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# DRAFT STORM WATER POLLUTION PREVENTION/MONITORING PLAN

**Consolidated Volume Transport (CVT)** 

Material Recovery Facility and Transfer Station 1131 North Blue Gum Street Anaheim, CA, 92806 WDID No. 8 30I000220

Prepared for: **Republic Waste Services of Southern California, L.L.C.** 1131 N. Blue Gum Anaheim, CA 92806



1036 W. Taft Avenue, Suite 200 Orange, CA 92865

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General Manager Republic Waste Services of Southern California, L.L.C.

Revision Date: September 30, 2013

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#### SECTION A. STORM WATER POLLUTION PREVENTION PLAN REQUIREMENTS

## A.1 BACKGROUND

This storm water pollution prevention plan (SWPPP) has been created by Environ Strategy Consultants, Inc. (Environ Strategy) for Consolidated Volume Transport (CVT) owned and operated by Republic Waste Services of Southern California, L.L.C. (Republic). The contents of this SWPPP are consistent with the guidelines of the California State Water Resources Control Board (SWRCB) and include facility runoff locations and descriptions, narratives of both facility processes and storm water prevention techniques, and a monitoring program with reporting requirements. The objectives of this SWPPP are: (1) to identify and evaluate sources of pollutants associated with industrial activities that may affect the quality of storm water discharges and authorized non-storm water discharges from the site; and (2) to identify and implement site-specific Best Management Practices (BMPs) to reduce or prevent pollutants associated with industrial activities in storm water discharges and authorized non-storm water discharges. The results of this SWPPP are based upon a facility audit and documentation provided by Environ Strategy. CVT is fully aware of the significance of pollution on the immediate and larger environment and is adamant about maintaining and exceeding regulatory compliance.

#### A.1.1 Regulatory Background

Storm water at CVT is managed in accordance with appropriate federal and state regulations including the Environmental Protection Agency, National Pollutant Discharge Elimination System (NPDES) requirements. In response to federal regulations promulgated in 1972 by the Water Pollution Control Act (also known as Clean Water Act or CWA), as amended in 1989 and codified as final regulations in 1990 in Title 40 of the Code of Federal Regulations, Part 122 (40 CFR 122), SWRCB elected to issue a statewide General Permit that would apply to all discharges covered under the new regulations, except municipal storm drain systems and storm water discharges from construction activities covered under separate statewide permits. The General Permit was initially issued in November 1991 under Water Quality Order No. 91-13-DWQ. The monitoring requirements of the General Permit were amended in September 1992 by Order No. 92-12-DWQ.

SWRCB issued a revised General Permit under Order No. 97-03-DWQ in April 1997 (revised General Permit) to replace the existing General Permit issued under Order No. 91-13-DWQ (as amended by Order No. 92-12-DWQ). This revised General Permit was issued to amend some of the provisions of the expired permit in accordance with federal regulations. The revised General Permit is described in the following section.

The revised General Permit issued under SWRCB Order No. 97-03-DWQ had waste discharge requirements (WDRs) for discharges of storm water associated with industrial activities.

Industrial sites covered under the former and revised permits must comply with the following requirements:

- Submit an abbreviated Notice of Intent (NOI) form.
- Prepare a revised SWPPP to comply with the appropriate requirements of the revised General Permit.
- Develop and implement a revised storm water monitoring program.
- Report storm water testing results and perform a comprehensive site compliance evaluation annually.

A copy of the revised General Permit for Order No. 97-03-DWQ is enclosed in Appendix A.

CVT originally applied for the Regional Water Quality Control Board General Storm Water Permit on March 2, 1992. A copy of the NOI is included in **Appendix B**.

#### A.1.2 Site Information

This facility provides commercial and residential solid waste pick up within Anaheim and outlying areas. CVT provides a valuable service to the surrounding community through waste and recyclable material pickup, processing, and handling (see **Figure 1**). The facility is a wholly-owned subsidiary of Republic.

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Site Contact:	Robin Murbach (Telephone 714-575-3820)
Facility SIC Codes:	4953 (Transfer Station), 5093 (Recycling), 4214 (Hauling)
WDID #:	8 301000220

## A.2 OBJECTIVES

The objectives of this SWPPP are: (1) to identify and evaluate sources of pollutants associated with industrial activities that may affect the quality of storm water discharges and authorized non-storm water discharges from the site; and (2) to identify and implement site-specific best management practices (BMPs) to reduce or prevent pollutants associated with industrial activities in storm water discharges and authorized non-storm water discharges. The results of this SWPPP are based upon a facility audit and documentation provided to Environ Strategy. CVT is fully aware of the significance of pollution on the immediate and larger environment and is adamant about maintaining and exceeding regulatory compliance.

# A.3 FACILITY ORGANIZATION & DESCRIPTION

This site houses the Orange County operations of Republic doing business as the CVT Material Recovery Facility (MRF) and Transfer Station, Anaheim Disposal, etc. Republic is an integrated solid waste management company. CVT was organized primarily to conduct recycling, transfer, and solid waste hauling operations. Site facilities include maintenance facilities, administrative offices, recycling facilities, solid waste transfer, a public drop-off area and the MRF (see **Figure 2**).

The CVT site is approximately 17 acres in size. Approximately 94% of the site is surfaced in impervious materials. Structures account for approximately 39% of the site, while 55% is comprised of paved areas. The remaining 6% pervious surface consists of landscaped areas.

Site operations include activities associated with the recovery of recyclable materials and transfer of solid waste and the maintenance of solid waste off-road vehicles. With the exception of public disposal and wood-waste, inert material and baled recyclable storage, all solid waste sorting, recovery and transfer operations are assigned to covered, enclosed areas. The most prominent structures on the site are the MRF and the Green-waste building.

## A.3.a Pollution Prevention Team

The members of the CVT Pollution Prevention Team (PPT) are listed in **Table 1**. The PPT has the authority and responsibility for coordinating and implementing the SWPPP. The PPT includes personnel knowledgeable in spill control, health and safety, materials management, and waste management. The General Manager of the facility oversees the SWPPP and delegates responsibility to site staff to act as the PPT. The ongoing training and implementation of this SWPPP and monitoring program is the responsibility of the General Manager, who may be supported in these responsibilities by Republic's Maintenance Managers, Operations Managers, and/or Environmental Managers.

## A.4 STORM WATER DRAINAGE PATTERNS AND SAMPLING LOCATIONS

The three primary drainage directions at the site are northwest towards Coronado Street, east towards Blue Gum Street, and southwest towards the corner of the site adjacent to the intersection of La Palma Avenue and Highway 57. The flow directions are illustrated on **Figure 2**.

There are concrete curbs and/or block walls around much of the site perimeter that prevent storm water discharge. Republic is in the process of permitting and constructing infiltration areas and permeable paving that is expected to be completed by December 31, 2013. The main volume of storm water discharge will be directed to two (2) StormChamber® subsurface infiltration devices located along Coronado Street, a StormChamber® subsurface infiltration device in the southwest corner of the site, and a bioretention area located north of the Post Collection Building (**Figure 3A**). After the completion of these storm water structural improvements, the storm water surface

discharge offsite will be limited to discharge from the MRF roof drain to the Caltrans property in the southwest corner of the site, the MRF roof drain on the northeast corner to the Human Resources parking lot, and minor sheet flow onto Blue Gum Street from Gretta Lane and employee parking areas near Gretta Lane and the corporate office. Gretta Lane does not receive storm water runoff from the adjacent building roofs or any industrial areas. The Post Collection Building, Human Resources Office, and Off-Road Maintenance roofs drain to landscaped areas. The Green Waste and Employee Break Building roofs drain to the proposed bioretention area.

The StormChamber® and bioretention areas will be inspected during rain events that occur during scheduled facility operating hours. Republic anticipates that only former monitoring point MP-1 will have a sufficient volume of storm water discharge offsite to allow a sample to be collected. The bioretention area located upstream of MP-1 and the StormChamber® infiltration areas are designed to capture runoff from an 85<sup>th</sup> percentile storm. Therefore, a storm event greater than the 85<sup>th</sup> percentile, may be required to produce enough storm water discharge to enable sample collection. Overflow will be sampled if it occurs. If the overflow is due to a storm event greater than the 85<sup>th</sup> percentile, the sampling will be for informational purposes only.

There are storm drains located along Blue Gum Street, Coronado Street, the 57 freeway, and La Palma Avenue that are not the responsibility of CVT.

# A.4.1 Drainage Estimate

An estimate of the drainage areas, in relation to total facility square footage is presented below. A site plan identifying the drainage areas, discharge locations, and monitoring points is identified in **Figure 2**.

Drainage Area	Runoff Source Area	(Approx. Sq. Feet)	% of Total Facility
Section I	Paved areas around the Green Waste Building, (flows to Monitoring Point 1 at Blue Gum Street)	173,700	28%
Section II	Corporate Office and employee parking areas (minimal sheet flow onto Blue Gum Street)	41,700	7%
Section III	Employee parking lot, guard shack, scale, shipping & storage area, and south side of MRF (flows to SW corner of site)	215,100	34%
Section IV	Scales, tarping station and a portion of the solid waste storage buildings along the west side of the site (flows to the Coronado cul-de-sac)	124,700	20%
Section V	Paved areas around the Bale Storage Building, which includes e-waste and hazardous waste storage areas (flows to Coronado Street)	52,200	8%
Section VI	Paved area between the MRF, Off-Road Maintenance, and Green Waste Buildings including diesel AST (flows to clarifier in the MRF)	24,100	4%

# A.5 LIST OF SIGNIFICANT MATERIALS

Raw materials reported to the local Hazardous Material Business Plan program and used either currently or within the last two to three years by CVT are listed in **Table 2**. A complete listing of raw materials is also contained in the CVT Hazard Communication MSDS binder. See **Figure 2** for the approximate locations of material storage areas.

# A.6 POTENTIAL POLLUTANT SOURCES

This section identifies the process and material handling areas and lists the significant materials that are handled and stored in each area at CVT.

#### A.6.a.i Industrial Processes

Industrial process areas identified as potential source contributors to pollutants in storm water runoff include: the Material Recovery Facility (MRF), the off-road vehicle maintenance area; diesel refueling area; recycled materials shipping/storage area; the Green Waste Building and adjacent paved areas; the scales and tarping station; the Bale Storage building; and vehicle parking areas. Pollutants inadvertently coming in contact with rainwater may increase levels of oil and grease (O&G), total suspended solids (TSS), metals, and chemical oxygen demand (COD). The potential pollutants present in each area are described below.

#### Material Recovery Facility (MRF)

Municipal solid waste and recyclable materials are deposited, sorted, and loaded into transfer trucks or sea-containers for transport offsite. The recyclable materials are also baled within the MRF. Potential pollutants include municipal solid waste, recyclables, minor amounts of household hazardous waste, and spills or leaks from equipment and vehicles. Southwest of the MRF, a StormChamber® with SedimenTrap<sup>TM</sup> will be installed (**Figure 3C**).

#### Off-Road Vehicle Maintenance Area

The off-road vehicle maintenance facility is where most of the chemicals used at CVT are stored. Chemicals are ordered on an as-needed basis so there is no build-up of materials in stock. All chemicals are stored in appropriate cabinets and/or containment devices. Any materials spilled are immediately treated with absorbent materials and cleaned up to avoid tracking off site.

#### Diesel Refueling Area

The red dye diesel fuel tank is filled on an as-needed basis. Tanker trucks from a certified fueling contractor enter the site and pump fluids directly into the 20,000 gallon aboveground storage tank (AST). The AST is used for the fueling of bulldozers and loaders operating in the compaction pit and throughout the facility. The equipment is fueled by trained operators on a daily basis. The diesel fuel dispensing area will be surrounded by a berm and covered with a

metal canopy by February 1, 2014, subject to receiving the necessary permits from the City of Anaheim and fabrication (**Figure 3A**).

#### Recycled Materials Shipping/Storage Areas

The recycled materials shipping/storage area was upgraded in 2011. The lot located southeast of the MRF was repaved and new loading docks were installed. Trucks with sea-containers back up to the loading docks and bales are loaded directly into the trucks (**Figure 2**). Bales of recycled materials awaiting removal from the site can be stored inside the MRF. The baled and temporarily stored materials are non-chemical in nature, but may result in debris such as metal filings and/or minor dripping of liquids such as laundry detergent, soda, etc. The bale staging areas are inspected and cleaned regularly by maintenance staff. Containers are inspected for leaks and the contents are checked to make sure they are not creating a hazard. Exposed materials are covered with tarps during rain events to prevent storm water contact.

#### The Green-Waste Building and Adjacent Area

Most green and wood waste is stored on paved surfaces under the Green Waste Building roof. However, some public disposal, wood waste, and inert materials are temporarily stored outside on paved surfaces adjacent to the Green Waste building. These items may be partially enclosed by K-rails or push walls. Some of the public disposal items and construction and demolition debris may be temporarily stored in roll-off bins outside.

#### Scales and Tarping Station

Inbound trucks cue near the Coronado Street cul-de-sac before proceeding to the scales for weighing. Transfer trailers also stop at the tarping station to secure the tarps over their loads before proceeding to the exit at Coronado Street. Loose litter, debris, and oily drips can be left by the trucks passing through the northwest area of the site.

A new scale was also installed south of the MRF near the recyclable material shipping & storage area. Loose litter, debris, and oily drips can be left by the trucks passing through the south area of the site.

## Vehicle Parking Areas

Parked vehicles and equipment are potential sources for storm water pollution from leaks of coolant, oils, etc. The CVT vehicle parking areas include the employee parking lot and parking area near the corporate office, along Blue Gum Street. The employee parking spots will be paved with permeable pavement per the TGD BMP Fact Sheet INF-6 by December 31, 2013 (Figure 3A). Sometimes dozers, loaders, and/or other heavy equipment are left parked on impermeable surfaces near the Green Waste building or await repairs parked outside the Off-road maintenance building. However, as much as practical, the heavy equipment is kept under cover. Maintenance staff inspects the parking lots and paved areas and clean up minor spillage, oily drips, etc. Equipment and trucks are maintained and checked for leaks on a regular basis.

## A.6.a.ii Material Handling and Storage Areas

The significant materials and their storage locations at the site are listed in **Table 2** - *List of Significant Materials at CVT*. Municipal solid waste and recyclable materials are mainly handled in the MRF. Bales of recyclable materials are stored on the south side of the MFR near the loading docks where they are loaded into sea-containers. Green and wood waste are handled in the Green Waste Building. Construction and demolition debris, public dumping, and temporary staging of other miscellaneous (non-hazardous) wastes are handled northwest and west of the Green Waste Building. E-waste, small amounts of household hazardous waste, and bales of recyclable materials are temporarily stored at the Bale Storage Building. Lubricating and other maintenance fluids are stored at the Off-Road Maintenance Shop. Hazardous wastes generated by servicing and maintenance of heavy equipment are limited to waste motor oil, gear oil, hydraulic oil, brake fluid, waste antifreeze, used oil filters, batteries, soiled rags, and absorbent materials. These wastes are accumulated in appropriately labeled containers having secondary containment. All hazardous wastes at the site are transported off site under manifest for recycling and/or disposal by qualified hazardous waste subcontractors that are certified to handle the waste.

#### A.6.a.iii Dust and Particulate Generating Activities

The unloading, sorting, loading and other processing and transfer activities of MSW, green waste, and recyclable materials can generate dust and particulates. Much of the dust and particulates are contained within the MRF and Green Waste Buildings, where they may collect along walls or in corners. To prevent airborne dust and particulates, CVT performs these activities inside buildings or under cover as much as possible. Misting systems operate within the MRF and the loading pit, along the perimeter openings of the MRF and Green Waste Building, and along the west perimeter of the site by the MRF tunnel. These misters operate during active site hours.

#### A.6.a.iv Significant Spills and Leaks

There have been no identified, significant spills from the facility for materials listed in 40 CFR Part 372, extremely hazardous materials, or other on-site raw materials onto the facility grounds at CVT.

#### A.6.a.v Non-Storm Water Discharges

The CVT has installed engineering controls to prevent any non-storm water discharges (irrigation water, air conditioner and misting system runoff, etc.) from leaving the site. These are discussed later in Section 8 – Best Management Practices. Domestic wastewater is piped directly to municipal sanitary sewer lines. Republic does not anticipate unauthorized non-storm water discharges or infiltration at this site. Spill kits and spill response procedures are in place to ensure that no unauthorized non-storm water discharge will reach any infiltration areas.

## A.6.a.vi Soil Erosion

Only 6% of CVT has permeable surfaces with potential to erode during heavy rain events. These consist of landscaped areas which have established plants and grass to prevent erosion. Some soil may come onto the site from the landscaped freeway embankment located along the western property boundary. These slopes are maintained by Cal Trans, so when there are erosion issues, CVT contacts Cal Trans. The pavement at the north side of the Locker Rooms and near the Off-Road Maintenance area will be repaired by December 31, 2013.

## A.6.b Potential Pollution Sources and Corresponding BMPs

CVT has identified potential areas of impact to storm water runoff and has implemented the best management practices listed in **Table 3** – Assessment of Potential Pollutant Sources and Corresponding Best Management Practices. The non-structural and structural BMPs are also discussed in more detail in the following sections.

Run-on from Blue Gum Street into Drainage Area 3 at CVT will be prevented by a planned cross-gutter (**Figure 3A**). This cross-gutter will be installed as soon as possible after acquiring the necessary permits from the City of Anaheim and fabrication. Other storm water run-on at CVT may occur from the Cal Trans slopes in the northwest corner of the site. Gretta Lane does not receive run-on from Blue Gum Street.

# A.7 ASSESSMENT OF POTENTIAL POLLUTANT SOURCES

Certain materials used or stored on the site contain potential pollutants. The following table lists the pollutants identified as having a potential to be present in storm water discharge.

Potential Pollutant	Source	Location
Ammonia (as N)	Solid waste and green waste	MRF & Green Waste Building
Chemical Oxygen Demand (COD)	Organic material from solid waste and green waste	MRF & Green Waste Building
Cyanide	Household hazardous waste	Bale Storage Building Hazardous Waste area
Oil &Grease	Fuels, hydraulic fluid, & lubricants	Off-Road Maintenance Area, diesel AST, and vehicle traffic areas
Total Suspended Solids (TSS)	Dirt and dust	Unpaved areas, truck traffic areas, waste transfer areas
Metals	Recyclable materials, C&D, solid waste, metal roofs, and equipment, bins, & trucks	MRF, Green Waste Building, and C&D staging east of scales

## A.8 STORM WATER BEST MANAGEMENT PRACTICES

**Table 3** contains an assessment of potential pollutant sources and the corresponding best management practices utilized at the CVT. The BMPs are also separated in to non-structural and structural categories and described below.

## A.8.a STORM WATER BEST MANAGEMENT PRACTICES – NON-STRUCTURAL

CVT has developed the following storm water management controls based on the requirements of the revised General Permit, facility process knowledge, and observed runoff gradients. These storm water controls utilize existing personnel and established preventive maintenance routines, including spill prevention and spill response techniques.

#### A.8.a.i Good Housekeeping

The following procedures are routinely employed to maintain CVT as a clean and orderly facility:

- Regenerative street sweepers operate on site and along the access roads adjacent to the facility;
- The track-out grid and proposed "cattle grid", which will be installed by December 31, 2013, near the guard shack (**Figure 3A**) will be inspected and cleaned regularly;
- Hydrocarbon spots left by company/personnel vehicles are removed on a regular basis using absorbent and/or a water-based, biodegradable solvent;
- Parking lots are kept clean and clear of debris using dry sweeping methods or the street sweepers;
- Process drains, clarifiers, and cleanouts are inspected and periodically cleaned as necessary to avoid excess pooling of industrial water and/or rainwater;
- Rainwater drainage trenches, gutters, and downspouts are periodically cleaned to remove excessive debris, vegetation, and silt so that storm flow is not obstructed;
- Access roads and perimeter fences/walls are inspected frequently, and refuse is picked up and disposed of properly;
- All objects with raw material or finished product residues are kept covered and indoors, and are periodically wiped clean;
- Absorbent material and pans are used to contain leaks, spills, or small discharges;
- Vehicles/equipment cleaning is performed in designated areas with collection drains using minimal amounts of water;

- Hazardous wastes generated at the site are kept in clearly labeled and dated containers awaiting transport off site in accordance with applicable handling regulations;
- Liquids from the baling area inside the MRF are contained by absorbent materials to prevent discharge flowing out of the southwest corner of the MRF;
- Dedicated litter collection personnel inspect the facility daily and pick up any litter found; and
- Litter collection, tarp applications and inspections, and BMP inspections and maintenance will be logged through the use of the activity logs and observation forms enclosed in **Appendix D**.

#### A.8.a.ii Preventive Maintenance

The following preventative maintenance procedures are routinely practiced at CVT:

- Site vehicles and equipment receive regular maintenance in accordance with manufacturers' recommendations to prevent leaks;
- Absorbent material is readily available in areas where leaks may routinely occur (i.e., refueling, parking, and off-road maintenance area);
- Only trained site employees are allowed to fuel facility vehicles and equipment within designated areas. They are instructed to report leaking fuel dispensers immediately to the appropriate manager;
- Individuals fueling vehicles are instructed not to "top off" or overfill fuel tanks;
- Vehicle and equipment maintenance is performed in a designated area on impermeable surfaces; and
- The bioretention and pretreatment areas will be inspected and cleaned as necessary before and during the rainy season, which will be documented.

#### A.8.a.iii Spill Response

Spills of hazardous materials greater than 55 gallons will be handled appropriately. If required, a HAZMAT contractor will be contracted. In the event of a significant spill the appropriate supervisor or manager will be immediately notified and the following activities will be conducted:

- 1. Identify product and secure the area (if necessary).
- 2. Obtain personal protective equipment and maintain safety of employees.
- 3. Contain spilled material with portable dikes, absorbent socks, and/or other absorbent materials.

- 4. Cover floor and storm drains.
- 5. Remove soiled absorbent, clean up material, and package it for disposal in accordance with environmental regulations.
- 6. Clean area to the approval of the appropriate manager.
- 7. Log the time, place, volume, reason for, and type of spill release (raw material usage, vehicle and tank fueling, or other vehicle fluids) in an incident report.
- 8. Replace or clean any spill control equipment so that it will be ready for the next event.
- 9. The incident shall be reported to the General Manager and/or Site Manager. The appropriate manager(s) shall determine the need for reporting to local enforcement agencies in accordance with federal, state, and local regulatory requirements.

#### A.8.a.iv Material Handling and Storage

The following material handling and storage procedures are employed at CVT to minimize spills and prevent exposure of storm water to pollutants:

- If possible, MSW and green waste is unloaded, temporarily stored, and loaded within enclosed or covered areas.
- Public disposal and inert materials are temporarily stored outside on a paved surface, partially enclosed with K-rails or push walls.
- Baled recyclable materials are stored on paved surfaces within the MRF or immediately adjacent in the loading dock area and are loaded into sea containers as soon as possible.
- Heavy materials are loaded and unloaded by a trained forklift operator.
- During unloading, the responsible employee accepting the delivery inspects for spills, leaks, and debris before the delivery vehicle leaves. Minor spills are cleaned up promptly.
- All containers storing significant materials are kept closed except when adding or removing material.
- All hazardous materials will be stored in containers with legible labels identifying the material and the date stored.

## A.8.a.v Employee Training

Responsibilities of the SWPPP Manager include implementation of annual training schedules for employees handling hazardous materials and having spill prevention/response responsibilities through the Hazard Communication Training Program. This program includes training designated employees in implementing facility controls, spill response, good housekeeping, tarp applications and inspections, appropriate hazardous material handling and storage, and other required training. In addition to emergency response procedures identified in the Emergency Response Plan, CVT has designated key employees to perform storm water management roles. These employees are trained to identify conditions at the various work areas at the site that may potentially cause pollution of storm water. Each new employee whose work in the course of their job might impact storm water, shall complete the Republic SWPPP and Spill Prevention Control and Countermeasures (SPCC) Training Program. This training is designed to maintain employee awareness regarding storm water pollution prevention practices. Drivers/operators receive additional training in proper fueling, fuel station inspections, and spill prevention procedures.

## A.8.a.vi Waste Handling / Waste Recycling

The following waste handling and recycling procedures are implemented at CVT to minimize and prevent exposure of storm water to pollutants:

- Waste products from vehicle/equipment maintenance such as motor oil, antifreeze, brake fluid, hydraulic fluid, gear oil, and batteries are collected, temporarily stored in appropriately labeled containers, and disposed/recycled under manifest by a qualified subcontractor.
- Drip pans are emptied into the used oil tank.
- Dry shop waste (rags, absorbent materials, etc.) is stored in a covered container located indoors in the Off-Road Maintenance Shop.
- Used oil filters are drained and then recycled by an approved vendor. Used oily parts are cleaned prior to disposal or recycling.

## A.8.a.vii Recordkeeping and Internal Reporting

CVT will keep all storm water and non-storm water discharge observation forms, chain of custody, analytical data, and records documenting employee training, litter collection, tarp application, and storm water BMP inspections and maintenance readily available on site. All elements of SWPPP observations will be retained as part of the plan. The time, place, volume, reason for, and type of release (raw material usage, vehicle and tank fueling, or other vehicle fluids) for any spills will be recorded on an incident report. All compliance reporting will be carried out in accordance with federal, state, and local regulations.

#### A.8.a.viii Erosion Control and Site Stabilization

Impermeable surfaces at CVT are maintained with landscape vegetation to prevent erosion. Landscaped areas are irrigated at intervals consistent with County or City Water Conservation Resolutions. Excess runoff from hoses, irrigation lines, air conditioners, or other domestic water sources are directed away from site areas where pollutants are likely to accumulate. The planned storm water infiltration areas will prevent any soil erosion from discharging offsite. During the storm season sandbags, silt screens, straw bales and/or other additional sediment control devices may be utilized.

## A.8.a.ix Inspections

Monthly, quarterly, and annual SWPPP inspections are conducted in accordance with the General Permit requirements. These inspections are described in Section B.

Designated CVT employees perform routine site inspection duties. Inspecting employees may recommend any additional spill prevention controls. Vehicles and equipment are regularly inspected to check for leaks. Vehicle parking and transit areas are inspected regularly for drips, debris, etc. A designated litter control person will inspect the perimeter of the facility daily and pick up litter, which will be recorded on the Litter Control Logs in **Appendix D**. If tarps are applied to cover materials during rain events, their application and inspections will be recorded on the *Tarp Application and Inspection Form* in **Appendix D**.

Storm water infiltration and pre-treatment areas will be inspected before the rainy season and during rain events that occur during scheduled facility operating hours during the rainy season. An example of the *Bioretention Area and StormChamber Visual Observation Form* for documenting the BMP inspections is enclosed in **Appendix D**.

#### A.8.a.x Metal Roof Sampling

During the first hour of the second and third qualifying storm water discharges of the 2013-2014 season (a qualifying storm water discharge is one that occurs during scheduled facility operating hours on a day preceded by at least three (3) working days without storm water discharge), the following metal roof storm water discharge samples will be taken:

- Material Recovery Facility 2 samples (from different locations)
- Green Waste Building 1 sample
- Off-Road Maintenance Building 1 sample

These are the only buildings on the site that have metal roofs. The four (4) samples listed above will be analyzed for Aluminum, Copper, Iron, Lead, and Zinc to determine the need for roof coating. Two (2) rounds of sampling will be conducted at these four (4) locations. If both rounds of sampling produce samples that do not exceed benchmarks, the metal roofs will not require coating. If the samples exceed the following USEPA Storm Water Benchmarks, the metal roof(s) exceeding the benchmark values will be coated within 60 days of receiving the second round of laboratory results.

Parameter	Units	Federal Benchmark Value
Aluminum	mg/L	<0.75
Copper	mg/L	<0.0636
Iron	mg/L	<1
Lead	mg/L	<0.0816
Zinc	mg/L	<0.117

#### A.8.a.xi Quality Assurance

The ongoing training and implementation of this SWPPP program is the responsibility of the General Manager, who is supported in these responsibilities by the PPT. The General Manager may designate a qualified environmental consultant for review and updating the SWPPP on an "as needed" basis.

## A.8.b STORM WATER BEST MANAGEMENT PRACTICES – STRUCTURAL

CVT utilizes structural control measures to minimize rainfall runoff and impact from on-site operations. The structural control measures include overhead coverage, control devices to channel storm water away from pollution sources, secondary containment, and treatment devices. Structural control measures are discussed in the following sections.

#### A.8.b.i Overhead Coverage

Most waste transfer operations are conducted within the enclosed MRF (which contains the transfer tunnel), under canopies adjacent to the MRF, or under the covered/partially enclosed Green Waste building. Most maintenance is conducted within the Off-Road Maintenance building and liquid raw material drums are stored within the Off-Road Maintenance building. Hazardous waste is stored under an awning at the Bale Storage Building. E-waste and recyclable material bales are also stored within the Bale Storage Building. The glass piles in Drainage Area 3 will be covered in a permanent method to be determined, designed, fabricated and installed by February 1, 2014, subject to receiving the necessary permits from the City of Anaheim. A canopy to cover the diesel fuel AST and dispensing area will be installed by February 1, 2014, subject to receiving the necessary permits from the City of Anaheim.

#### A.8.b.ii Retention Ponds

This site does not have retention ponds.

#### A.8.b.iii Control Devices

The MRF and Green Waste Building have a series of gutters and downspouts to collect storm water runoff and direct it to areas where it will not come into contact with pollutants. The runoff from the southwest portion of the MRF building roof will be directed via an overhead pipe to the Cal Trans drainage ditch offsite.

A concrete curb runs along the west side of CVT to prevent storm water from leaving the site and to prevent sediment from the slopes alongside the 57 freeway from washing down into the site. A concrete ribbon gutter and a grade break in Drainage Area 1 directs discharge towards a storm water settling clarifier, which will be replaced by a bioretention area. A cross-gutter to prevent run-on from the southernmost entrance at Blue Gum Street will be installed as soon as possible after acquiring the necessary permits from the City of Anaheim. Track-out grids have been placed near the Guard Shack to knock litter and debris off trucks and vehicles exiting the site onto Blue Gum Street. A cattle grid will be installed by December 31, 2013 between the track-out grids and the exit, with a cement lining underneath the grid for ease of clean out.

A berm around the diesel fuel dispensing area to prevent spilled fuels from leaving the area will be installed by February 1, 2014, subject to receiving the necessary permits from the City of Anaheim and fabrication of the canopy (**Figure 3A**).

Permeable pavement will be installed in the employee and visitor parking stalls located at the Corporate Office, the Human Resources Office, and the Post Collection Building.

## A.8.b.iv Secondary Containment Structures

Some maintenance fluids and liquid wastes are stored within a block wall enclosure with secondary containment at the Off-Road Maintenance Shop. Other maintenance materials and liquid wastes are properly stored in drums on spill containment pallets. Hazardous Wastes are stored in labelled drums on spill containment pallets at the Bale Storage Building. The red dye diesel AST is double-walled and has a secondary containment concrete berm around it.

#### A.8.b.v Treatment

A bioretention area with pretreatment will be installed north of the Post Collection Building by December 31, 2013 (**Figure 3B**). The pretreatment will consist of concrete chevrons providing energy dissipation, as well as a basket of approximately 4 to 6 inch diameter rocks, which will provide energy dissipation and sediment removal.

A StormChamber® with SedimenTrap<sup>TM</sup> will be installed north of Coronado Street in the Operations & Maintenance Facility (**Figures 3A** and **3E**). Drainage from Area 4 at CVT will be discharged via subsurface piping over to this device for treatment. A StormChamber® with SedimenTrap<sup>TM</sup> will also be installed north of the Bale Storage Building along Coronado Street. (**Figure 3D**). The StormChamber® installation in areas 4 and 5 is expected to be completed by December 31, 2013.

A StormChamber® with SedimenTrap<sup>TM</sup> will also be installed in Area 3 in the southwest corner of the site (**Figure 3C**). It was discovered that a portion of the property inside the fence line in this corner is not owned by the site, so Republic is working on purchasing this property. Since the property acquisition will take more time, it is anticipated that the StormChamber® in Area 3 may not be installed by December 31, 2013. Therefore, Republic will be prepared to install a temporary sump and use temporary tanks to collect and hold the storm water discharge from Area 3, starting December 31, 2013. The collected storm water will be tested for the parameters listed in Section B.5.c. If the storm water sample results are below the benchmarks, the storm water will be discharged directly to the CalTrans property. If the storm water results are above the benchmarks, the collected storm water may be discharged to another infiltration basin on site (weather permitting) or discharged to the MRF clarifiers, which are connected to the sanitary sewer.

Pretreatment to avoid clogging in all the StormChamber® subsurface infiltration devices will consist of inlet protection in the form of fiber rolls and drop inlet filters.

The above mentioned StormChamber<sup>®</sup> and bioretention areas have been designed for the 85<sup>th</sup> percentile storm, which is 0.9 inches of precipitation in a 24-hour period. These areas will be monitored during rain events that occur during routine scheduled facility operating hours using the forms in **Appendix D**. Storm water discharge due to overflow from a StormChamber<sup>®</sup> infiltration area or the bioretention area will be sampled. If a storm event greater than the 85<sup>th</sup> percentile storm occurs, leading to overflow of the infiltration devices, this overflow will be sampled for informational purposes only.

# A.9 ANNUAL COMPREHENSIVE SITE COMPLIANCE EVALUATION

The General Manager or their qualified designee shall conduct an Annual Comprehensive Site Compliance Evaluation. These annual compliance evaluations will be conducted at CVT to evaluate site compliance with the elements contained in this SWPPP. The annual evaluations will cover annual reporting period from July 1st of each year to June 30<sup>th</sup> of the following year and will be conducted within 8-16 months of each other.

The following activities will be conducted during each annual evaluation:

- Review of inspection records and storm water sampling data collected during the reporting period.
- Visual inspection of all potential pollutant sources identified at the site for evidence of, or the potential for, pollutants entering storm water discharge.
- Review and evaluation of the non-structural and structural BMPs to determine if they are adequate, properly implemented and maintained, or whether additional BMPs are needed.
- Visual inspection of equipment needed to implement the SWPPP (such as spill response kits) shall be performed.
- Preparation of an annual evaluation report.

The annual evaluation report will be retained on site and submitted to the Regional Water Quality Control Board (RWQCB) with the annual report. The annual evaluation will include the following information:

• Personnel conducting the evaluation.

- Dates of the evaluation.
- A schedule to implement the appropriate SWPPP revisions, if needed.
- Any incidents of non-compliance and corrective actions taken.
- A certification that the facility operator is in compliance with the revised General Permit.

A sample copy of SWRCB Annual Report Forms is enclosed in Appendix C.

#### A.10 SWPPP GENERAL REQUIREMENTS

- a. The SWPPP shall be kept on-site and made available upon request of a representative of the Regional Water Board and/or local storm water management agency which receives the storm water discharges.
- b. The Regional Water Board and/or local agency may notify the facility operator when the SWPPP does not meet one or more of the minimum requirements of this Section. As requested by the Regional Water Board and/or local agency, the facility operator shall submit an SWPPP revision and implementation schedule that meets the minimum requirements of this section to the Regional Water Board and/or local agency that requested the SWPPP revisions, the facility operator shall provide written certification to the Regional Water Board and/or local agency that requested the SWPPP revisions, the facility operator shall provide written certification to the Regional Water Board and/or local agency that the revisions have been implemented.
- c. The SWPPP shall be revised, as appropriate, and implemented prior to changes in industrial activities which (i) may significantly increase the quantities of pollutants in storm water discharge, (ii) cause a new area of industrial activity at the facility to be exposed to storm water, or (iii) begin an industrial activity which would introduce a new pollutant source at the facility.
- d. Other than as provided in Provisions B.11, B.12, and E.2 of the General Permit, the SWPPP shall be revised and implemented in a timely manner, but in no case more than 90 days after a facility operator determines that the SWPPP is in violation of any requirements(s) of this General Permit.
- e. When any part of the SWPPP is infeasible to implement by the deadlines specified in Provision E.2 or Sections A.1, A.9, A.10c, and A.10.d of this General Permit due to proposed significant structural changes, the facility operator shall submit a report to the Regional Water Board prior to the applicable deadline that (i) describes the portion of the SWPPP that is infeasible to implement by the deadline, (ii) provides justification for a time extension, (iii) provides a schedule for completing and implementing that portion of the SWPPP, and (iv) describes the BMPs that will be implemented in the interim period to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. Such reports are subject to Regional Water Board approval and/or

modifications. Facility operators shall provide written notification to the Regional Water Board within 14 days after the SWPPP revisions are implemented.

f. The SWPPP shall be provided, upon request, to the Regional Water Board. The SWPPP is considered a report that shall be available to the public by the Regional Water Board under Section 308(b) of the Clean Water Act.

# SECTION B. MONITORING PROGRAM AND REPORTING REQUIREMENTS

## **B.1** SWPPP IMPLEMENTATION SCHEDULE AND RESPONSIBILITY

In order to meet the requirements of this SWPPP for CVT, Republic has dedicated significant time and expense. The anticipated result is to minimize the impact of facility processes on natural rainfall runoff.

The General Manager of the facility will oversee the SWPPP program and has delegated responsibility to the PPT for the implementation of the program. The ongoing training and implementation of this SWPPP and its monitoring program is the responsibility of the General Manager, who may be supported in these responsibilities by the PPT or other Republic managers. The General Manager may designate a qualified environmental consultant for the review and updating of the SWPPP on an "as needed" basis.

#### **B.2 OBJECTIVES**

The objectives of the monitoring program are to:

- Ensure that storm water discharges are in compliance with the Discharge Prohibitions, Effluent Limitations, and Receiving Water Limitations specified in the General Permit.
- Ensure practices at the facility to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges are evaluated and revised to meet changing conditions
- Aid in the implementation and revision of the SWPPP required by Section A of the General Permit.
- Measure the effectiveness of best management practices (BMPs) to prevent or reduce pollutants in storm water discharges, and prevent authorized and unauthorized non-storm water discharges.

#### VISUAL OBSERVATIONS (INSPECTIONS)

Designated CVT personnel will perform visual inspections using the forms enclosed in **Appendix D** of this SWPPP. The forms include quarterly dry (non-storm water) observations, monthly wet season observations of the site discharge locations, and bioretention and StormChamber® area observations as described below.

## **B.3** NON-STORM WATER VISUAL OBSERVATIONS

Quarterly a designated CVT employee shall visually observe all drainage areas within the facility. Visual observations shall occur in daylight hours during scheduled facility operating hours on days with <u>no storm water discharges</u>. Quarterly observations should be conducted within 6 to 18

weeks of each other during the following periods: January-March, April-June, July-September, and October-December. The CVT employee will document the presence of any observed authorized and/or unauthorized non-storm water discharges, discolorations, stains, odors, floating materials, etc. Authorized non-storm water discharges include fire hydrant flushing, potable water discharge from the operation, maintenance or testing of potable water sources, drinking fountains, irrigation drainage, landscape watering, and atmospheric condensates from refrigeration, air conditioning, and compressors. Clean non-storm water discharge is only authorized if quarterly visual observations are performed. BMPs to reduce contact with significant materials or equipment must also be utilized to prevent significant quantities of pollutants in the discharge.

The proposed storm water infiltration areas and permeable paving should eliminate authorized non-storm water discharges. If non-storm water discharge is observed leaving the site, the source will be identified and additional BMPs used to eliminate the flow of non-storm water discharges. Spill kits and spill prevention controls will be used to prevent any unauthorized non-storm water discharge from reaching the infiltration areas. Quarterly observations will include a description of corrective measures taken to eliminate the discharge. The BMPs may be revised and implemented if necessary.

# **B.4 STORM WATER DISCHARGE VISUAL OBSERVATION**

Monthly during the wet season (October 1 to May 30) a designated CVT employee shall visually observe storm water discharges from at least one storm event. These observations will occur during the first hour of discharge at all monitoring locations. Visual observations will be conducted in daylight hours, during scheduled facility operating hours, on a day preceded by at least three "working days" without storm water discharge. The presence of any floating and suspended material, O&G, discolorations, turbidity, odor, source of any pollutants, and any corrective measures taken to prevent pollutants shall be documented. The BMPs shall be revised and implemented as necessary.

The proposed StormChamber<sup>®</sup> and bioretention areas and their pretreatment BMPs will be monitored during rain events that occur during routine scheduled facility operating hours using the forms in **Appendix D**.

# **B.5 SAMPLING AND ANALYSIS**

Republic has prepared a site-specific storm water monitoring program for CVT which includes the following components: rationale and locations for sampling, analytical methods, QA/QC program, pollutant reduction tracking, and record keeping. The intent of this program is to monitor the facility progress in minimizing discharge of potential facility pollutants, assist in implementing the SWPPP, and measure the effectiveness of existing and proposed BMPs, such as those previously implemented and planned. CVT has trained designated employees in proper storm water sampling and sample handling techniques. An off-site California-certified analytical laboratory performs analyses of samples collected by CVT personnel. The proposed StormChamber® and bioretention areas have been designed for the 85<sup>th</sup> percentile storm, which is 0.9 inches of precipitation in a 24-hour period. If storm water discharge occurs due to overflow from a StormChamber® infiltration area or the bioretention area, it will be sampled and submitted for laboratory analysis. If a storm event greater than the 85<sup>th</sup> percentile storm occurs, leading to overflow of the infiltration devices, this overflow will be sampled for informational purposes only.

## **B.5.a Sampling Preparation**

CVT will be prepared to sample the first rainfall of the "wet" season during scheduled facility operating hours starting in October. Per the revised General Permit, samples will be collected within the first hour of storm water discharge, on a day preceded by at least three "working" days without storm water discharge. Storm water samples will be collected from the designated site monitoring location in accordance with the General Permit.

## **B.5.b** Sampling Protocol

Samples of storm water discharge will be collected during scheduled facility operating hours on a day preceded by at least three (3) working days without storm water discharge. The infiltration areas are designed to capture runoff from an 85<sup>th</sup> percentile storm. Therefore, it is expected that a storm event greater than the 85<sup>th</sup> percentile will be required to produce storm water discharge offsite. Overflow will be sampled if it occurs. If the overflow is due to a storm event greater than the 85<sup>th</sup> percentile, the sampling will be for informational purposes only.

## **B.5.c** Sampling Methods and Parameters

Samples will be collected directly in clean laboratory-provided sample bottles, or if necessary in clean unused high density polyethylene quart bottles from water pooled, or flowing into the sample area. This water will then be immediately transferred into the laboratory-provided sample bottles. Bottle size and type and laboratory method may vary slightly depending on the laboratory, but the general sampling parameters are identified herein:

Parameters	<b>EPA Method</b> <sup>1</sup>	Sample Bottle
pH	150.1, A4500HB, or grab	500 mili-liter HDPE unpreserved
Specific Conductivity (EC)	120.1 or A2510B	500 mili-liter HDPE unpreserved
Oil & grease (O&G) <sup>2</sup>	413.2 or 1664A HEM	1 liter amber glass with H <sub>2</sub> SO <sub>4</sub>
Total Suspended Solids (TSS)	160.2 or 2540D	1 liter HDPE unpreserved
Total Metals	200.7, 200.8, or 6010B	500 mili-liter HDPE with HNO3
Chemical Oxygen Demand (COD)	410.4, 5220B, or 5220D	500 mili-liter glass with H <sub>2</sub> SO <sub>4</sub>
Ammonia (as N)	SM 4500-NH3 B+ C or E	1 liter amber glass with H <sub>2</sub> SO <sub>4</sub>
Cyanide, Total	3135.2I	1 liter HDPE with NaOH
Mercury (Hg)	245.1	500 mili-liter HDPE with HNO3
Fecal Coliform <sup>3</sup>	SM9221B/E	120 mili-liter HDPE with $Na_2S_2O_3$
Enterococci <sup>3</sup>	SM9230B	120 mili-liter HDPE with $Na_2S_2O_3$

 $HNO_3 = nitric acid$   $H_2SO_4 = sulfuric acid$  NaOH = sodium hydroxide HDPE = high density polyethylene  $Na_2S_2O_3 = sodium thiosulfate$ 

Metals includes: Aluminum (Al), Arsenic (As), Cadmium (Cd), Copper (Cu), Iron (Fe), Lead (Pb), Magnesium (Mg), Selenium (Se), Silver (Ag), and Zinc (Zn)

<sup>1</sup> Or Equivalent Approved Method

<sup>2</sup> O&G can be substituted for total organic carbon (TOC) as allowed in the General Permit.

<sup>3</sup> These are being analyzed in accordance with a Settlement Agreement.

## **B.6 SAMPLE STORM WATER DISCHARGE LOCATIONS**

#### **B.6.a Representative Drainage Areas**

Based on the general site contours, and the proposed storm water infiltration areas, Republic has identified one representative storm water discharge location for monitoring/sampling, as illustrated on **Figure 2.** Monitoring point (MP-1) is located at the northeast corner of the site at a drain by Blue Gum Street.

The StormChamber® subsurface infiltration devices and their pre-treatment BMPs will be monitored, when rain events occur during scheduled facility operating hours. This monitoring will be recorded on the observation forms in Appendix D. If discharge or overflow is observed, storm water samples will be collected and submitted for laboratory analysis. If the overflow or discharge is due to a storm event greater than the 85<sup>th</sup> percentile design storm, then the sampling will be for informational purposes only.

## **B.6.b** Comingled Storm Water

CVT receives run-on from Blue Gum Street and La Palma Avenue that can flow into Area 3 at the site's southernmost entrance. A cross-gutter will be installed across the entrance from Blue Gum Street to eliminate any run-on at that location, pending receiving the necessary permits from the City of Anaheim (see **Figure 3A**). CVT may also receive some run-on from the landscaped freeway embankments that run along the northwest perimeter of the site during heavy

precipitation events. A concrete curb helps prevent any run-on from the adjacent property. The selected storm water sampling locations will be carefully sampled to avoid collecting a comingled storm water sample.

## **B.6.** Sample Locations That Are Difficult to Observe and Sample

The current sample locations at CVT are not difficult to observe or sample.

#### **B.6.d** Substantially Identical Drainage Areas

Though not currently applicable, CVT will document in the annual report if the industrial activities and BMPs within two or more drainage areas are substantially identical, such that a combined sample or a reduced number of storm water samples are collected.

# **B.7** VISUAL OBSERVATION AND SAMPLE COLLECTION EXCEPTIONS

#### **B.7.a** Exceptions

If CVT is not able to conduct required visual observations or collect storm water samples due to dangerous weather conditions, storm water discharge beginning after scheduled facility operating hours, or because storm water discharges are not preceded by three working days without discharge, these exceptions shall be explained in the annual report.

#### **B.7.b** Non-Qualifying Observation and Sampling Exceptions

CVT will attempt to perform visual observations and sample collection within the first hour of storm water discharge from the site drainage locations. However, CVT may choose to collect a storm water sample after the first hour of storm water discharge, if the "wet" season is almost over, and there have been no previous storm events in which storm water could be sampled within the first hour of discharge. If the storm water samples are not collected within the first hour of discharge, an explanation will be included in the annual report.

## **B.8 ALTERNATIVE MONITORING PROCEDURES**

This site does not have any alternative monitoring procedures.

#### **B.9 MONITORING METHODS**

#### **B.9.a** Rationale for CVT Monitoring Program

#### **B.9.a.i** Visual Observations

CVT will perform monthly visual observations of storm water discharge from October to May during the "wet" season. The monitoring location MP-1 has been selected based upon the topography, site configuration and drainage, storm water infiltration areas, and industrial activities at CVT.

The bioretention area and StormChamber® infiltration Areas 3, 4, and 5 (**Figure** 3A) will be observed during rain events that occur during scheduled facility operating hours. These observations will be recorded on the *Bioretention Area & StormChamber Visual Observation Form* in **Appendix D**.

Authorized non-storm water discharge is not anticipated due to the proposed installation of infiltration areas and permeable pavement. Spill kits and spill prevention controls will be used to prevent any unauthorized non-storm water discharge from reaching the infiltration areas. In accordance with the General Permit, quarterly visual observations will be performed to detect the presence of authorized and unauthorized non-storm water discharges from July 1<sup>st</sup> to June 30<sup>th</sup>. The observations will be performed by a trained, designated employee in the PPT.

#### B.9.a.ii Sampling Location

CVT personnel will be prepared to sample the first rainfall of the "wet" season starting in October. Per the SWRCB, samples will be collected within the first hour of storm water discharge, on a day preceded by at least three (3) "working" days without storm water discharge. Storm water samples will be collected from sampling location MP-1, which has been selected as the most representative sampling locations for storm water at the site based on storm water conveyance and runoff, infiltration areas, and the location of industrial activities. Since storm water discharge from CVT will be mostly eliminated once the proposed infiltration areas and permeable pavement is installed, monitoring point MP-1 will be representative of runoff in accordance with the guidelines provided by the RWQCB.

If storm water discharge due to overflow from the bioretention area or from a StormChamber® infiltration area occurs during scheduled facility operating hours, it will be sampled. The bioretention area and StormChamber® infiltration Areas 3, 4, and 5 have been designed for the 85<sup>th</sup> percentile storm, which is 0.9 inches of precipitation in a 24-hour period. If a storm event greater than the 85<sup>th</sup> percentile storm occurs, leading to overflow of the infiltration devices, this overflow will be sampled for informational purposes only.

#### **B.9.a.iii** Analytical Methods and Detection Limits

All storm water samples shall be analyzed at a laboratory certified for such analyses in accordance with State Regulations. The analytical methods and method detection limits may

Parameters	EPA Method <sup>1</sup>	Method Detection Limit
рН	Calibrated portable meter or litmus paper	0.01 pH Units
Specific Conductivity (SC)	120.1 or A2510B	1.0 micro ohms per centimeter (umhos/cm)
Oil & grease (O&G) <sup>2</sup>	EPA 1664A HEM	1.0 milligrams per liter (mg/L)
Total Suspended Solids (TSS)	SM2540D	1.0 milligrams per liter (mg/L)
Chemical Oxygen Demand (COD)	SM5220C	1.0 milligrams per liter (mg/L)
Ammonia (as N)	SM 4500-NH3 B+C or E	0.1 milligrams per liter (mg/L)
Iron (Fe)	200.7	0.005 milligrams per liter (mg/L)
Metals: Al, As, Cu, Pb, Mg, Se, & Zn	200.7, 200.8 or 6010B	0.0005 milligrams per liter (mg/L)
Metals: Cadmium (Cd) and Silver (Ag)	200.8	0.0002 milligrams per liter (mg/L)
Cyanide, Total	3135.2I	0.003 milligrams per liter (mg/L)
Mercury (Hg)	245.1	0.0001 milligrams per liter (mg/L)
Fecal Coliform <sup>3</sup>	SM9221B/E	1.0 colony forming units per 100 mL
Enterococci <sup>3</sup>	SM9230B	1.0 colony forming units per 100 mL

vary slightly depending on the laboratory, but the sampling parameters, methods, and method detection limits are presented in the following table.

<sup>1</sup> Analyses must be conducted per 40 CFR Part 136 or an equivalent method approved by the RWQCB.

<sup>2</sup> O&G can be substituted for total organic carbon (TOC) as allowed in the General Permit.

<sup>3</sup> These are being analyzed in accordance with a Settlement Agreement.

The Method Detection Limit can vary based on the analysis method, laboratory equipment, laboratory Quality Assurance/Quality Control protocols, and the storm water sample itself. The method detection limits are carefully determined by the analytical laboratory to meet State and Federal regulations. The method detection limits are well below the Federal Benchmark Levels (FBLs), which are the pollutant concentrations above which EPA determined represent a level of concern at which a storm water discharge could potentially impair, or contribute to impairing, water quality or affect human health from ingestion of contaminated fish.

#### **B.9.b** Sampling and Sample Preservation

All sampling and sample preservation shall be in accordance with the current edition of "Standard Methods for the Examination of Water and Wastewater". All analyses will be conducted at a laboratory certified for such analyses by the State Department of Health Services. Consolidated, or their designated consultant, will select the analytical laboratory and arrange the handling and transfer of the sample bottles. Storm water samples will be placed in a cooler with ice and will be transported to the lab with a completed chain of custody.

The chain of custody shall include:

- 1) Site Name;
- 2) Project Manager and contact information (can be a consultant);
- 3) Sample location name(s);
- 4) Date and time of sample collection;

- 5) Requested analysis;
- 6) Requested turnaround time;
- 7) Total number of containers;
- 8) Name of individual performing sampling; and
- 9) Signatures of persons relinquishing and receiving the samples.

An example of the COC form is included in **Appendix E**.

All monitoring instruments and equipment shall be calibrated and maintained in accordance with manufacturers' specifications to ensure accurate measurements.

## **B.10 INACTIVE MINING OPERATIONS**

There are no inactive mining operations at this site.

## **B.11 SAMPLING AND ANALYSIS EXEMPTIONS AND REDUCTIONS**

There are no exemptions or reductions designated for this site.

## **B.12 RECORDS**

A binder/folder will be maintained at CVT and will include this SWPPP, inspection forms, recommended actions, corrective actions, and results of laboratory analyses. The binder will be available to regulatory agencies upon request.

Records of storm water monitoring information shall include:

- 1. Date, place, time of site sampling and measurements (including site inspections and visual wet weather observations).
- 2. Name of individual(s) performing sampling and monitoring.
- 3. Chain of Custody (COC) form and laboratory analytical report.

An example of the required COC form is included in Appendix E.

## **B.13 ANNUAL REPORT**

All required information will be submitted in an annual report by the required due date of July 1<sup>st</sup> to either the Executive Officer of the Regional Water Quality Control Board (RWQCB) or via the SWRCB's online Storm Water Multiple Application and Report Tracking System (SMARTS) database.