, assess the material's potential for being a pollutant source.

For example:

Vehicle and Equipment Fueling is a potential source of storm water pollution at the facility. Storm water run-on has the potential to wash away any spills or leaked fluids located at the fueling area and subsequently drain onto the street and into the storm drain. With the washing area currently northeast and upgrade of the fueling area, pollutants may be carried via wash water flows to the storm drain in a non-storm water discharge.

Pollutants located at the fueling area include oil and gasoline. Gasoline is shipped to the facility by tanker truck weekly and is pumped into a 1,000-gallon aboveground, bermed storage tank near the east end of the maintenance yard. Oil is also shipped weekly by tanker truck and is pumped into a 700-gallon aboveground, bermed storage tank located next to the gasoline storage tank.

Vehicle and Equipment Washing has a high pollutant potential as alluded to above. Without a bermed area or covered structure for this activity, non-storm water discharges from washing may flow south-southwest, crossing the fueling area, concentrating pollutant flow even more. Pollutants from washing include sediment, metals, toxic materials, and vehicle fluids such as oil and gasoline.

Material, Chemical, Vehicle and Equipment Storage also has a potential for storm water pollution. Particularly, vehicles and equipment, stored outside and uncovered, are susceptible to leaking. Rainfall at the facility has the potential to wash leaked fluids into the storm drain system. Material and chemical storage at the facility are covered and carefully protected, minimizing the potential for any storm water pollution.

Table 4-2 Identification of Significant Materials and Assessment of Potential Pollutant Sources

Activity	Description
<p>EXAMPLE: Vehicle and Equipment Fueling</p>	<p>Vehicle and Equipment Fueling is a potential source of storm water pollution at the facility. Storm water run-on has the potential to wash away any spills or leaked fluids located at the fueling area and subsequently drain onto the street and into the storm drain. With the washing area currently northeast and upgrade of the fueling area, pollutants may be carried via wash water flows to the storm drain in a non-storm water discharge.</p> <p>Pollutants located at the fueling area include oil and gasoline. Gasoline is shipped to the facility by tanker truck weekly and is pumped into a 1,000-gallon aboveground, bermed storage tank near the east end of the maintenance yard. Oil is also shipped weekly by tanker truck and is pumped into a 700-gallon aboveground, bermed storage tank located next to the gasoline storage tank.</p>

Activity	Description

4.3 DESCRIPTION OF POTENTIAL POLLUTANT SOURCES AND ASSOCIATED BMPs

Describe potential pollutant sources and BMPs for various facility types. Table 4-3.a gives examples to show the preparer the type of information that should be included. It is not all-inclusive. The developer of this PPP should review the Santa Ana DAMP and CASQA Municipal Handbooks for additional BMPs.

Appendix A excerpts Table 5-4 from the Santa Ana DAMP. Table 5-4 summarizes potential source control BMPs for municipal facilities and activities. Identify potential pollutant sources and BMPs for this facility in Table 4.3.b.

Table 4-3.a Identification of Potential Pollutant Sources and List of Current BMPs (EXAMPLE)

Area/Activity	Pollutant Source	Pollutant	BMPs
<p>Vehicle and Equipment Fueling performed in the center of the yard at the fueling area; containing both unleaded and diesel fuel for smaller vehicles and large equipment. Both pumps in the fueling area are covered by a raised roof.</p>	Spills caused by topping off fuel tanks	gasoline	<p>Train employees in proper fueling and cleanup procedures Discourage "topping off" of fuel tanks Install "shut-off" valves on nozzles Use adsorbent materials on spills as opposed to hosing down Install covered spill kits next to fueling area</p>
	Spills and leaks during deliveries	fuel, oil	
	Hosing or washing down fuel area.	fuel, oil	
	Rainfall running onto and off of fueling area	fuel, oil	
<p>Waste Handling and Disposal performed at the waste oil storage tank, the hazardous waste storage container and the trash dumpster in the northeast corner of the yard.</p>	Waste oil and hazardous waste container spills or leaks, uncovered trash container/dumpster	Trash, oil, hazardous waste (i.e., solvents, detergents, pesticides, etc.)	<p>Keep the Spill Prevention Control and Countermeasure (SPCC) Plan up-to date Train employees in proper cleanup procedures of spills and leaks Place hazardous waste containers in secondary containment Sweep up daily Install spill kits in waste oil and hazardous waste storage areas Reduce the amount generated Recycle whenever possible Inspect waste management areas for leaking containers or spill Repair leaking equipment including valves, lines, seals, or pumps promptly.</p>
<p>Vehicle and Equipment Washing performed in the northeast section of the yard. Washing Area is uncovered and not bermed.</p>	Washing particulates and debris off vehicles and equipment	sediment, metals, toxic materials, vehicle fluids	<p>Wash vehicles and equipment at an off-site commercial washing location whenever possible If 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</p>
<p>Landscape, Garden, and General Maintenance and Cleaning performed throughout the facility.</p>	Potential over-irrigation, spills and leaks	fertilizers, pesticides, detergents, solvents	<p>Promote the use of less harmful products and products that contain little or no TMDL pollutants Choose cleaning agents that can be recycled Use proper lawn management and landscaping, including use of native vegetation Use Integrated Pest Management techniques for pest control Properly recycle yard trimmings Recycle residual paints, solvents, lumber, and other materials as much as possible</p>
<p>Material, Chemical, Vehicle and Equipment Handling and Storage located at the north and east sections of the yard. All areas are covered. See Table 1 for yard materials stored.</p>	Container spills or leaks	antifreeze, oil, pesticides, solvents, etc.	<p>Develop an operations plan that describes procedures for loading and/or 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 Grade and/or berm the loading/unloading and storage areas to a drain that is connected to a deadend Train employees in spill containment and cleanup present during loadin/unloading</p>
	Vehicle and equipment leaks	gasoline, oil	Use drip pans underneath leaking vehicles and equipment

Table 4-3.b Identification of Potential Pollutant Sources and List of Current BMPs

Area/Activity	Pollutant Source	Pollutant	BMPs

Area/Activity	Pollutant Source	Pollutant	BMPs

5.0 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 PPP. The Annual Stormwater Assessment includes:

- Visual inspection of all potential sources of pollutants that may enter the storm water drainage system via storm water or non-storm water discharges;
- A review and assessment of all BMPs to determine whether the BMPs are adequate, properly implemented and maintained, or whether additional BMPs are needed; and
- Visual inspection of equipment needed to implement the PPP, such as spill response equipment, drip pans, brooms or vacuum sweepers, or containers for used absorbents.

The Annual Facility or Activity Stormwater Assessment should be documented:

- Identification of personnel performing the evaluation;
- The date(s) of the evaluation;
- Findings of the evaluation;
- Recommended modifications of the PPP;
- Schedule for implementing PPP revisions; and

Any incidents of non-compliance and the corrective actions taken.

Following the evaluation, revisions, if needed, to the PPP should be completed within 90 days. Assessment forms may be found in Appendix B.

Completed Assessment forms should be placed in Appendix C. Table 5-1 can be used to track annual assessments and follow through on recommendations.

Table 5-1 Assessment Log

Assessment Date (mm/dd/yyyy)	Assessor (Name & Position)	Revisions Required? (Y/N)	Follow Through (Date or N/A)
		<input type="checkbox"/> Yes <input type="checkbox"/> No	
		<input type="checkbox"/> Yes <input type="checkbox"/> No	
		<input type="checkbox"/> Yes <input type="checkbox"/> No	
		<input type="checkbox"/> Yes <input type="checkbox"/> No	
		<input type="checkbox"/> Yes <input type="checkbox"/> No	
		<input type="checkbox"/> Yes <input type="checkbox"/> No	
		<input type="checkbox"/> Yes <input type="checkbox"/> No	
		<input type="checkbox"/> Yes <input type="checkbox"/> No	

**APPENDIX A
TABLE 5-4 FROM THE
2003 SANTA ANA DAMP**

APPENDIX B
ANNUAL FACILITY/ACTIVITY STORMWATER ASSESSMENT FORM
AND CHECKLIST

(Facility)

**Riverside County Storm Water Management Program
Annual Site/Activity Assessment**

1. Name of Building or Operation: _____

2. Operation Representative: _____

Position: _____ Phone No.: _____

	<u>Yes</u>	<u>No</u>	<u>Not Applicable</u>
3. Facility's PPP easily accessible in each building?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Awareness of PPP by facility personnel? (Random survey of employees of site.) # Employees Surveyed _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Facility's Emergency Response Plan easily accessible in each building?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Awareness of Emergency Response Plan by facility personnel? (Random survey of employees on site.) # Employees Surveyed _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Evaluation Checklist (page 2 of 2) completed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Was any storm water pollution prevention training conducted during the year?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Were non-storm water discharge visual observations conducted? List Dates: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Were storm water discharge visual observations conducted? List Dates: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Evaluation Notes: _____

Corrective Measures Recommended: _____

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 storm water and the runoff 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. 5. Pump island is inspected regularly for spills and/or leaks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vehicle and Equipment Washing/Steam Cleaning 1. A designated wash are is used 2. The wash area is equipped with a clarifier and is connected to a sanitary sewer 3. The designated wash area is properly designed 4. The clarifier is cleaned regularly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vehicle and Equipment Maintenance and Repair 1. Maintenance is done 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 may drip 4. Used oil and oil filters, antifreeze, batteries, fluids, etc. are recycled	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Outdoor Loading/Unloading of Materials 1. Delivery vehicles are parked so spills and leaks can be contained 2. The loading/unloading dock is covered to reduce exposure of materials to rain 3. The loading/unloading area is designed to prevent storm water run on 4. Fork lift operators are properly trained	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Outdoor Container Storage of Materials 1. Materials are covered to protect from rainfall 2. Materials are protected from run on and runoff of storm water 3. Waste dumpsters are covered 4. Hazardous materials are stored in a properly designed storage area	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Outdoor Process Equipment O & M 1. The area is covered with a permanent roof 2. Berming and drainage routing is used to minimize contact of storm water 3. The equipment are is swept after each use of machine or at the end of each day	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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 and curbing are used to prevent materials from entering the storm drain system 4. Parking lots and/or other surface areas are swept regularly near the material storage area	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Waste Handling and Disposal 1. Usage and disposal inventory is used to limit waste generation 2. Materials are recycled whenever possible 3. Wastes are segregated and separated 4. Storage area is covered, enclosed and bermed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Contaminated or Erodible Surface Areas 1. Erosion can be controlled by preservation of natural vegetation 2. Surface area is regularly inspected to determine is revegetation is needed 3. Geosynthetics are used as an alternative for the surface area 4. Sandbags or berms are needed to prevent storm water pollution	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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 4. Planting of natural vegetation reduces water, fertilizer and/or pesticide needs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Building Repair, Remodeling and Construction 1. Materials used in repair and remodeling (paints, etc.) are stored properly 2. Soil erosion control techniques are used 3. Good housekeeping practices are used	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- ① No BMPs used and storm water pollution likely. ② Some BMPs used but not effective. ③ Some BMPs used and moderately effective.
 ④ Source control BMPs used and very effective/structural BMPs needed. ⑤ All necessary BMPs used and very effective.

APPENDIX C
TRAINING DOCUMENTATION