

# City of San José

## South Service Yard-

### Storm Water Pollution Prevention Plan (SWPPP)

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Revised:  
August 2023



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## APPENDIX

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## **1.0. REGULATORY BACKGROUND**

### **1.1. The Municipal Regional Stormwater NPDES Permit, Urban Runoff Management Plan, and Annual Report**

On October 14, 2009, the San Francisco Bay Municipal Regional Stormwater NPDES Permit No. CAS612008 (Permit) was adopted by the San Francisco Bay Regional Water Quality Control Board. Subsequent Orders were adopted on November, 18, 2015 and May 11, 2022 which update Permit requirements. The Municipal Compliance Corporation Yard section of the Permit (Section C.2.f) requires that all permittees, including San José, prepare, implement, and maintain a site-specific Stormwater Pollution Prevention Plan (SWPPP) for each corporation yard.

Compliance with the Permit is documented through the Annual Report to the Regional Water Quality Control Board.

### **1.2. Stormwater Pollution Prevention Plan**

The SWPPP identifies Corporation Yard pollutants related to municipal vehicle maintenance, heavy equipment and maintenance vehicle parking areas, runoff, and material storage facilities and recommends the Best Management Practices (BMPs) to use to minimize pollutant discharge to the storm sewer system. In addition to structural controls, procedures and policies are employed to ensure that operations are conducted in a manner that eliminates and/or minimizes the introduction of pollutants into the storm sewer system.

The SWPPP has been designed to achieve the following objectives:

- Identify and evaluate potential pollutant sources associated with corporation yard activities that may affect stormwater quality,
- Identify and implement site-specific BMPs to reduce or prevent pollutants associated with corporation yard activities affecting stormwater and authorized non- stormwater discharges,
- Establish a process for periodic review of the BMPs in the site-specific SWPPP, and
- Ensure compliance with stormwater regulations

Because the SWPPPs are prepared pursuant to the City's NPDES permit rather than the State's General Permit for Industrial Facilities, the City Yards are not required to file a Notice of Intent.

### **1.3. Corporation Yards**

Municipal facilities are required to comply with stormwater regulations that control activities that have the potential to generate non-stormwater discharges to the storm sewer system. Efforts to reduce or prevent pollutants associated with these activities are intended to be similar to those required of private businesses. The five corp yards that are owned and operated by the City are assessed annually for stormwater permit compliance by City staff. Corporation yards (corp yards) support fleet management, street maintenance, storm and sanitary sewer maintenance, and parks maintenance.

Managed by Public Works (PW)

- Central Service Yard, 1661 Senter Road, San José, CA 95112
- Municipal (or Police) Garage, 825 North San Pedro Street, San José, CA 95110

Managed by Department of Transportation (DOT)

- Mabury Yard, 1404 Mabury Road, San José, CA 95133
- South Yard, 4420 Monterey Road, San José, CA 95111
- West Yard, 5050 Williams Road, San José, CA 95129

A copy of the current SWPPP must be retained at each corp yard and be immediately available upon request by reviewing agencies. The SWPPPs for the five City corporation yards were all updated in compliance with Section C.2.f of NPDES Permit No. CAS612008.

### 1.4. Pollution Prevention Team

The SWPPP must identify a specific individual or individuals associated with each facility as members of the Pollution Prevention (P2) Team. The City of San José has formed a Corporation Yards' Pollution Prevention (P2) Team. The P2 Team is responsible for developing the Storm Water Pollution Prevention Plan (SWPPP), assisting the facility manager in SWPPP implementation and revision, and conducting all monitoring program activities specified in the SWPPP. The P2 team is identified in **Table 1**

<b>POLLUTION PREVENTION TEAM</b>		
<b>CONTACT INFORMATION</b>	<b>FUNCTION</b>	<b>ACTIVITIES</b>
Riley Moffatt Environmental Services Specialist (Environmental Services) (408) 398-4393	Urban Runoff Program Corporation Yards Contact / SWPPP Development	Corp Yard Assessments; Assist with SWPPP annual review and revisions, if necessary, & training
Marcelino Vialpando Senior Engineering Tech (Public Works) (408) 975-5725	Stormwater Corporation Yards Liaison / SWPPP Development	Conducts bi-annual Corp Yard Hazardous Material inspections; Assists with SWPPP annual reviews and revisions, if necessary, for GS-managed Corp Yards
Oksan Gouthier Assoc. Civil Engineer (Transportation) (408) 794-1959	Stormwater Corporation Yards Liaison / SWPPP Development	Assists with SWPPP annual reviews and revisions, if necessary, for DOT-managed Corp Yards; Contact for stormwater issues.
Frank Penninger Sr. Maintenance Worker (Transportation) (408) 794-1978	Stormwater Corporation Yards Liaison / SWPPP Development	Contact for South Yard stormwater issues
Frank Penninger Sr. Maintenance Worker (Transportation) (408) 794-1978	Stormwater Corporation Yards Liaison / SWPPP Development	Contact for West Yard stormwater issues
Victor Ocanas Equipment Maintenance Supervisor (Public Works) (408) 975-7266	SWPPP Implementation	Contact for Municipal Garage stormwater issues
Marcelino Vialpando Senior Engineering Tech (Public Works) (408) 975-5725	SWPPP Implementation	Contact for Central Yard stormwater issues
Frank Penninger Sr. Maintenance Worker (Transportation) (408) 794-1978	Stormwater Corporation Yards Liaison / SWPPP Development and Implementation	Contact for Mabury Yard stormwater issues

**Table 1** Pollution Prevention Team

## **2.0. SOUTH SERVICE YARD**

### **2.1. Location**

The South Service Yard is located at 4420 Monterey Road in San José (zoned Public and Community Facilities (PCF)) and is surrounded by commercial and residential areas. This 8.23-acre facility has been in operation since 1978 and employs approximately 100 people. A fire station is located on the southeast corner of the site.

The entire site is fenced with access restricted to City vehicles and authorized personnel only. Access into the South Service Yard can only be gained through two entrances located on Skyway Drive. During normal weekday operations, the code is necessary to enter through the southeast entrance. The east entrance is closed but is accessible to vehicles with special gate keys. After-hours access is restricted to City vehicles with special gate codes.

### **2.2. Runoff, Rainfall, and Nearby Water Bodies**

The site is at an elevation of 147 feet above sea level. The closest waterway to the South Service Yard is Coyote Creek, which is located approximately one mile east of the site. The South Service Yard, however, is in the Canoas Creek watershed, which is located approximately 1.1 miles to the west. To direct rainfall and roof runoff at the site, the yard is sloped to divert water into the storm drains. The yard drains to storm drains that discharge to Canoas Creek.

The average annual rainfall for the City of San José is approximately 15.1 inches. The National Weather Service collects rainfall data from the San José weather station, which is located at the Civic Center.

### **2.3. Facilities**

The South Service Yard consists of four single-story buildings occupied by the Departments of Transportation and Public Works staff, six storage sheds/warehouses, and six covered storage areas. City vehicles and equipment are stored on site in uncovered areas. Uncovered parking for staff and visitors is also provided on site.

City vehicles and equipment are stored onsite in covered and uncovered areas and uncovered employee parking is also provided.

In addition to the buildings, the following facilities are located at the South Service Yard:

- Diesel and gasoline fueling stations for City vehicles
- A compressed natural gas (CNG) fueling station
- Two wash racks for vehicle and equipment washing. (The primary wash rack area is covered and both wash racks are connected to the City sanitary sewer system.)
- An uncovered debris storage area for temporary storage of miscellaneous debris generated during day-to-day operations, including:
  - Storm inlet rubbish and miscellaneous trash from daily maintenance operations
  - Asphalt debris generated from street repair projects
  - Yard waste
  - Miscellaneous household appliances, scrap metals, and hazardous waste collected by field staff
- Storage bins are used to store a variety of construction materials such as base rock, aggregates, and sand for daily street maintenance operations.

### **2.4. Potential Pollutants to Stormwater**

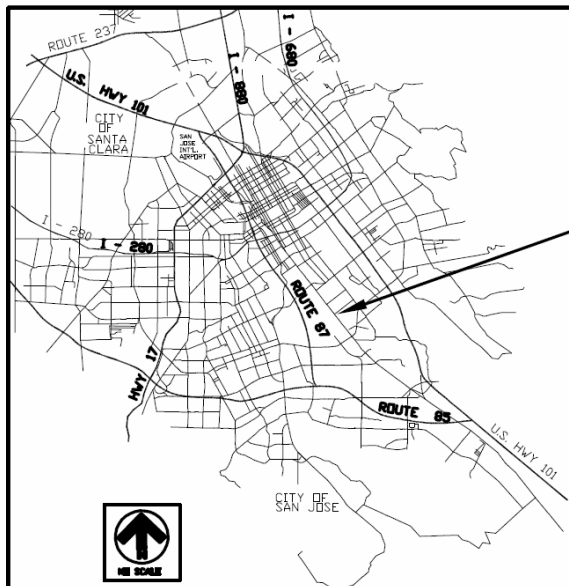
Potential pollutants associated with activities at the South Yard are sediment, oil and grease, and trace metals.

## 2.5. Existing Facility Plans

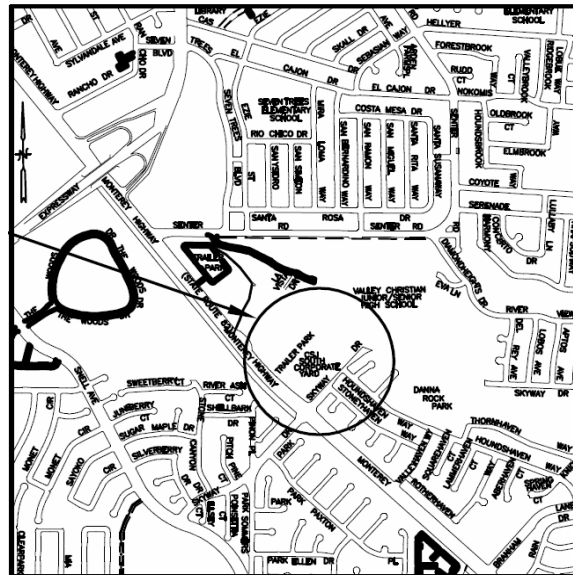
The South Service Yard maintains a Hazardous Materials Management Plan. This plan lists the quantities, location and content of all the hazardous materials and spill response procedures.



Figure 1: Location of South Service Yard



VICINITY MAP  
NOT TO SCALE



LOCATION MAP  
NOT TO SCALE

Figure 2: Vicinity and Location map for South Service Yard

### 3.0. STORMWATER AND SANITARY SEWER SYSTEMS

Storm runoff generated from the South Service Yard is collected by the City storm sewer system where it is conveyed into Canoas Creek at the Branham Lane crossing. However, wastewater from the wash racks and the bermed area of the debris storage areas is collected by the sanitary sewer system and transmitted for treatment (see Figure 6).

#### 3.1. Process Wastewater and Sanitary Sewer System

Wastewater is discharged into the sanitary sewer system from restrooms and sinks in the various buildings, both wash racks, and the two sanitary storm drains within the bermed area of the debris storage area. Wastewater flows through the City sanitary sewer system to the San Jose/Santa Clara Regional Wastewater Facility for treatment.

#### 3.2. Non-Stormwater Discharges

The South Service Yard has limited potential for non-stormwater discharges. Potential non-stormwater discharges include the backing up and overflowing of the wash rack areas.

#### 3.3. Stormwater Monitoring

Pollutant sources are evaluated during dry and wet weather inspections of the facility and by monitoring activities within the yard.

#### 3.4. Stormwater Drain Inlets

The South Service Yard grading plan below shows the direction of flow across the site and the location of the storm drain inlets, including those with inlet filter inserts (inlets #4, #5, #11, #14, and #22). An enlarged copy of this plan is included in Appendix B.

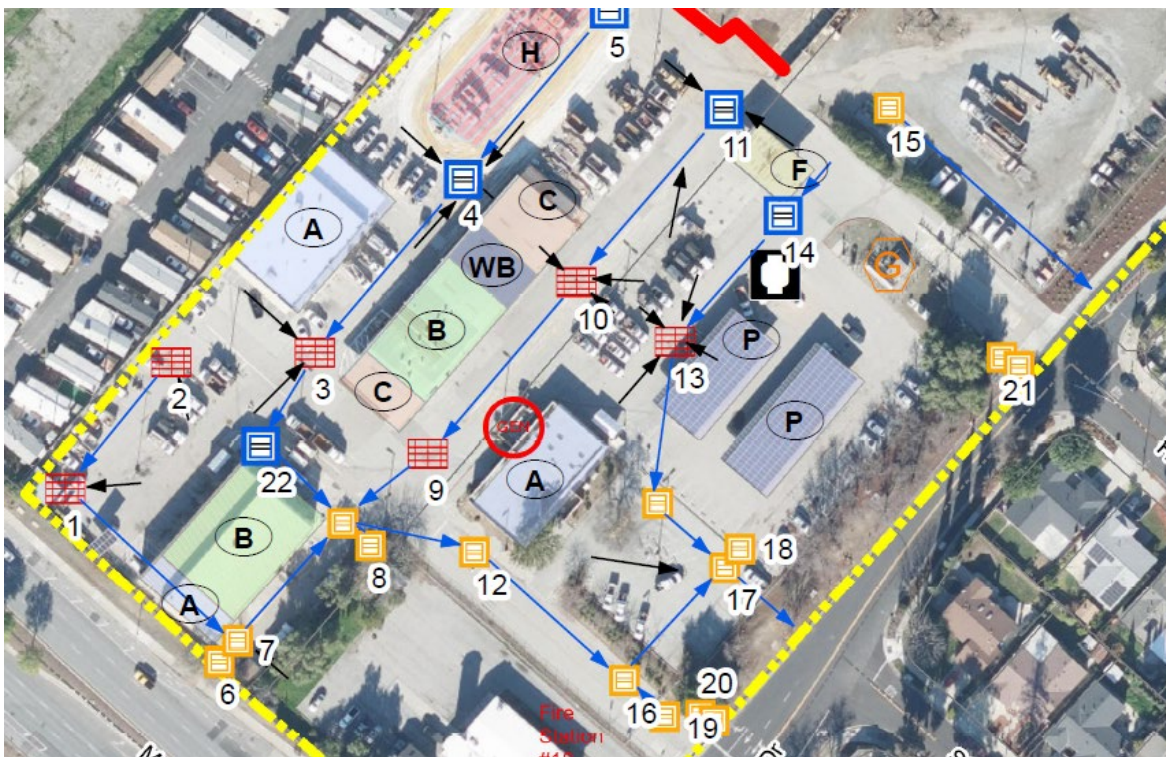


Figure 3: Location of storm drain inlets



## 4.0. POTENTIAL POLLUTANT SOURCES AND BUILDING USAGE

The following section describes the potential sources of pollution at the South Service Yard facility. These pollutants are associated with the type of materials stored and activities conducted at the yard.

### 4.1. Potential Sources of Pollutants from Exterior Sources

#### 4.1.1. Wash Racks

The primary wash rack discharges to the sanitary sewer collection system. It is a covered facility located east of Building 2, the DPW Warehouse Building. The wash rack has a sump that is maintained monthly. The sump collects any paint and sediments before they enter the sanitary sewer lateral. All the paint used by staff is water-based. The water from the wash rack is transported through to the sanitary sewer system.

The second wash rack is located in the southeast portion of the South Service Yard. City vehicles use the facility to remove excessive amounts of soil collected on the vehicles from daily maintenance operations. The wash rack discharges to the sanitary sewer system.

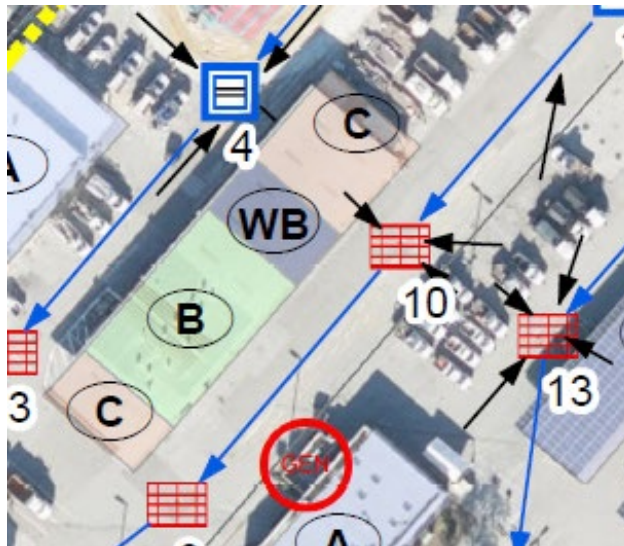


Figure 4: Location of wash bay

#### ***Potential Pollutants, Corresponding BMPs, and Structural Controls***

Potential pollutants from the wash racks include the following:

- Diesel and vehicle fluids
- Organic and metal debris that washes off equipment and vehicles
- Detergents and other cleaning supplies

The corresponding BMPs are described in Section 8.

- Housekeeping Practices (Section 8.1)
- Material and Chemical Storage (Section 8.2)
- Spill Response (Section 8.3)
- Vehicle and Equipment Washing (Section 8.6)

Wash Rack Structural Controls include the following:

- The primary wash rack area is covered and connected to the sanitary sewer system.
- A sump pump is used at the primary wash rack area to collect excess paint and sediment

and prevent it from entering the sanitary sewer system

- The secondary wash rack area is connected to the sanitary sewer system and is surrounded by a berm (See Figure 6).
- The nearest storm drain inlet (SDI #15) is surrounded by straw wattles to protect it from any mud from this area.

#### **4.1.2. Parking Lots and Impervious Surfaces**

Over eighty percent of the South Service Yard is covered by an impervious paved surface or by roofed buildings. An unpaved area, located near the northeast corner of the site, includes a wash rack area for vehicle maintenance (described in Section 4.1.2), an area to load heavy equipment, and a warehouse within which to store it (described in Section 4.2.6, Covered Storage #6). As most of the water runoff from the South Service Yard is collected in the South Service Yard storm sewer system, unpaved areas represent potential areas from which sediment can be washed into the storm sewer system.

City vehicles and equipment are parked and stored on site in uncovered areas. Employee parking is also allowed on site. Potential pollutants from the equipment parking area include sediment, vehicle and equipment fluids, oil and grease, and trace metals. Pollutants are deposited on the pavement from vehicles that leak motor oil, engine coolant, or hydraulic fluid. Sediment can be transported to the parking area by vehicle movement. Good housekeeping is used throughout the yard to prevent these pollutants from entering the storm drains.

##### ***Potential Pollutants, Corresponding BMPs, and Structural Controls***

Potential pollutants from parking lots and impervious surfaces include the following:

- Diesel and vehicle fluids
- Sediment
- Oil and grease

The corresponding BMPs are described in Section 8.

- Housekeeping Practices (Section 8.1)
- Spill Response (Section 8.3)
- Vehicle and Equipment Storage (Section 8.5)

Impervious Surface Structural Controls include the following:

- Catch basin filter inserts (See Section 6.1 and Appendix B Grading Plan)

#### **4.1.3. Fuel Dispensing Area and Underground and Above Ground Storage Tanks**

The South Service Yard is equipped with a covered fueling station with six fuel pumps for City vehicle use. The fuel island is located at the midpoint of the Yard, north of the secondary entry gate, and is maintained by the Public Works Department. City vehicles are required to provide a special gasoline key to prevent illegal fueling. The fueling station consists of two underground diesel fuel tanks and an underground unleaded gasoline fuel tank. The three fuel tanks each have a capacity of approximately 12,000 gallons. A supply of absorbent material is maintained at the fuel island to handle small fuel spills that may occur while vehicles and equipment are being fueled. The used absorbent is then placed in a container for transport to a hazardous waste disposal facility.

A CNG fueling station is located near the secondary entry gate just south of the gas and diesel fueling island. This station is no longer operational. A propane tank is also located in the South Service Yard near the CNG fueling station.

The South Service Yard has one external emergency generator with an above ground self-contained storage tank located adjacent to Building 1.

There is an underground 500-gallon waste oil tank located on the south side of Bldg 4 and an above-ground 480-gallon waste oil tank located on the north side of Bldg. 2.

##### ***Potential Pollutants, Corresponding BMPs, and Structural Controls***

Potential pollutants from the storage tanks and the fueling area include the following:

- Gasoline, diesel, propane, and CNG
- Automotive fluids
- Oil

The corresponding BMPs are described in Section 8.

- Housekeeping Practices (Section 8.1)
- Material and Chemical Storage (Section 8.2)
- Spill Response (Section 8.3)
- Vehicle and Equipment Fueling (Section 8.5)

Structural Controls for the storage tanks and fueling area include the following:

- Tanks are fit with spill containment and overfill prevention systems.
- The fueling area is paved and covered.

#### **4.1.4. Outdoor Storage Areas, Material Storage Bunkers, and Scrap Metal Bin**

The northeastern portion of the South Service Yard contains an 8,630 square foot area used for the temporary storage of miscellaneous debris generated during daily operations. Pollutants are diverted from entering the storm water sewer system by the plumbing of the three inlets within the area to the sanitary sewer system and by an asphalt concrete (AC) berm, which separates the Debris Storage Area, materials storage bunkers, and scrap metal bin from the rest of the Yard. The scrap metal bin, located southeast corner of the yard, near the heavy equipment area. It is used to store scrap metals collected during daily maintenance operations.

Debris in the storage area includes:

- Storm inlet debris
- Debris generated from street repair and construction projects
- Yard waste
- Tires
- Mattresses
- Miscellaneous household appliances, scrap metals, Universal Wastes (such as CRTs and e- Waste), and hazardous waste
- Trash collected at city sponsored community clean up events

There are several uncovered storage bunkers located along the north portion of the South Service Yard used for the storage of construction materials, such as soil, sand, and aggregates. The bunkers are located within the Debris Storage Area. Construction barricades and oversized-miscellaneous rubbish, such as refrigerators and tires, are temporarily stored in the bunkers until enough is collected for disposal to the landfill. Rubbish is stored in the storage area for a period of up to month while awaiting pickup and disposal by the Department of Transportation or by vendors contracted by the Department of Transportation.

#### ***Potential Pollutants, Corresponding BMPs, and Structural Controls***

Potential pollutants from the Debris Storage Area, Materials Bunkers, and Scrap Metal Bin include the following:

- Trash and sediment
- Universal and hazardous waste
- Organic and metal debris

The corresponding BMPs are described in Section 8.

- Housekeeping Practices (Section 8.1)
- Material and Chemical Storage (Section 8.2)
- Spill Response (Section 8.3)

Structural Controls for the storage tanks include the following:

- A berm divides these two areas from the rest of the yard (See Figure 6)
- This area drains to the sanitary sewer system.

#### 4.1.5. Outdoor Storage Areas and Material Storage Bunkers

Four uncovered storage areas are located at the South Service Yard. An enlarged copy of this plan is included in Appendix B.



Figure 5: Location of covered and uncovered storage areas

#### 4.2. Uncovered Storage #1 and #2

Two uncovered storage areas, used to store miscellaneous sign materials, are located between Building 3 and the Debris Storage Area.

#### 4.3. Uncovered Storage #3

The Hazardous Material Storage Area is located across from Covered Storage #5. Various hazardous materials, such as paint thinners and other solvents, are stored in this uncovered area in secondary containment. There are also flammable liquids stored in this area in barrels. Runoff from this area is collected by the storm sewer system.

#### 4.4. Uncovered Storage #4

The fourth uncovered storage area is located adjacent to Building 4, the Public Works Department Fleet Maintenance Building. New material, including antifreeze and other vehicle fluids, is stored in secondary containment in this area.

##### **Potential Pollutants, Corresponding BMPs, and Structural Controls**

Potential pollutants from the uncovered storage areas include the following:

- Paint thinners and other solvents
- Flammable liquids
- Hazardous waste, including motor oil and vehicle fluids

The corresponding BMPs are described in Section 8.

- Housekeeping Practices (Section 8.1)
- Material and Chemical Storage (Section 8.2)
- Spill Response (Section 8.3)

Structural Controls for these areas include the following:

- Hazardous waste US#3 are stored in US#3 secondary containment.
- Wash-rack areas drains to the sanitary sewer system.
- New oils are stored in US#4 secondary containment.

#### 4.5. Buildings

There are four single-story buildings on site at the South Service Yard. The buildings include one administrative office building (Bldg. 1), one administrative/vehicle maintenance building (Bldg. 2), one administrative office/warehouse building (Bldg. 3) for sign shop operations and one vehicle maintenance building (Bldg. 4). There are also six storage sheds/warehouses on site.

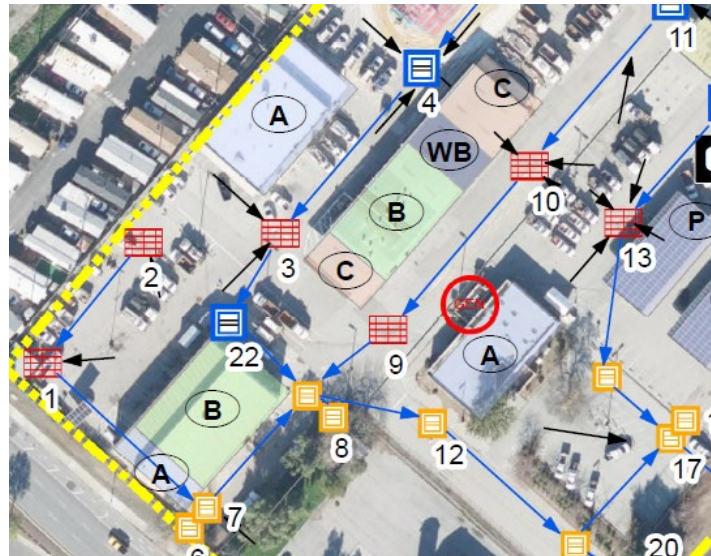


Figure 6: Location of buildings

##### 4.5.1. Building 1: Transportation Administration

The Transportation Administration Office Building is a single-story office building located just north of the site's main entrance off Skyway Drive. A combination of administrative and maintenance personnel occupies the building. Employee restrooms are connected to the sanitary sewer collection system. No industrial activities are performed at this building, and there are no potential materials or means of pollutants entering the storm drain system from the Administration Building.

##### 4.5.2. Building 2: Public Works Department Warehouse

The Public Works Department Warehouse is single-story administrative building located north of the DOT Office. Potential pollutants include oil and grease, fuels, hydraulic fluids, and trace metals. These pollutants can deposit on the pavement when vehicle maintenance is performed outside the maintenance bay of the Public Works Department Warehouse. There is a waste oil storage tank outside the maintenance bay on the north side of the building; motor oil could potentially pollute storm water runoff if accidentally spilled during handling.

##### 4.5.3. Building 3: Sign Shop Administration/Warehouse

The Sign Shop Administrative Building/Warehouse is a single-story Department of Transportation administrative building and warehouse located adjacent to the north property line of the site. This warehouse building is used primarily for DOT administrative office space and the manufacturing shop for street signs.

Potential pollutants include metal shavings from sign shop. These pollutants could potentially pollute the storm water runoff if accidentally tracked outside.

#### **4.5.4. Building 4: DPW Fleet Mechanics Shop**

The Public Works Department Vehicle Maintenance Building is a single-story administrative/vehicle maintenance building located on the west property line of the site (Monterey Road).

The building is used as a garage facility for vehicle service and maintenance & administrative office space for vehicle maintenance personnel. The garage facility is indoors; however, during dry weather, vehicle maintenance does occur outside in uncovered areas.

All motor oils and other automotive fluids are stored outside of the vehicle maintenance garage in covered areas. There is an underground Waste Oil storage tank on the south side of the building where waste oils are stored; the waste oil is regularly disposed of by contracted vendors. Some waste oils are also temporarily stored in secondary containment containers located to the west and north of the garage.

Potential pollutants include oil and grease, fuels, hydraulic fluids, and trace metals. These pollutants can become deposited on the pavement when vehicle maintenance is performed outside the maintenance bay of the Public Works Department Vehicle Maintenance Building. There is an underground waste oil storage tank on the south side of the building; used motor oil could potentially pollute storm water runoff if accidentally spilled during handling.

#### ***Potential Pollutants from Buildings and Corresponding BMPs***

Potential pollutants from the buildings include the following:

- Oil, grease, fuels, hydraulic fluids, and trace metals from the DPW Warehouse and the Vehicle Maintenance Building (Buildings 2 and 4)
- Metal shavings from the sign shop
- The corresponding BMPs are described in Section 8.
- Housekeeping Practices (Section 8.1)
- Material and Chemical Storage (Section 8.2)
- Spill Response (Section 8.3)
- Vehicle and Equipment Maintenance (Section 8.4)
- Vehicle and Equipment Storage (Section 8.5)

#### **4.5.5. Covered Storage**

Five covered storage areas are located at the South Service Yard.

### **4.6. Covered Storage 1 (CS 1)**

Storage area #1 is located to the west of Bldg. 2 and is labeled as "CS 1" on the *Grading Plan*.

### **4.7. Covered Storage 2 (CS 2)**

A storage shed/warehouse is located east of Building 2 DPW Warehouse Building as an extension of that building. There is a wash rack located between the Public Works Department Vehicle Maintenance Area and CS2, and that facility is described in Section 4.1.2.

Roadway marking maintenance supplies are stored in this storage shed. Roadway marking supplies include paint, highway safety spheres, raised pavement markers, etc. Roadway maintenance supplies include cement mix, asphalt mix and other pavement maintenance supplies.

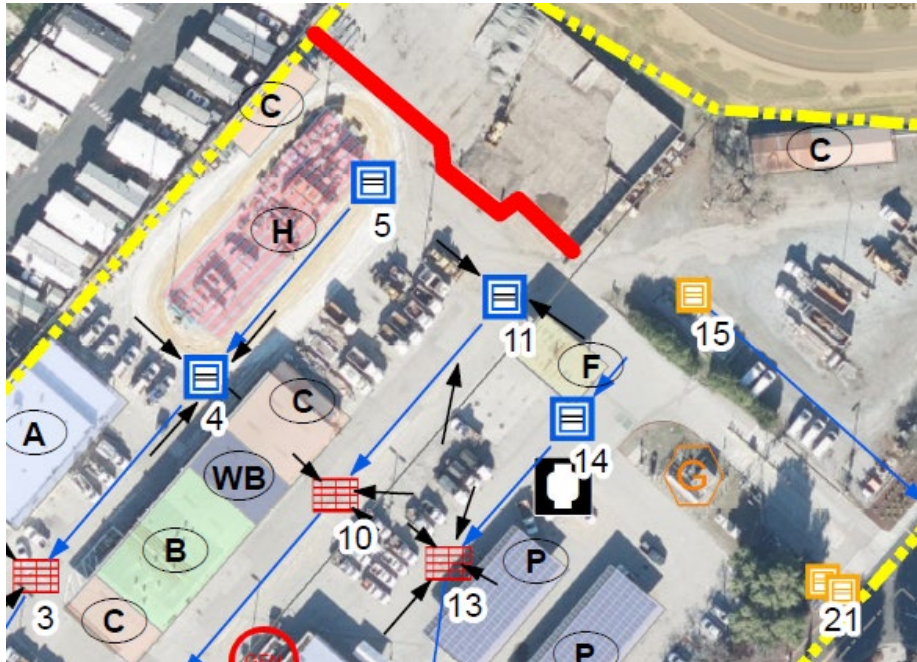


Figure 7: Location of covered storage

#### 4.8. Covered Storage 3 (CS 3)

The third shed is located at the west corner of the site. The Public Works Department uses the shed to store vehicle maintenance supplies.

#### 4.9. Covered Storage 4 (CS 4)

The fourth shed is located north of Building 3, the Sign Shop Administrative Building/Warehouse. The storage shed is used to house paint supplies used for roadway striping. Used paint cans are also allowed to dry on pallets in this area before they are disposed of in the trash. Any excess paint is stored in 55-gallon containers. The storage shed is bermed to prevent any spillage that might occur inside of the shed from entering the storm sewer collection system.

#### 4.10. Covered Storage 5 (CS 5)

The fifth shed is located at the northern property line. The shed is used as a storage facility to house sign shop related materials. Inlets located east of the shed collect runoff.

#### 4.11. Covered Storage 6

The sixth warehouse structure is located on the eastern edge of the site and is used to store heavy equipment and vehicles used for roadway maintenance. Vehicles include asphalt emulsion spreaders.

##### **Potential Pollutants from Covered Storage and Corresponding BMPs**

Potential pollutants from the covered storage areas include the following:

- Roadway marking and maintenance supplies, including paint, cement mix, asphalt mix, and pavement maintenance supplies (CS 2)
- Hazardous materials (CS 3)
- Paint striping supplies (CS 4)
- Asphalt emulsion spreaders (CS6)

The corresponding BMPs are described in Section 8.

- Housekeeping Practices (Section 8.1)

- Material and Chemical Storage (Section 8.2)
- Spill Response (Section 8.3)
- Vehicle and Equipment Storage (Section 8.5)



## 5.0. HAZARDOUS WASTE

Hazardous wastes are generated by vehicle operation and maintenance, operations and maintenance conducted in the field, and small amounts of wastes found abandoned throughout the City and brought to the Yard by field staff (DOT and PRNS). Occasionally, abandoned hazardous waste is found in several of the Yards. When such hazardous wastes are discovered, they are identified and stored according to all Federal, State, and local regulations. Refer to Hazardous Material Management Plan (HMMP) for further details on material storage.

Hazardous waste is stored in front of the west face of the Warehouse Building and in an area located by Covered Storage #5. The material is placed in plastic containers that protect the contents from rainfall. The containers provide a secondary containment for stored materials that may leak during storage. Proper management of hazardous waste ensures that these materials do not enter the storm drain system.



**Figure 8:** Hazardous waste identified with accumulation dates

## 6.0. STRUCTURAL SOURCE AND TREATMENT CONTROLS

Structural controls include both source control and treatment control BMPs. Storm drain inlet filters treat runoff by capturing sediment and hydrocarbons and preventing them from entering the storm sewer system. The wash racks and Debris Storage Areas drain to the sanitary sewer system. Additional protection is provided by berms that control the migration of liquid and solid material from these areas to areas that lead to the storm drains.

### 6.1. Storm Drain System Inlet Filters

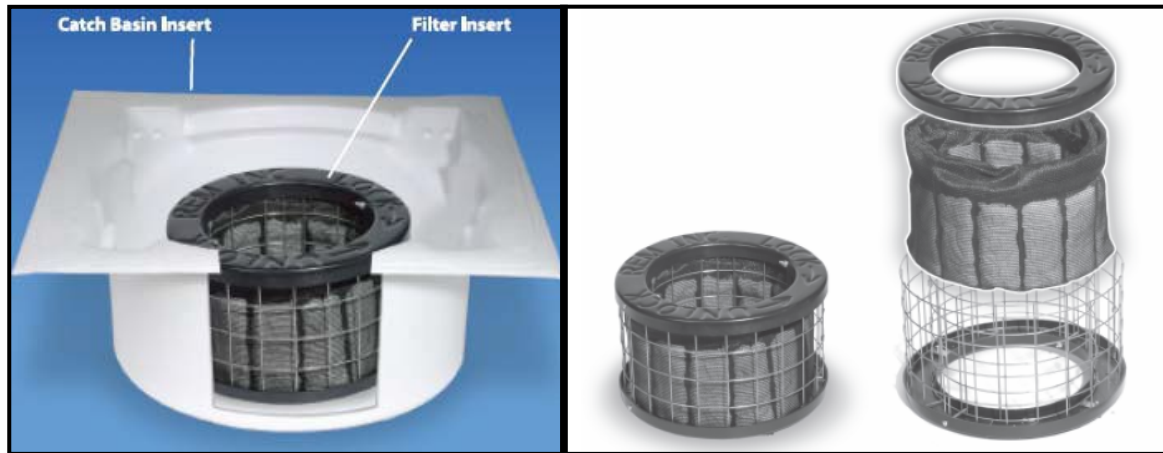


Figure 9: Catch basin inlet insert

In December 2007, filter inserts were installed within the Yard in four storm drain inlets (#4, #5, #11, #14, and #22) that have a high potential for pollutants entering the storm drain system. These plastic inserts capture the larger debris as runoff enters the catch basin. It then flows through a filter that consists of disposable media packets that capture hydrocarbons and other contaminants, such as metals, sand, silt, and litter. The manufacturer, Revel Environmental Manufacturing (REM), conducts all maintenance by servicing these devices three times a year and removing and disposing of all resulting debris and waste.

### 6.2. Berms

Five spill containment berms are located within South Yard. The largest is an asphaltic concrete (AC) berm that separates the Debris Storage Area, scrap metal recycling bin, and material bunkers from the rest of the Yard. Additional berms are located on either side of Covered Storage Area #2, which is used to store marking paint and asphalt cleaner; around the secondary wash rack area and around the perimeter of Covered Storage Area, which is used to store paint.



Figure 10: Location of control berm

### 6.3. Connection to the Sanitary Sewer System

The three inlets within the Debris Storage Area are connected to the sanitary sewer system, thereby preventing pollutants from entering the storm sewer system. The two wash racks are also connected to the sanitary sewer system.

## **7.0. TRAINING AND INSPECTIONS**

### **7.1. Training**

Periodic training is provided to corp yard employees by supervisors, staff from the Environmental Services Department, or County-wide. The training focuses on identifying and managing pollutants that are found in corp yards, understanding why they pose a threat to the stormwater system, and learning about appropriate BMPs to use to mitigate these threats and protect the stormwater system.

### **7.2. Inspection**

Inspections are conducted by staff from the Public Works, Department of Transportation, Environmental Services Department, and the individual Yardmasters.

#### **7.2.1. Hazardous Material Inspection**

A bi-annual Hazardous Material inspection is conducted by combination of DOT and DPW staff at each of the corporation yards. The types of activities included in these inspections are Hazardous Materials Storage and Handling Procedures, Safety, Record Keeping, Fueling Equipment, Catch Basins, and general practices. The purpose is to ensure facility compliance with the hazardous material handling requirements of the Fire Department, County Department of Environmental Health, Environmental Protection Agency, and Regional Water Quality Control Board.

#### **7.2.2. Annual Stormwater Inspection**

An annual Stormwater inspection is conducted prior to the start of the rainy season, between August 1 to September 30 by Environmental Services Department staff at each of the corporation yards. This inspection includes verifying that all elements of the SWPPP are accurate and up-to-date. A tracking and follow-up procedure is incorporated into the Annual Stormwater Inspection form – actions taken to address the noted concern, who took the action, when the action took place. A copy of the Annual Stormwater Inspection forms with completed responses will be maintained electronically and retained for five years.

#### **7.2.3. Visual Spill Inspections**

The Pollution Prevention Team member for each yard will conduct routine visual spill inspections to ensure that no non-stormwater discharges are entering the storm drain and, during storm events, pollutants discharges are prevented to the maximum extent practicable. Visual observations are to be recorded in a log and should include the date of the inspection, whether or not it occurred during a storm event, any pollutants observed, and actions taken.

### 8.0. ASSESSMENT OF POTENTIAL POLLUTANT SOURCES AND CORRESPONDING BMPs

The handling of all materials is to be performed in a manner that minimizes potential for spills and leaks. To minimize the impact of potential spills, the storage capacity of most potential pollutants is limited to one or two gallons, thereby minimizing the potential for contact between pollutants and the storm sewer system.



Figure 11: Example of BMPs: Absorbent and spill kits stored at fuel station

8.1. Housekeeping Practices		
SOURCE AND POLLUTANT		BEST MANAGEMENT PRACTICES (BMPs)
Air compressor condensate	Oil	Outdoor air compressors must be covered.
		Contain air compressor condensate (allow to evaporate, or capture and discharge to the sanitary sewer).
Cleaning of floors and carpets in offices	Dirt	Wash water from floor and carpet cleaning must be discharged to the sanitary sewer system.
Dumpsters	Trash, dirt, metals	Keep dumpster lids closed. Four-yard dumpsters all have lids attached

		Do not place dumpsters near storm drains.
		Remove trash and debris from dumpster area.
Hazardous storage	Hazardous materials and	Ensure all hazardous material and hazardous waste containers are labeled appropriately and legibly.

<b>8.1 Housekeeping Practices</b>		
<b>SOURCE AND POLLUTANT</b>		<b>BEST MANAGEMENT PRACTICES (BMPs)</b>
	hazardous waste	Place all hazardous wastes generated into the appropriate hazardous waste container at the completion of each task or at the end of the day if a task cannot be completed in one day.
Metal working and painting	Metal shavings, cutting oil, paint residue, solvents	Sweep paint residues, metal shavings, and other materials from the floor as often as needed to prevent tracking to the outdoors.
		Place drip pans with absorbent material underneath leaking lathes or other metal working equipment that utilized oil as a lubricant
		Product substitution– Use less toxic materials (i.e. - water based paint instead of oil based).
Sandblasting	Sandblasting grit	Use a shop vacuum to clean up dust from sanding, sand blasting, etc
Parking lot and outdoor areas	Dirt, oil, grease, automotive fluids, metals, sediment	Inspect storm drains regularly for litter and debris.
		Conduct regular maintenance to remove trash and debris from the parking lot.
		Do not use a hose to conduct any outdoor cleaning with drainage to storm drains.
		Clean the parking lot by sweeping, as needed, to prevent contaminants from being washed by rain, or blown, into the storm drain – hosing down of the parking lot into any storm drain shall not occur.
General		Keep work sites clean and orderly. Remove debris in a timely fashion.
		Recycle or dispose of fluids properly.
		Place materials and equipment in designated areas when not in use.
		Repair and/or replace any equipment or machinery that is malfunctioning to ensure safe usage
		Keep all containers and secondary containers tightly closed when not in use.

	Do not use vacuums for flammable liquids. Wet-sanding debris can be allowed to dry overnight then swept or vacuumed. Dispose of dust as solid waste.
	Clean up spills and vehicle leaks promptly, using dry methods.

<b>8.1 Housekeeping Practices</b>	
<b>SOURCE AND POLLUTANT</b>	<b>BEST MANAGEMENT PRACTICES (BMPs)</b>
General (Cont.)	Maintain facility on a routine basis (sweeping, etc.) to ensure a clean safe work place.
	Conduct routine maintenance of storm drain inlet inserts

<b>8.2. Material and Chemical Storage</b>	
<b>Source and Pollutant</b>	<b>Best Management Practices (BMPs)</b>
<p>Container spills or leaks: Antifreeze, oil, solvents, pesticides, herbicides, paint, etc</p>	Weekly inspections are required for hazardous waste storage areas. Use the Daily/Weekly/Monthly inspection form.
	Storage areas should be properly secured to prevent unauthorized access.
	If a container is leaking or corroded, contact the District HAZMAT Coordinator to have trained personnel transfer the waste or material to a new container. Label appropriately.
	Store hazardous materials in a designated area containing chemically compatible materials. Do not store incompatible products in the same storage area without some type of physical barrier separating the containers.
	Inspect storage areas regularly. Ensure containers are properly labeled and covers or caps are secure.
	Original container labels must not be removed.
	Conduct regular inspections of stored materials and storage units.
	Store materials in enclosed or covered area away from storm drains.
	Store materials in secondary containment per Federal, State, and local regulations. Storm drains must be protected from outdoor storage piles. Material may be either stored under roofing, OR covered with tarps during rains, OR contained within bermed areas to prevent run-off:
<p>Outdoor storage piles (yard waste, debris, construction materials, raw materials, greasy or rusting metals): Metals, oil, sediment</p>	Inspect storage areas regularly. Use the Daily/Weekly/Monthly inspection form.
	Keep surfaces swept clean where material is blown or washed from the storage area, keeping materials covered and keeping storage containers in good condition.
	Store materials away from storm drainage systems or watercourses.
	Where feasible, cover storage area with a canopy or roof that is designed to direct runoff away from the storage area, or cover (tarp) dry materials to prevent water intrusion during the rainy season.
	Paved surfaces shall not be cleaned by hosing down. Use dry sweep rather than washing.
	Outdoor materials stockpiles shall be covered or protected with soil stabilization measures or a perimeter sediment barrier. Cold-mix asphalt shall be covered.



Treated wooden post storage areas must be covered during rainy season
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<b>8.2 Material and Chemical Storage</b>	
<b>Source and Pollutant</b>	<b>Best Management Practices (BMPs)</b>
	Recycled tires are to be covered whenever there is a threat of rain.

<b>8.3. Spill Response</b>	
<b>Source and Pollutant</b>	<b>Best Management Practices (BMPs)</b>
Hazardous material, hazardous waste containers, or vehicle and equipment fueling: Antifreeze, oil, fuel, solvents,	Ensure that people or equipment do not travel through and track the spilled substance.
	Cover storm drains in the vicinity of the spill in order to prevent spilled material from entering the storm drain system.
	Identify substance spilled (hazardous or non-hazardous). Read container label. Refer to MSDS, if necessary.
	Use absorbent material: <ul style="list-style-type: none"> <li>○ Using proper personal protective equipment, surround the spill with absorbent material, such as “kitty litter” or pig blankets, to block flow to storm drain.</li> <li>○ Allow time for absorbent to soak up spill. However, absorbent should not be left, unattended, on a spill to soak up - absorbent used on a spill must be cleaned up immediately.</li> <li>○ Sweep up the used absorbent and place it in a designated container for proper disposal.</li> </ul>

Alert supervisor to record and report the spill, as directed below:

- Small spills (Less than 6 gallons):
  - Recording: The supervisor is to document all spill activity in the spill log and keep the records on site.
  - Reporting: There are no reporting requirements for a spill of this size.
- Medium spills (6 – 41 gallons):
  - Recording: The supervisor is to document all spill activity in the spill log and keep the records on site.
  - Reporting: The supervisor is to contact Watershed Enforcement at 945-3000.
- Large spills (42 or more gallons):
  - Recording: The supervisor is to document all spill activity in the spill log and keep the records on site.
  - Reporting: The supervisor is to contact the Fire Department Hazardous Incident Team (911), Watershed Enforcement (945-3000), and the Office of Emergency Services (1-800-852-7550) to report the spill

<b>8.4. Vehicle and Equipment Maintenance</b>	
<b>Source and Pollutant</b>	<b>Best Management Practices (BMPs)</b>
Container spills or leaks, vehicle fluid spills and leaks: Solvents, degreasers, other cleaners, transmission fluids, antifreeze, oil, etc.	Keep equipment clean, disallowing excessive grease/oil buildup.
	Implement adequate preventative maintenance program to prevent leaks.
	Use drip pans for any leaking vehicle/equipment.
	Complete all maintenance in proper location inside building (or a covered outdoor contained area away from storm drains).
	Do not perform vehicle maintenance outdoors prior to predicted rain events or during rain events, unless required by emergency situations.
	Sweep up vehicle and equipment maintenance areas daily.
	Wash water from cleaning floors, after sweeping, must be discharged to the sanitary sewer system. Floor wash water may not be hosed outdoors or allowed to enter a storm drain.
	Train employees in proper cleanup procedures of spills and leaks.
	Spill response materials must be kept readily available in the maintenance bay.
	Transfer removed vehicle fluids to recycling storage tanks by the end of the shift (daily).
	Transfer fluids from drip pans to recycling storage tanks by the end of the shift (daily).
	Ensure safeguards, such as oil shut-off valves, are installed and maintained on recovery equipment.
	Use self-contained sinks or tanks when working with solvents. Periodically check for leaks.
	Allow parts to drain over the solvent sink or tank. Do not allow solvents to drip onto the floor.
When finished with parts washer, be sure to shut it off, close the unit and clean up area.	
Keep internal floor drains plugged unless they drain to the sanitary sewer.	

<b>8.5. Vehicle and Equipment Storage</b>	
<b>Source and Pollutant</b>	<b>Best Management Practices (BMPs)</b>
Vehicle and equipment leaks: Antifreeze, fuel oil, vehicle fluids, metals,	Store equipment in enclosed or covered area away from storm drains when possible.
	Use drip pans underneath leaking vehicles and equipment; clean drip pans as necessary.
	Place greasy or rusting equipment under a covered area, or tarp, when stored outdoors during the rainy season to prevent rains from washing contaminants from these items down into the storm drain.

<b>8.6. Vehicle and Equipment Washing</b>	
<b>Source and Pollutant</b>	<b>Best Management Practices (BMPs)</b>
Steam cleaning: Solvents, degreasers, metals, oil & grease,	Steam cleaning wastewater, if not being recycled, must be diverted to a grease/oil separator connected to the sanitary sewer system. The nature and quantity of the discharge must go through approval by the Source Control section of the Environmental Services Department, 945-3000.
	○ Service sump regularly.
Particulates and debris from washing vehicle and equipment: Soap, sediment, metals, oil & grease, vehicle fluids	Wash vehicles and equipment at designated wash area in Corp Yard
	○ Wastewater discharge from vehicle wash area should be plumbed to the sanitary sewer.
	Inspect wash rack area daily for debris buildup, sweep or shovel debris at the conclusion of washing and before vehicle is driven out of the wash rack.

## 8.7. Vehicle and Equipment Fueling

Source and Pollutant	Best Management Practices (BMPs)
Hosing or washing down fuel area, rainfall running onto and off of fueling area, spills caused by topping off fuel tanks, spills and leaks during deliveries, leaking storage tanks: Fuel and oil	Keep fuel tank and fuel dispenser permits current with appropriate agencies.
	Inspect all above ground fueling tanks and fueling dispensers daily, using the daily inspection form. Report leaks or malfunctions immediately. Repair as necessary.
	Use dry cleanup methods rather than hosing down area.
	Train employees on proper fueling, cleanup, and spill response techniques.
	Spill response materials must be kept readily available in the fueling area. Clean up spills immediately.
	Implement adequate preventative maintenance program to prevent tank and line leaks.
	Inspect fueling areas regularly to detect problems before they occur.
	Minimize run-on of stormwater into the fueling area.
	Cover fueling area.
	Post signs at the fuel dispenser or fuel island warning vehicle operators against "topping off" of vehicle fuel tanks.
	Use secondary containment when transferring fuel from the tank truck to the fuel tank.
	Cover storm drains in the vicinity of the fuel island during transfer from tank truck to the fuel tank.
	Implement proper spill prevention control program.
Inspect portable fueling tanks regularly for cracks and leaks, repair as necessary.	
Automatic shut-off valves shall be installed at each pump where required. Manual shut-off valves shall be near fuel pumps and clearly posted where required.	

**C.2.f. Corporation Yard BMP Implementation**

**i. Task Description – Corporation Yard Maintenance**











- (1) The Permittees shall prepare, implement, and maintain a site-specific Stormwater Pollution Prevention Plan (SWPPP) for corporation yards, including municipal vehicle maintenance, heavy equipment, and maintenance vehicle parking areas, and material storage facilities to comply with water quality standards. Each SWPPP shall incorporate all applicable BMPs that are described in the California Stormwater Quality Association's Handbook for Municipal Operations and the Caltrans Stormwater Quality Handbook Maintenance Staff Guide, May 2003, and its addenda, as appropriate.
- (2) The requirements in this provision shall apply only to facilities that are not covered under the State Water Board's Industrial Stormwater NPDES General Permit.








**ii. Implementation Level**

- (1) Implement BMPs to minimize pollutant discharges in stormwater and prohibit non-stormwater discharges, such as wash waters from street sweeper, vector trucks, or other related equipment. Pollution control actions shall include, but not be limited to, good housekeeping practices, material and waste storage control, and vehicle leak and spill control.
- (2) Routinely inspect corporation yards to ensure that no non-stormwater discharges are entering the storm drain system and, during storms, pollutant discharges are prevented to the maximum extent practicable. At a minimum, each corporation yard shall be fully inspected each year between August 1 and September 30. Permittees shall cease or cause to be ceased any active non-stormwater discharge immediately after they discovered. Corrective actions shall be implemented before the next rain event, but no longer than 10 business days after the potential and/or actual discharges are discovered. Corrective actions can be temporary, in which case more time can be allowed for permanent corrective actions. If more than 10 business days are required for compliance, a rationale shall be recorded.
- (3) Plumb all vehicle and equipment wash areas to the sanitary sewer after coordination with the local sanitary sewer agency and equip with a pretreatment device (if necessary) in accordance with the requirements of the local sanitary sewer agency. In areas where a sanitary sewer connection is not available, the Permittees shall collect and haul the wash water to an alternative sanitary sewer connection or municipal wastewater treatment plant, or implement appropriate BMPs to collect, properly treat, and reuse wash water onsite without any discharge.
- (4) Use dry cleanup methods when cleaning debris and spills from corporation yards. If wet cleaning methods must be used (e.g., pressure washing), the Permittee shall ensure that wash water is collected and disposed in the sanitary sewer after coordination with the local sanitary sewer agency and in accordance with the requirements of the local sanitary sewer agency. Any private companies hired by the Permittee to perform cleaning activities on Permittee-owned property shall follow the same requirements. In areas where sanitary sewer connection is not available, the Permittees shall collect and haul the wash water to a municipal wastewater treatment plant, or implement appropriate BMPs and dispose of the wastewater to land in a manner that does not adversely impact surface water or groundwater.
- (5) Outdoor storage areas containing pollutants shall be covered and/or bermed to prevent discharges of polluted stormwater runoff or run-on to storm drain inlets

# South Service Yard Site Map



-  Storm Drain Inlet
-  Storm Drain Inlet with Silt Filter
-  Storm Drain Inlet with Geo Filter
-  Emergency Generator
-  Metal Bin
-  Natural Gas Station (Inactive)
-  Propane Tank
-  Drain Pipe Flow Direction
-  Surface Flow Direction
-  Spill\_Containment\_Berm

- A  Office Building
- B  Vehicle Maintenance
- C  Covered Storage
- F  Fuel Station
- H  Hazmat Area
- P  Covered Parking
- WB  Wash Bay

The Department of Transportation (DOT) and Environmental Services Department (ESD) share in the responsibility of developing and implementing the City’s Corporation Yard Stormwater Pollution Prevention Plans (SWPPP). Department responsibilities are as follows:

- DOT is responsible for leading the development and/or revision of their SWPPPs, and implementing Best Management Practices (BMPs), all requirements related to inspections, and required record keeping. This includes proper response to any stormwater related incidents or spills. DOT agrees to work with ESD staff to conduct annual inspections and resolve corrective actions in a timely manner.
- ESD is responsible for interpreting Municipal Regional Stormwater Permit provisions related to Corporation Yards, supporting the development and revision of the SWPPPs, conducting annual inspections of the Corporation Yards, identifying corrective actions, and documenting compliance.

Organizational charts are available upon request for all Departments responsible for the development and implementation of the SWPPPs for the City’s five Corporation Yards.

The following staff from ESD and DOT certify they understand the roles and responsibilities of their Department as described above:

Rick Scott Deputy Director Department of Transportation		Rajani Nair, P.E. Deputy Director Environmental Services	
Jennifer Seguin Division Manager Department of Transportation		Mary Morse Senior Environmental Program Manager Environmental Services	
Oksan Gouthier Associate Engineer Department of Transportation		Simret Yigzaw Supervising Environmental Services Specialist Environmental Services	
Frank Penninger Associate Construction Inspector, Yardmaster Department of Transportation		Riley Moffatt Environmental Services Specialist Environmental Services	