# Water Pollution Control Plan

## for: Pilot & Smuggler's Gulch Channels Routine Maintenance Project

### *Site Located at:*

*North:* **Saturn Blvd,** *West:* **Tijuana River County Open Space Preserve,** *East:* **Hollister Rd,** *South:* **Monument Rd**

### *WPCP Prepared by:*

*Company:* **Dudek**

*Individual:* **Nicole Rieger, PE, QSD**

*Address:* **605 Third Street, Encinitas, CA 92024**

### *Preparation Date:* **June 30, 2017**

### *Prepared for:*

*City of San Diego*

*Storm Water Division*

*Transportation & Storm Water Department*

*Address:* **2781 Caminito Chollas, MS 46, San Diego, CA 92105**

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# 1.0 PROJECT INFORMATION

## 1.1 INTRODUCTION

The San Diego Regional Water Quality Control Board (RWQCB) adopted Order No. R9-2013-0001 as amended by R9-2015-0001 and R9-2015-0100, *National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for Discharges from the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds within the San Diego Region* on May 8, 2013 (MS4 Permit). The MS4 Permit requires the City of San Diego (City) to implement effective best management practices (BMPs) to reduce discharges of pollutants in storm water from soil disturbing activities originating from any maintenance or construction sites to the maximum extent practicable and effectively prohibit non-storm water discharges into the MS4.

As of January 2016, the City has updated the 2012 Storm Water Standards Manual to comply with requirements under the MS4 and NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2009-0009-DWQ as amended by 2010-0014-DWQ and 2012-006-DWQ, NPDES No. CAS000002) (CGP). The channel maintenance projects are not subject to the CGP and associated amendments because in Section I.C.24 of the CGP, it states “routine maintenance to maintain original line and grade, hydraulic capacity, or original purpose of the facility” is considered an activity not covered under the CGP. The maintenance work to be performed at individual channels is subject to multiple permits. The permits and specific requirements are indicated within the unique Individual Maintenance Plan (IMP) once permits are issued.

A Water Pollution Control Plan (WPCP) must be developed and implemented to ensure BMPs and maintenance protocols are followed during maintenance activities, to avoid and/or minimize effects to environmental resources, and incorporate the analysis of the operational and pollution prevention benefits of each proposed project under the Master Storm Water System Maintenance Program (MMP) (2011). Selected BMPs must be seasonally appropriate, tailored to each maintenance site, and shall be implemented at each maintenance site year-round during the course of the proposed activities. Dry season BMP implementation must plan for and address unseasonal rain events that may occur during the dry season (May 1 through September 30).

This document has been prepared to comply with the City’s 2016 Storm Water Standards, and will be used as of November 2016 for the development of WPCP within the Storm Water Division of the Transportation and Storm Water Department (TS&W).

## 1.2 OBJECTIVES

The main objectives of the WPCP are:

- To identify all pollutant sources which may affect the quality of storm water discharges from the site associated with maintenance activities;
- To identify non-storm water discharges and eliminate unauthorized non-storm water discharges, illicit connections, and dumping;
- To establish, implement, and maintain BMPs to reduce or eliminate pollutants in storm water discharges and authorized non–storm water discharges from the maintenance site; and
- To develop an inspection program to determine the effectiveness of site BMPs.

## 1.3 GENERAL PROJECT INFORMATION

This section provides project information relevant to the development of this WPCP.

### 1.3.1 Project Location

The project location and identifying information are provided in Table 1.

**Table 1**
**Project Location and Contact Information**

| **Contact Information** | | | |
|---|---|---|---|
| **Applicant Name**: City of San Diego Transportation & Storm Water Department | **Contact Name**: Stephanie Bracci | | |
| **Mailing Address**: 2781 Caminito Chollas, MS 44 | **City**: San Diego | **State**: CA | **Zip Code:** 92105 |
| **Telephone No**.: (619) 527-3445 | **Email address**: SBracci@sandiego.gov | | |
| **General Project Information** | | | |
| **Address:** West of Hollister Street, south of Saturn Road and north of Monument Road (MMP Maps 138, 139) | **City:** San Diego | **State:** CA | **Zip Code:** 92154 |
| | | | |
| **Qualified Contract Person (QCP):** TBD | | | |
| **Telephone No**.: | **Email address**: | | |

### 1.3.2 Project Description

The project description including the project maintenance area is described in Table 2.

**Table 2**
**Project Description**

| | |
|---|---|
| **Project Scope:** | Pursuant to the Individual Maintenance Plan (IMP) (Dudek 2017), the proposed project includes maintenance of approximately 5,400 feet of the Tijuana River Pilot Channel and 3,040 feet of the Smuggler's Gulch Channel, illustrated in Maps 138 and 139 of the City MMP, as defined in the Individual Hydrologic and Hydraulic Assessment (IHHA) (URS 2012). The maintenance would be limited to mechanized sediment, trash and vegetation removal from the channel. |
| **Total Maintenance Area (in $ft^2$):** | 185,000 sf |
| **Estimated Sediment/Debris Removal (in $yd^3$):** | 10,000-30,000 cy |
| **Watershed** | Tijuana River |
| **Receiving Water Body** | Tijuana River and Estuary |
| **303 (d) Listed Impairments** | Indicator bacteria,Turbidity, Solids, Sedimentation/Siltation, Trash, Total Nitrogen as N, Phosphorous, Eutrophic, Low Dissolved Oxygen, Pesticides, Surfactants (MBAS), Lead, Nickel, Selenium, Thalium, Trace Elements, Synthetic Organics, Toxicity. |
| **Existing Storm Water Features:** | Earthen channels with a gabion rock mattress located near confluence of SG and Pilot channels. Culverts at Monument Road and the private road crossing in SG Channel. |
| **Sources of Run-on to the Site:** | Run-on does not occur in the staging areas due to slope and vegetation characteristics of the surrounding topography. Additionally, existing earthen berms prevent run-on from staging areas entering the channels. Run-on occurs in the Pilot Channel due to the treatment plant effluent upstream, high groundwater table, and other types of dry weather flows. |
| **Downstream Discharge Locations:** | SG Channel discharges into the Pilot Channel. The Pilot Channel is a low flow channel within the Tijuana River channel that ends at a plug, located at the end of the maintenance area. The Tijuana River discharges into the estuary. Staging Area B drains towards the Pilot Channel. |
| **Other Site Features:** | Existing 25' x 30' turnarounds along north bank of Pilot Channel.<br>Biologically significant Areas to be delineated by the biologist prior to the start of work. |

### 1.3.3 Maintenance Schedule

The maintenance schedule is provided in Table 3. The start of work is subject to the completion of the following additional City measures:

- Notification to the California Department of Fish and Wildlife (CDFW), in writing, at least five days prior to initiation/completion of maintenance activities,
- Biological evaluation of the maintenance project boundary to determine the absence/presence of Nesting Birds during the breeding season (January 15 and August 31), sensitive biological resources, and/or determination of the required noise attenuation measures, and
- Installation of any biological measures such as fencing, flagging, signage or other means to protect sensitive resources.

**Table 3**
**Maintenance Schedule**

| Maintenance Activity (Map No.) | Approximate Duration (Days) |
|---|---|
| BMP Installation | 5-10 |
| SG Channel – Remove Sediment/Debris Material | 60-90 |
| Clean SG Channel Culverts | 5-10 |
| Pre-maintenance pumping (potential) | 30-45 |
| Pilot Channel – Remove Sediment/Debris Material | 60-90 |
| BMP Removal | 5-10 |

The scheduled work may be extended with written permission from the Department of Development Services (DSD) or TS&W.

### 1.3.4 Site Priority

The project is anticipated to be a low priority per the City's Form DS-560 (see Appendix C). This project is greater than 1 acre and is not located in an ASBS watershed.

### 1.3.5 Site Features, Maintenance Activities, and Associated Potential Pollutants

Potential pollutant sources may stem from maintenance materials used on-site that are not designed to be outdoors and exposed to environmental conditions. Maintenance materials have the potential to come into contact with storm water when stored or used outdoors on the site. Table 4 presents a series of questions to help identify potential pollutants from specific maintenance activities.

**Table 4**
**Determination of Site Features, Activities, and Potential Pollutants**

| No. | Site Feature Question | No | Yes | If *Yes*, Select BMPs from Table: | Potential Pollutant Sources (add, if not listed) |
|---|---|---|---|---|---|
| 1 | Is there run-on to the site from surrounding areas? | ☐ | ☒ | 11 | |
| 2 | Are storm drain inlets located within the project boundary and/or will the site discharge storm water to nearby storm drain inlets? | ☒ | ☐ | | |
| 3 | Will concentrated flows and/or large accumulations of water occur on-site? | ☐ | ☒ | 11 | |
| 4 | Is the site adjacent to a waterway or sensitive habitat (i.e., wetland, vernal pool, etc.)? Note: additional permitting may be required. | ☐ | ☒ | 9 | |
| 5 | Is the site likely to discharge to impaired or sensitive water bodies (tributary to a Clean Water Act Section 303[d]-listed/impaired water body segments), adjacent to or discharging directly to coastal lagoons, or other receiving waters in Water Quality Sensitive Areas (as defined in Attachment C of the San Diego Municipal Storm Water Permit, Order No R9-2007-0001)? | ☐ | ☒ | See *Storm Water Standards*, | Sediment, trash, debris |
| 6 | Will the site have exposed/disturbed slopes greater than 5 percent? | ☐ | ☒ | 5,6,7,8,10 | |
| 7 | Will there be soil-disturbance activities (grading, stockpiling, trenching, etc.)? | ☐ | ☒ | 5,6,7,8,10 | Sediment |
| 8 | Will there be asphalt paving, cutting, and/or patching? | ☒ | ☐ | 13 | |
| 9 | Will there be stockpiling (i.e., soil, concrete, solid waste, etc.) for over 24 hours? | ☐ | ☒ | 5,14 | Sediment, trash, debris |
| 10 | Will there be slurries from concrete or mortar mixing, coring, or saw cutting? | ☒ | ☐ | 13 | |

**Table 4 (Continued)**
**Determination of Site Features, Activities, and Potential Pollutants**

| No. | Site Activity Question | No | Yes | If *Yes*, Select BMPs from Table: | Potential Pollutant Sources (add, if not listed) |
|---|---|---|---|---|---|
| 11 | Will wash water or liquid waste be generated from this project? | ☒ | ☐ | 12,13,16 | |
| 12 | Will there be dewatering operations? | ☐ | ☒ | 16 | Dewatering water |
| 13 | Will there be on-site storage of construction materials such as mortar mix, raw landscaping and soil stabilization materials, treated lumber, rebar, and plated metal fencing materials? | ☐ | ☒ | 14 | BMP materials |
| 14 | Will trash or solid wastes (including landscaping wastes) be generated from this project? | ☐ | ☒ | 13 | Trash & Debris |
| 15 | Will hazardous materials or wastes, including paint, be stored or handled on-site? | ☐ | ☒ | 13 | Tires |
| 16 | Will construction equipment and/or vehicles be stored, fueled, maintained, or washed on- site? | ☐ | ☒ | 15, 16 | Engine fluids, fuels, oil, grease, wash water |
| 17 | Will portable sanitary facilities (“Porta-potties”) be used on the site? | ☐ | ☒ | 13 | Sanitary waste |
| 18 | Are underlying soils potentially contaminated? | ☒ | ☐ | 13 | |
| 19 | Will dust (i.e., from grading, driving on unpaved roads, etc.) or particulates (i.e., from sandblasting, concrete cutting, painting, etc.) be generated from this project? | ☐ | ☒ | 17 | Sediment |
| 20 | Other activities will be performed that are not described above? | ☒ | ☐ | Select applicable BMPs from Tables 7-19 | |
| 21 | Final stabilization of the site is required. | ☒ | ☐ | | Not applicable |

## 1.4 RESPONSIBILITY FOR WPCP DEVELOPMENT AND IMPLEMENTATION

This WPCP shall be prepared by a Professional Engineer (PE). The WPCP shall be certified by a Qualified Contact Person (QCP). A QCP will also be responsible for amending this WPCP. The QCP is responsible for WPCP implementation and self-inspections (see Section 3.0).

## 1.5 AVAILABILITY

This WPCP shall remain on-site at all times during business hours and readily available for review by the U.S. Environmental Protection Agency (EPA), SWRCB, San Diego RWQCB, City of San Diego representatives, and all operating personnel for the duration of the project. Authorized representatives from the U.S. EPA, SWRCB, San Diego RWQCB, City of San Diego, and any other regulatory agency shall be permitted entry to the site for review of this WPCP, inspecting the site, and/or collecting storm water samples.

## 1.6 AMENDMENTS

This WPCP shall be amended whenever there is a change in maintenance or operations which may affect the discharge of pollutants to surface waters, groundwater, or to the City's MS4 or are deemed necessary by the Resident Engineer or Division Supervisor.

## 1.7 NON-STORM WATER DISCHARGES

Discharging any material other than storm water to Waters of the State or to the City's MS4 is prohibited. However, certain exceptions apply. The following non-storm water discharges are allowed, provided that the discharges are essential for emergency response purposes, structural stability, slope stability or occur naturally:

1. Discharges associated with emergency firefighting operations;
2. Foundation and footing drains;
3. Water from crawl space or basement pumps;
4. Hillside or upstream dewatering;
5. Naturally occurring groundwater seepage via a storm drain; and
6. Non-anthropogenic flows from a naturally occurring stream via a culvert or storm drain, as long as there are no contributions of anthropogenic runoff.

See the City's Storm Water Standards – BMP Standards to determine applicable non-storm water regulations.

## 1.8 SITE MAP DEVELOPMENT

A Site Map has been developed for the IMP and included as Appendix A of this WPCP. The IMP includes all of the following, where applicable:

- Legend, north arrow, and scale of the drawing.
- The site boundary and limits of maintenance; including access points to the channel being maintained;

- Drainage areas, direction of flow, nearby water bodies (including Clean Water Act Section 303(d) List of Impaired Segments in the site's vicinity), and municipal storm water system features (i.e., inlets, curbing, etc.);
- Storm water conveyance features and discharge points;
- Material, stockpile, and waste storage areas;
- Vehicle and equipment fueling areas;
- Locations of portable sanitary facilities; and
- Locations of all BMP implementation areas.

## 2.0 BEST MANAGEMENT PRACTICES

The BMPs listed in this WPCP will be implemented on a year-round basis throughout the project duration, not solely during seasons in which the probability of a rain event is high. All areas not in use for 14 days will be stabilized (i.e., exposed soil will be covered). Sufficient BMP materials will be maintained on-site to allow implementation with this WPCP and emergency installation in the event of a breach. Locations where BMPs will be implemented are to be shown on the IMP in Appendix A.

BMPs must be implemented on maintenance sites to reduce pollution to the maximum extent practicable. Sections 5.0 and Appendix H of the City's *Storm Water Standards*, which is available online at http://www.sandiego.gov/stormwater/regulations/index.shtml outlines the requirements for maintenance/construction storm water BMPs. The following BMP categories must be addressed:

- Erosion control;
- Sediment control;
- Run-on and site storm water management;
- Materials management;
- Non-storm water management;
- Particulate and dust control; and
- Final stabilization.

BMPs from each of the above categories must be used together as a system in order to prevent potential pollutant discharges. Each category is generally described and applicable BMPs are listed in the following sections. Projects containing site features identified with a "yes" answer in Table 4 must utilize BMPs from the applicable BMP table(s). If no BMPs from a specific table are selected, an explanation must be provided. For BMP implementation details, refer to:

- California Stormwater Quality Association (CASQA) *Construction BMP Handbook Portal*, 2010, online at: http://www.casqa.org/LeftNavigation/ConstructionBMPHandbookPortalSWPPPTemplate/tabid/200/Default.aspx, (subscription required); and
- California Department of Transportation (Caltrans) *Construction Site BMP Handbook*, 2003, online at: http://www.dot.ca.gov/hq/construc/stormwater/CSBMPM_303_Final.pdf.

### 2.1 EROSION CONTROL

Erosion control, also referred to as soil stabilization, consists of source control measures that are designed to prevent soil particles from detaching and becoming transported in storm water runoff. Erosion control BMPs protect the soil surface by covering and/or binding soil particles and many have the secondary effect of increasing water infiltration. Erosion controls are provided in Table 5-7.

Erosion controls must be used in conjunction with sediment controls. Apply erosion controls as soon as grading and/or excavation are completed for any portion of the site, but no longer than 14 days after activity has ceased. Prior to and during rain events, slopes must be stabilized and erosion control BMPs must be maintained. Loose maintenance and landscaping materials, including stockpiles, must be covered and bermed at the end of each work day. Plastic sheeting for erosion control should be avoided. Exposed areas shall be inspected frequently and if signs of erosion are observed, additional erosion control BMPs shall be implemented.

Scheduling maintenance is required on all sites to minimize soil exposure and soil disturbance during the rainy season. When planning grading activities, minimize slope length and gradient to the greatest extent possible to avoid erosion and to promote vegetation establishment. Inactive stockpiles should be covered and bermed (with jute netting and fiber rolls or similar).

**Table 5**
**General Erosion Control BMPs**

| Best Management Practices | References | | Check at least one BMP |
|---|---|---|---|
| | CASQA BMP | Caltrans BMP | |
| **Scheduling** | EC-1 | SS-1 | ☒ |
| **Minimize Slope Length and Gradient** | - | - | ☐ |
| **Manage Soil Stockpiles** | WM-3 | WM-3 | ☒ |
| If no BMPs were selected, explain the rationale: | | | |
| Describe any additional erosion control BMPs to be implemented: | | | |
| Describe where erosion and sediment control BMPs will be implemented/installed: **Maintenance work will be scheduled during anticipated dry periods during the authorized work window to the extent feasible. Sediment/erosion control BMPs will be installed at Staging Area B according to project water pollution control plan (WPCP). The same will apply to staging area D, if utilized.** | | | |

### 2.1.1 Physical Stabilization

Physical stabilization consists of materials other than vegetation used to temporarily or permanently stabilize exposed areas. Materials used for physical stabilization should be determined based on site conditions. For example, geotextiles are generally installed where runoff is concentrated and are left in place long term. Jute erosion control blankets, hydraulic mulch, and soil binders are usually installed as temporary BMPs. Erosion control blankets, which can consist of jute, straw, coconut, and/or wood fiber, are common BMPs for stabilizing slopes. The type of blanket used usually depends on the longevity needed (see BMP references for details). Blankets need to be staked into the soil as specified by the manufacturer, keyed in on the top of the slope, and must have good soil contact to be effective (i.e., generally not suitable for rocky sites). Turf reinforced mats are installed in swales and ditches and are used in conjunction with vegetation (the roots lock the mat into the soil and further reduce erosion from high velocity flows).

Hydraulic mulch usually consists of wood fiber mulch, water, and sometimes soil binder. Bonded fiber matrix is similar, but the mulch material is long strand wood fibers that lock together with a bonding agent and is also applied hydraulically. Soil binders can consist of natural materials, such as guar, or man-made polymers (although some may not function well on sandy soils). The longevity varies with different products; see the BMP references for details.

Straw is generally the material used for mulch; it should be punched into soil or covered with soil binder so that it does not blow or wash away. Chipped brush and trees may also be used as mulch and usually doesn't required application of soil binder. Vegetation grubbed from the site, chipped, and reapplied to exposed soils may also provide a seed bank for vegetation establishment. Mulch used in conjunction with seeding may also enhance vegetation establishment.

A compost blanket (a layer of compost on the soil surface) can be a very effective BMP and can be used on rocky slopes. An added benefit of compost is that can enhance vegetation establishment while protecting again erosion. The thickness of the compost layer needed is dependent upon the slope gradient (see BMP resources for details). Soil binder in conjunction with compost blanket is usually not necessary. Compost can be applied by hand, with a compost blower, or hydraulically (certain proprietary brands are designed to be applied with hydroseeding equipment).

Permanent stabilization may consist of retaining walls, rock gabions (wire mesh blocks filled with rock that can be stacked), rock, etc. These features are used on or to support steep slopes or where water velocities/wave action is high (i.e., sea walls, etc.)

**Table 6**
**Physical Stabilization BMPs**

| Best Management Practices | References | | Check at least one BMP |
|---|---|---|---|
| | CASQA BMP | Caltrans BMP | |
| **Erosion Control Blankets and Turf Reinforced Mats** | EC-7 | SS-7 | ☒ |
| **Hydraulic Mulch and Bonded Fiber Matrix** | EC-3, EC-5 | SS-3 | ☐ |
| **Soil Binders** | EC-5 | SS-5 | ☐ |
| **Mulch** | EC-6, EC-8, EC-14 | SS-6, SS-8 | ☐ |
| **Compost Blankets** | EC-14 | - | ☐ |
| **Soil Roughening** | EC-15 | - | ☐ |
| **Topsoil Reapplication** | - | - | ☐ |
| **Permanent Stabilization (i.e., retaining walls, rock gabions, rock riprap, etc.)** | - | - | ☐ |
| **Other Material (to be approved by the City)** | EC-16 | - | ☐ |
| If no BMPs were selected, explain the rationale: | | | |
| Describe any additional physical stabilization BMPs to be installed: **Rock gabion was installed previously at SG & Pilot Channels' confluence.** | | | |
| Describe where physical stabilization BMPs will be installed: **Staging areas, access ramp to SG Channel, and access routes, as necessary.** | | | |

### 2.1.2 Vegetation Stabilization

Preserving existing vegetation to the maximum extent possible reduces the need for vegetation re-establishment and is recommended. Areas where vegetation is to be protected need to be clearly marked on the site to avoid accidental removal. Where preservation is not feasible, interim and permanent vegetation/landscaping can be established by seeding; hydroseeding; and installing plugs, sod, or container stock. Begin re-establishing permanent vegetation as early in the project as feasible. The soil should be prepared prior to seeding and the use of compost blankets or straw mulch in conjunction with seeding is recommended.

**Table 7**
**Vegetation Stabilization BMPs**

| Best Management Practices | References | | Check at least one BMP |
|---|---|---|---|
| | CASQA BMP | Caltrans BMP | |
| Preserve Existing Vegetation | EC-2 | SS-2 | ☒ |
| Establish Interim Vegetation | EC-4 | SS-4 | ☐ |
| Establish Permanent Landscaping | - | - | ☐ |
| If no BMPs were selected, explain the rationale: | | | |
| Describe any additional vegetation stabilization BMPs to be implemented: | | | |
| Describe where vegetation stabilization BMPs will be installed: **Existing vegetation will be preserved throughout the staging and maintenance areas where feasible. Any biologically sensitive vegetation that has been identified by the biologists will be delineated and protected prior to the start of work.** | | | |

## 2.2 SEDIMENT CONTROL

The goal of sediment control is to capture soil particles which have become detached from disturbed areas by water or wind. Sediment controls, consisting of perimeter control, resource protection, sediment capture, and off-site sediment tracking control (as described below) are required year-round and must be installed and maintained to comply with performance standards of the *Storm Water Standards*. Sediment control BMPs are provided in Tables 8-11. They should be used in conjunction with erosion controls.

### 2.2.1 Perimeter Control

Perimeter control BMPs must be installed and maintained year round and upgraded during the rainy season to comply with performance standards from the *Storm Water Standards*. They may consist of silt fencing or fiber rolls (straw wattles). All of the BMPs listed must be trenched in and backfilled to be effective. Fiber rolls should be stacked if necessary so that storm water cannot flow over the top.

**Table 8**
**Perimeter Control BMPs**

| Best Management Practices | References | | Check at least one BMP |
|---|---|---|---|
| | CASQA BMP | Caltrans BMP | |
| **Silt Fencing** | SE-1 | SC-10 | ☒ |
| **Gravel Bag Barriers** | SE-6 | SC-6 | ☐ |
| **Fiber Rolls or Straw Wattles** | SE-5 | SC-5 | ☒ |
| **Compost Socks and Berms** | SE-13 | - | ☐ |
| If no BMPs were selected, explain the rationale: | | | |
| Describe any additional perimeter control BMPs to be implemented: **Stockpile areas will be surrounded with silt fence.** | | | |
| Describe where perimeter control BMPs will be installed: **Staging areas B and D, as necessary** | | | |

### 2.2.2 Resource Protection

Year-round protection of waterways and sensitive areas is required. Linear protection may be installed using silt fencing, gravel bag barriers, fiber rolls, and/or compost socks/berms. Linear protection should be installed between the maintenance area and the sensitive area. However, it should not be installed up and down a slope, which can cause erosion.

The *Storm Water Standards,* requires preserving natural hydraulic features and riparian area buffers where possible. Additionally, BMPs must be implemented for performing demolition adjacent to a water body (such as installing turbidity curtains) and crossing waterways, dry conveyances, or areas where storm water flows.

**Table 9**
**Resource Protection BMPs**

| Best Management Practices | References | | Check at least one BMP |
|---|---|---|---|
| | CASQA BMP | Caltrans BMP | |
| **Linear Protection** | SE-1, SE-6, SE-5, SE-13 | SC-10, SC-6, SC-5 | ☒ |
| **Preserve Natural Hydraulic Features and Riparian Area Buffers** | - | - | ☒ |
| **Demolition Adjacent to Water** | NS-15 | NS-15 | ☐ |
| **Temporary Stream Crossing** | NS-4 | - | ☐ |
| If no BMPs were selected, explain the rationale: | | | |
| Describe any additional resource protection BMPs to be implemented: | | | |
| Describe where resource protection BMPs will be installed: **Linear protection will be used at access ramp to SG Channel and access routes, as necessary. Any biologically sensitive vegetation that has been identified by the biologists will be delineated and protected prior to the start of work.** | | | |

### 2.2.3 Sediment Capture

Sediment in storm water is generally captured by gravity-based (i.e., sediment traps and basins) and passive filtration systems (i.e., silt fence, fiber rolls, etc). No storm drain inlets are located within the maintenance or staging areas. See perimeter controls utilized in Table 8.

### 2.2.4 Off-Site Sediment Tracking

Off-site sediment tracking BMPs must be installed and maintained year-round at entrances/exits to comply with performance standards from the *Storm Water Standards* .The site entrance/exit needs to be stabilized to ensure tracking does not occur. If minimal amounts of sediment tracking are anticipated, shaker plates or similar may be used. However, if larger amounts of sediment tracking or clayey soils are expected, the entrance/exits should be stabilized with 3-6-inch rock overlaying filter fabric, 50 feet by 30 feet minimum, with the length corresponding to the anticipated level of tracking. A tire wash may be installed, if necessary, but must be frequently inspected and maintained to ensure non-storm water discharges to not occur. The entrance/exit should be designed so that vehicles and equipment cannot be driven around the stabilization measures. Construction roads should be stabilized with road base or soil binder to prevent wind and water erosion.

Roads adjacent to the site should be swept or vacuumed when sediment or construction debris has been deposited. Adjacent roads should be inspected daily to ensure tracking is not occurring.

**Table 10**
**Off-Site Sediment Tracking BMPs**

| Best Management Practices | References | | Check at least one BMP |
|---|---|---|---|
| | CASQA BMP | Caltrans BMP | |
| **Entrance/Exit Stabilization** | TC-1 | TC-1 | ☒ |
| **Road Stabilization** | TC-2 | - | ☐ |
| **Street Sweeping and Vacuuming** | SE-7 | SC-7 | ☒ |
| If no BMPs were selected, explain the rationale: | | | |
| Describe any additional off-site sediment tracking BMPs to be implemented: | | | |
| Describe where off-site sediment tracking BMPs will be implemented/installed: **Staging Areas and access routes, as necessary.** | | | |

## 2.3 RUN-ON AND SITE STORM WATER MANAGEMENT CONTROLS

All run-on, runoff within the site, and runoff that discharges off-site, must be managed to prevent erosive flows. Run-on and site storm water management BMPs are provided in Table 11. Runoff from the site must be directed away from all disturbed areas. If runoff or dewatering operation discharges are concentrated, velocity must be controlled using an energy dissipater. Discharge points and discharge flows must be free of pollutants, including sediment.

Run-on to the site should be diverted around the site if possible. Check dams are used to reduce velocity of concentrated flows, limit erosion in channels, and trap sediment. They can be installed in gutter to reduce sediment loading to storm drain inlets. Slope drains and drainage swales should be used to convey runoff downslope without causing erosion. Slope drains and sediment trap/basin outlets require outlet protection to prevent erosion in this area.

**Table 11**
**Run-On and Site Storm Water Management BMPs**

| Best Management Practices | References | | Check at least one BMP |
|---|---|---|---|
| | CASQA BMP | Caltrans BMP | |
| **Divert Run-on from Surrounding Areas** | EC-9, SE-5, SE-6, SE-13 | SC-5, SS-9, SC-6, NS-5 | ☒ |
| **Check Dams** | SE-4 | SC-4 | ☐ |
| **Slope Drains and/or Stabilized Drainage Swales** | EC-9, EC-11 | SS-9, SS-11 | ☐ |
| **Outlet Protection** | EC-10 | SS-10 | ☐ |
| If no BMPs were selected, explain the rationale: | | | |
| Describe any additional run-on and site storm water management BMPs to be implemented: | | | |
| Describe where run-on and site storm water management BMPs will be implemented/installed: **To be utilized in channel for run-on or dry weather flows.** | | | |

## 2.4 MATERIALS AND WASTE MANAGEMENT CONTROLS

Materials and waste materials are not expected to be stored onsite. If this occurs BMPs must be installed to control all maintenance and waste materials. Additionally, maintenance-related materials, spills, and residues must be prevented from entering the MS4. Materials and waste management BMPs are provided in Table 12-15. Keep an inventory of maintenance materials that will be used outdoors and exposed to precipitation, other than those designed for this purpose (i.e., poles, bricks, etc.). Designate materials loading, unloading, and storage areas. Do not perform activities during a rain event that may contribute to storm water pollution (i.e., loading/ unloading, etc.) and minimize exposure of maintenance materials to precipitation.

### 2.4.1 Spill Control

Post procedures for storage, clean-up, and spill-reporting for hazardous materials and wastes in open, conspicuous, and accessible locations adjacent to storage areas. Ensure all on-site staff receives spill prevention, control, and reporting training. Ample spill controls materials should be stored on-site. Significant spills must be reported to the City Enforcement Agency within 24 hours.

**Table 12**
**Spill Control BMPs**

| Best Management Practices | References | | Check at least one BMP |
|---|---|---|---|
| | CASQA BMP | Caltrans BMP | |
| **Spill Prevention and Control** | WM-4 | WM-4 | ☒ |
| **Reporting Significant Spills** | - | - | ☒ |
| If no BMPs were selected, explain the rationale: | | | |
| Describe any additional spill control BMPs to be implemented: | | | |
| Describe where spill control BMPs will be implemented/installed: **In maintenance and staging areas, as necessary.** | | | |

### 2.4.2 Waste Management

Wastes must be fully managed to prevent discharges to the MS4. Properly designate and protect waste storage areas. Waste disposal containers must be free of leaks and covered at the end of every business day and during rain events.

Liquid waste management includes, but is not limited to, wash water, or accumulated storm water that has come into contact with pollutants. In some cases, a system to collect liquid wastes from the ground (via vacuuming or collecting in a temporary capture device) may be necessary.

Install secondary containment for, and stake down, portable restrooms to prevent leaks and blow-over. Portable restrooms must be located away from storm water conveyance features and vehicle/equipment traffic. Stockpiled waste materials must be secure and protected from wind and rain at all times unless actively being used. Waste stockpiles must be covered and bermed unless actively being used. Remove waste stockpiles from the site as soon as possible.

**Table 13**
**Waste Management BMPs**

| Best Management Practices | References | | Check at least one BMP |
|---|---|---|---|
| | CASQA BMP | Caltrans BMP | |
| **Solid Waste Management** | WM-5 | WM-5 | ☒ |
| **Liquid Waste Management** | WM-10 | WM-10 | ☒ |
| **Contaminated Soil Management** | WM-7 | WM-7 | ☐ |
| **Sanitary Waste Management** | WM-9 | WM-9 | ☒ |
| **Concrete Waste Management** | WM-8 | WM-8 | ☐ |
| **Hazardous Waste Management** | WM-6 | WM-6 | ☒ |
| **Stockpiled Waste Management** | WM-3 | WM-3 | ☒ |
| If no BMPs were selected, explain the rationale: | | | |
| Describe any additional waste management BMPs to be implemented: | | | |
| Describe where waste management BMPs will be implemented installed: **In maintenance and staging areas, as necessary.** | | | |

### 2.4.3 Material Storage and Handling

Manage and store maintenance materials, chemicals (including paints, solvents, glue/epoxy, primers thinners, liquid asphalts and emulsions, and hazardous materials) so that they will not spill or leak and will not pollute storm water. Cover or store materials indoors and provide secondary containment for materials not designed to come into contact with storm water. Paving and concrete materials should be properly contained and covered if necessary. Slurries from cutting activities should be vacuumed and disposed of off-site. Storm drain inlets downstream of paving and concrete activities should be covered while handling or using materials that could discharge to the storm drain system.

**Table 14**
**Material Storage and Handling BMPs**

| Best Management Practices | References | | Check at least one BMP |
|---|---|---|---|
| | CASQA BMP | Caltrans BMP | |
| **Material Storage** | WM-1 | WM-1 | ☒ |
| **Material Handling** | WM-2 | WM-1 | ☒ |
| **Paving and Grinding Operations** | NS-3 | NS-3 | ☐ |
| **Concrete Management** | NS-12, NS-13, NS-16 | NS-12, NS-14 | ☐ |
| If no BMPs were selected, explain the rationale: | | | |
| Describe any additional material storage and handling BMPs to be implemented: | | | |
| Describe where material storage and handling BMPs will be implemented/installed: **Staging Areas, as necessary.** | | | |

### 2.4.4 Vehicle and Equipment Management

Vehicle and equipment management BMPs are needed if these will be used, fueled, maintained, and/or parked onsite. All fueling will be performed outside of the channel and located at least 150 feet from waters of the US/State. Storage, service, cleaning, and maintenance areas for vehicles and equipment are not expected to occur onsite. All maintenance of equipment shall be perform at the appropriate maintenance facility. Spill materials should always be available during fueling and fueling operations should not be left unattended. If fueling or maintaining equipment in the field is performed, drip pans should be used to capture spills. Also utilize drip pans under leaking equipment or vehicles, inspect the pans regularly to prevent overflow, and remove leaking vehicles/ equipment from the site as soon as feasible.

**Table 15**
**Vehicle and Equipment Management BMPs**

| Best Management Practices | References | | Check at least one BMP |
|---|---|---|---|
| | CASQA BMP | Caltrans BMP | |
| **Vehicle and Equipment Fueling** | NS-9 | NS-9 | ☒ |
| **Vehicle and Equipment Maintenance** | NS-10 | NS-10 | ☒ |
| If no BMPs were selected, explain the rationale: | | | |
| Describe any additional vehicle and equipment management BMPs to be implemented: | | | |
| Describe where vehicle and equipment management BMPs will be implemented/installed: **Staging Areas, as necessary.** | | | |

### 2.5 NON-STORM WATER MANAGEMENT CONTROLS

Non-storm water discharges are defined as any discharges to the storm water conveyance system that is not entirely composed of storm water. Non-storm water management BMPs are provided in Table 16. Non-storm water discharges must be eliminated or controlled to the maximum extent practicable. See Section 1.7 for a list of allowable discharges to the City's MS4. All non-storm water discharges shall be controlled by implementing water conservation practices, implementing good housekeeping techniques, and implementing a program to detect and eliminate illicit discharges.

The site should be inspected frequently for illicit connections and discharges. If observed, action should be taken as soon as possible to halt the connection/discharge. Illicit discharges to the City's MS4 should be reported to the City Enforcement Agency within 24 hours. Overspray and overwatering of vegetation for erosion control and landscaping should be avoided. Water line breaks should be repaired as soon as possible. Vehicle and equipment cleaning should be performed off-site if possible or otherwise in a location where wash water will drain to the sanitary sewer.

Dewatering uncontaminated (i.e., free of sediment or any other pollutant) groundwater and surface water is allowable, but may require additional permitting depending on the discharge location (i.e., see the San Diego RWQCB's Order No. R9-2007-0034, Order No. R9-2008-0002 and General Conditional Waiver No. 2). If discharging groundwater to the sanitary sewer, a Request for Authorization must be submitted to the City Public Utilities Department. Dewatering of accumulated, uncontaminated storm water is allowable if the discharges are monitored/visually observed.

**Table 16**
**Non-Storm Water Management BMPs**

| Best Management Practices | References | | Check at least one BMP |
|---|---|---|---|
| | CASQA BMP | Caltrans BMP | |
| **Illicit Connection/Discharge Control** | NS-6 | NS-6 | ☒ |
| **Potable Water/Irrigation** | NS-7 | NS-7 | ☒ |
| **Vehicle and Equipment/Cleaning** | NS-8 | NS-8 | ☒ |
| **Water Conservation Practice** | NS-1 | NS-1 | ☒ |
| **Dewatering Operations** | NS-2 | NS-2 | ☒ |
| If no BMPs were selected, explain the rationale: | | | |
| Describe any additional non-storm water management BMPs to be implemented: | | | |
| Describe where non-storm water management BMPs will be implemented/installed: **Maintenance and Staging Areas, as necessary.Dewatering may occur in portions of the Pilot Channel where ponded water needs to be removed prior to maintenance activities.** | | | |

## 2.6 PARTICULATE AND DUST CONTROL

Wind erosion control BMPs are implemented to prevent the air deposition of site materials and site operations. Particulate and dust control BMPs are provided in Table 17. Such particulates can include sediment, nutrients, trash, metals, bacteria, oil/grease, and organics. Ensure a water truck is available while maintenance activities are being performed, especially when soil and stockpiled material is being handled. Spray exposed soils with water or soil binder via water truck. Ensure maintenance materials are not discharged through the air. Do not perform activities that may discharge particulates on windy days.

**Table 17**
**Particulate and Dust Control BMPs**

| Best Management Practices | References | | Check BMP, if applicable |
|---|---|---|---|
| | CASQA BMP | Caltrans BMP | |
| **Wind Erosion Control** | WE-1 | WE-1 | ☒ |
| If no BMPs were selected, explain the rationale: | | | |
| Describe any additional particulate and dust control BMPs to be implemented: | | | |
| Describe where particulate and dust control BMPs will be implemented: **Maintenance and Staging Areas, and access routes, as necessary.** | | | |

## 2.7 FINAL STABILIZATION

For a maintenance project to be considered complete, all of the following conditions must be met:

- The site will not pose any additional sediment discharge risk than it did prior to the commencement of maintenance activity.

- Final stabilization has been reached by one of the following:
  - Attaining 70 percent uniform vegetative cover or equivalent stabilization measures[1], such as: erosion control blankets, reinforced channel liners, and geotextiles; or
  - Otherwise demonstrating that final stabilization has been achieved.
- Maintenance materials, temporary BMPs, and wastes have been removed from the site.

The Pilot and SG Channels are each small portions of an extensive network of natural and engineered channels draining large portions of the nearly the 1,700 square mile Tijuana River watershed. Within this system, watershed-scale fluvial geomorphology processes play a significant role in channel erosion and stabilization processes relative to localized short-term maintenance-related changes in channel composition and dimensions. As evidenced in the recent maintenance history where annual sediment and debris removal has been performed, the Pilot and SG channels function as a deposition area within the watershed. The removal of the accumulated sediment, trash, and other debris from the Pilot and SG Channels does not increase the sediment discharge risk as the channel banks are stable in this portion of the Tijuana River watershed. Accordingly, final stabilization BMPs are not required for this channel maintenance area.

[1] Where background native vegetation covers less than 100 percent of the surface, the 70 percent coverage criteria is adjusted as follows: if the native vegetation covers 50 percent of the ground surface, 70 percent of 50 percent (0.70 X 0.50 = 0.35) would require 35 percent total uniform surface coverage.

## 3.0 BEST MANAGEMENT PRACTICE MAINTENANCE AND INSPECTION

Maintenance is a dynamic operation where changes are expected. Storm water BMPs for maintenance sites are typically temporary measures that require frequent maintenance to maintain effectiveness. BMPs facilities may require relocation, revision and re-installation, particularly as earthwork activity progresses.

### 3.1 BMP MAINTENANCE

Best management practice maintenance requirements are listed in Table 18. The following subsections describe the inspection program responsibilities and requirements.

**Table 18**
**BMP Maintenance Requirements**

| Best Management Practices | Maintenance Requirements |
|---|---|
| **Scheduling** | Periodically review schedule determine if activity during the rainy season can be minimized. |
| **Manage Soil Stockpiles** | Replace compromised covers and berms. Ensure stockpiled material is within the silt fence area. Store ample supplies of cover material, silt fence and fiber rolls on site. |
| **Erosion Control Blankets and Turf Reinforced Mats** | Replace compromised blankets and mats. Ensure good soil contact. |
| **Permanent Stabilization (i.e., retaining walls, rock gabions, rock riprap, etc.)** | Remove accumulated sediment and debris at existing rock gabion. |
| **Preserve Existing Vegetation** | Ensure protected vegetation is clearly marked. |
| **Silt Fencing** | Replace compromised silt fence. Ensure fence is trenched and backfilled. Removed sediment accumulated to 1/3 the fence height. |
| **Fiber Rolls or Straw Wattles** | Replace compromised rolls. Ensure rolls are trenched in and backfilled. Remove sediment accumulated to 1/3 the roll height. |
| **Linear Protection** | See applicable BMPs. |
| **Preserve Natural Hydraulic Features and Riparian Area Buffers** | Ensure protected features and buffers are clearly marked |
| **Entrance/Exit Stabilization** | Install prior to maintenance start; replace gravel when surface voids are visible; remove post-maintenance. |
| **Road Stabilization** | Install prior to maintenance start; replace gravel when surface voids are visible; remove post-maintenance. |
| **Street Sweeping and Vacuuming** | Implement as soon as possible upon sediment deposition. |

**Table 18 (Continued)**
**BMP Maintenance Requirements**

| Best Management Practices | Maintenance Requirements |
|---|---|
| **Divert Run-on from Surrounding Areas** | Ensure that diversions are effective. |
| **Check Dams** | Remove accumulated sediment and debris when it reaches 1/3 the height of the dam. |
| **Spill Prevention and Control** | Ensure that ample supplies of spill cleanup materials are stored onsite and within vehicles and equipment. |
| **Reporting Significant Spills** | Ensure that on-site staff receives spill cleanup and reporting training. |
| **Solid Waste Management** | Arrange for waste collection as necessary; remove deposited solids in containment areas and collection devices; inspect and repair containment areas and capturing devices. |
| **Liquid Waste Management** | Arrange for waste collection as necessary; remove liquid wastes containment areas and collection devices; inspect and repair containment areas and capturing devices. |
| **Sanitary Waste Management** | Coordinate with a local contractor for frequent inspection and maintenance. |
| **Hazardous Waste Management** | Keep storage areas clean and organized; store ample cleanup supplies on site; control storage area perimeter; repair containment structures, covers, and liners as necessary. |
| **Stockpiled Waste Management** | Ensure that stockpiled waste is covered and bermed at all times, unless actively using. |
| **Material Storage and Handling** | Store ample supplies of spill cleanup materials onsite; clean and organize storage areas; repair perimeter controls, containment structures, covers, and liners; spot check materials use throughout the maintenance period to ensure proper practices are utilized. |
| **Vehicle and Equipment Fueling** | Resupply on-site spill cleanup materials; clean up spills, properly dispose of contaminated soil and clean up materials; |
| **Vehicle and Equipment Maintenance** | Inspect vehicles and equipment for leaks; if possible, prohibit washing vehicles on-site; ensure equipment wash water discharges to the sanitary sewer. |
| **Illicit Connection/Discharge Control** | Prohibit staff and subcontractors from disposing of debris on site; notify owner/operator of illicit connections or discharge incidents immediately. |
| **Potable Water/Irrigation** | Repair broken lines and correct irrigation overspray as soon as possible. |
| **Vehicle and Equipment/Cleaning** | Ensure washing discharges do not leave the site. |

**Table 18 (Continued)**
**BMP Maintenance Requirements**

| Best Management Practices | Maintenance Requirements |
|---|---|
| **Water Conservation Practice** | Repair water equipment as needed to prevent non-storm water discharges. |
| **Dewatering Operations** | Ensure dewatering is not causing erosion, discharges do not contain pollutants, and activities are continuously monitored. |
| **Wind Erosion Control** | Ensure maintenance materials are not discharged through the air. |

## 3.2 BMP INSPECTIONS

Self-inspections are to be performed by a QCP, as described in the following section.

### 3.2.1 Qualified Contact Person

A QCP, as per the *Storm Water Standards* (definition, is to be assigned for the project. The QCP is to be specifically trained in storm water pollution prevention, including the installation and maintenance of sediment and erosion control measures. The QCP may designate additional, trained persons to assist with QCP responsibilities. The specific duties of the QCP and persons delegated by the QCP are:

- Coordinating with the appropriate City representatives to ensure the project complies with the WPCP and approved plans at all times;
- Implementing all elements of the WPCP, including prompt and effective erosion, sediment, tracking, and wind erosion control measures and management of non-storm water discharges and maintenance materials and liquid, solid, and hazardous wastes;
- Assigning authority to mobilize crews in order to conduct immediate and complete BMP repairs and providing storm water pollution prevention training;
- Tracking weather conditions, as reported on the National Weather Service Forecast's website [http://www.noaa.gov/wx.html]);
- Performing self-inspections;
- Overseeing site stabilization; and
- Ensuring WPCP availability and retaining records.

**Table 19**
**Qualified Contact Person and Designees**

| | Name | Company/ Organization | Phone Number |
|---|---|---|---|
| Qualified Contact Person | **TBD** | | |
| Additional Persons Designated by the Qualified Contact Person | **TBD** | | |
| | **TBD** | | |

### 3.2.2 Self-Inspections

The QCP or his/her designees is required to perform self-inspections, as per the *Storm Water Standards* The objectives are to:

- Demonstrate the site is in compliance with the City's *Storm Water Standards* and San Diego Municipal Code Sect. 43.03;
- Ensure that storm water BMPs are properly documented, implemented, and effective in preventing or reducing pollutants in storm water discharges and authorized non-storm water discharges;
- Identify BMP maintenance (i.e., sediment removal) and repair needs;
- Ensure that the site-specific WPCP is fully implemented and updated; and
- Ensure final stabilization of the site before demobilization.

The *Storm Water Standards* requires performing self-inspections throughout the life of the project (until final stabilization is achieved). Self-inspections are not required during dangerous weather conditions such as flooding and electrical storms or outside of scheduled site business hours. Self-inspections are to be performed:

- At 24-hour intervals during extended rainfall events; and
- During the dry season, weekly.

During self-inspections, the QCP or designee should identify and record BMPs that are in need of maintenance to operate effectively, have failed, or could fail to operate as intended and if additional BMPs are needed. If additional BMPs are necessary, the WPCP should be revised accordingly. All self-inspections must be documented using a checklist. The self-inspection checklist (Appendix D) shall also note the date, time, and weather conditions during the inspection. Completed checklists should be made available upon request. During self- inspections, storm water discharges must be monitored to determine the presence of pollutants. If any failures or deficiencies are identified, repairs or design changes should begin to be implemented within 72 hours and noted on the self-inspection checklist.

### 3.2.3 Recordkeeping and Reports

Records for the following items should be retained for a minimum of three years:

- Completed site inspection forms;
- Training documentation (if any);
- Discharge reports (if any); and
- WPCP and amendments (if any).

## 4.0 REFERENCES

California Department of Transportation (Caltrans)
2003 *Storm Water Quality Handbook SWPPP/WPCP Preparation Guide*. February 1.

California Stormwater Quality Association (CASQA)
2003 *Construction Stormwater BMP Handbook*. January.

City of San Diego
2012 *Storm Water Standards*. Available online at: http://www.sandiego.gov/thinkblue/pdf/stormwatermanual.pdf. January 2012.

City of San Diego
2016 *Storm Water Standards*. Available online at: https://www.sandiego.gov/stormwater/regulations January 2016.

San Diego Regional Water Quality Control Board (RWQCB)
2013 Order No. R9-2013-0001, *National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for Discharges from the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds within the San Diego Region*. Available online at: http://www.waterboards.ca.gov/rwqcb9/water_issues/programs/stormwater/docs/updates052313/2013-0523_Order_No._R9-2013-0001_COMPLETE.pdf . May 8.

State Water Resources Control Board (SWRCB)
2009 *National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities, Water Quality Order 2009-0009-DWQ*, General Permit No. CAS000002. Available online at: http://www.swrcb.ca.gov/water_issues/programs/stormwater/constpermits.shtml

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# A INDIVIDUAL MAINTENANCE PLAN

This Water Pollution Control Plan
is provided here as an attachment
to the Individual Maintenance Plan.

# B CERTIFICATION

## Appendix B

This WPCP must be certified by the applicant.

*[Please sign and date below.]*

| **The Water Pollution Control Plan Preparer must print and sign the following certification.** | | | |
|---|---|---|---|
| *I have read and understand that the City of San Diego has adopted minimum requirements for managing urban runoff, including storm water from construction and land development activities. I certify that the BMPs selected on this form will be implemented to minimize the potentially negative impacts of this project's construction and land development activities on water quality. I further agree to install, monitor, maintain, or revise the selected BMPs to ensure their effectiveness. I also understand that non-compliance with the City's Storm Water Standards may result in enforcement by the City, including fines, cease and desist orders, or other actions.* | | | |
| **Signature:** | Nicole Rieger | **Date:** | 6/30/2017 |
| **Name and Title:** | Nicole Rieger, PE, QSD | **Tel. Number** | 760-479-4148 |

| **The applicant must print and sign the following certification before a permit will be issued.** | | | |
|---|---|---|---|
| *I have read and understand that the City of San Diego has adopted minimum requirements for managing urban runoff, including storm water from construction and land development activities. I certify that the BMPs selected on this form will be implemented to minimize the potentially negative impacts of this project's construction and land development activities on water quality. I further agree to install, monitor, maintain, or revise the selected BMPs to ensure their effectiveness. I also understand that non-compliance with the City's Storm Water Standards may result in enforcement by the City, including fines, cease and desist orders, or other actions.* | | | |
| **Applicant Signature:** | Lester Del Rosario | **Date:** | 7/5/17 |

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# C CITY OF SAN DIEGO FORM DS-560, STORM WATER REQUIREMENTS APPLICABILITY CHECKLIST

City of San Diego
**Development Services**
1222 First Ave., MS-302
San Diego, CA 92101
(619) 446-5000

# Storm Water Requirements Applicability Checklist

**FORM DS-560**
October 2016

Project Address: West of Hollister Street and north of Monument Road

Project Number *(for City Use Only):*

## SECTION 1. Construction Storm Water BMP Requirements:

All construction sites are required to implement construction BMPs in accordance with the performance standards in the Storm Water Standards Manual. Some sites are additionally required to obtain coverage under the State Construction General Permit (CGP)[1], which is administered by the State Water Resources Control Board.

**For all projects complete PART A: If project is required to submit a SWPPP or WPCP, continue to PART B.**

**PART A: Determine Construction Phase Storm Water Requirements.**

1. Is the project subject to California's statewide General NPDES permit for Storm Water Discharges Associated with Construction Activities, also known as the State Construction General Permit (CGP)? (Typically projects with land disturbance greater than or equal to 1 acre.)

☐ Yes; SWPPP required, skip questions 2-4 ☒ No; next question

2. Does the project propose construction or demolition activity, including but not limited to, clearing, grading, grubbing, excavation, or any other activity resulting in ground disturbance and contact with storm water runoff?

☐ Yes; WPCP required, skip 3-4 ☒ No; next question

3. Does the project propose routine maintenance to maintain original line and grade, hydraulic capacity, or original purpose of the facility? (Projects such as pipeline/utility replacement)

☒ Yes; WPCP required, skip 4 ☐ No; next question

4. Does the project only include the following Permit types listed below?

- Electrical Permit, Fire Alarm Permit, Fire Sprinkler Permit, Plumbing Permit, Sign Permit, Mechanical Permit, Spa Permit.
- Individual Right of Way Permits that exclusively include only ONE of the following activities: water service, sewer lateral, or utility service.
- Right of Way Permits with a project footprint less than 150 linear feet that exclusively include only ONE of the following activities: curb ramp, sidewalk and driveway apron replacement, pot holing, curb and gutter replacement, and retaining wall encroachments.

☐ Yes; no document required

Check one of the boxes below, and continue to PART B:

☐ If you checked "Yes" for question 1, **a SWPPP is REQUIRED. Continue to PART B**

☐ If you checked "No" for question 1, and checked "Yes" for question 2 or 3, **a WPCP is REQUIRED.** If the project proposes less than 5,000 square feet of ground disturbance AND has less than a 5-foot elevation change over the entire project area, a Minor WPCP may be required instead. **Continue to PART B.**

☐ If you checked "No" for all questions 1-3, and checked "Yes" for question 4 PART B **does not apply and no document is required. Continue to Section 2.**

1. More information on the City's construction BMP requirements as well as CGP requirements can be found at: www.sandiego.gov/stormwater/regulations/index.shtml

## PART B: Determine Construction Site Priority

This prioritization must be completed within this form, noted on the plans, and included in the SWPPP or WPCP. The city reserves the right to adjust the priority of projects both before and after construction. Construction projects are assigned an inspection frequency based on if the project has a "high threat to water quality." The City has aligned the local definition of "high threat to water quality" to the risk determination approach of the State Construction General Permit (CGP). The CGP determines risk level based on project specific sediment risk and receiving water risk. Additional inspection is required for projects within the Areas of Special Biological Significance (ASBS) watershed. **NOTE:** The construction priority does **NOT** change construction BMP requirements that apply to projects; rather, it determines the frequency of inspections that will be conducted by city staff.

**Complete PART B and continued to Section 2**

1. ☐ **ASBS**
   a. Projects located in the ASBS watershed.

2. ☐ **High Priority**
   a. Projects 1 acre or more determined to be Risk Level 2 or Risk Level 3 per the Construction General Permit and not located in the ASBS watershed.
   b. Projects 1 acre or more determined to be LUP Type 2 or LUP Type 3 per the Construction General Permit and not located in the ASBS watershed.

3. ☐ **Medium Priority**
   a. Projects 1 acre or more but not subject to an ASBS or high priority designation.
   b. Projects determined to be Risk Level 1 or LUP Type 1 per the Construction General Permit and not located in the ASBS watershed.

4. ☒ **Low Priority**
   a. Projects requiring a Water Pollution Control Plan but not subject to ASBS, high, or medium priority designation.

## SECTION 2. Permanent Storm Water BMP Requirements.

Additional information for determining the requirements is found in the Storm Water Standards Manual.

### PART C: Determine if Not Subject to Permanent Storm Water Requirements.

Projects that are considered maintenance, or otherwise not categorized as "new development projects" or "redevelopment projects" according to the Storm Water Standards Manual are not subject to Permanent Storm Water BMPs.

**If "yes" is checked for any number in Part C, proceed to Part F and check "Not Subject to Permanent Storm Water BMP Requirements".**

**If "no" is checked for all of the numbers in Part C continue to Part D.**

| | | |
|---|---|---|
| 1. | Does the project only include interior remodels and/or is the project entirely within an existing enclosed structure and does not have the potential to contact storm water? | ☐ Yes ☐ No |
| 2. | Does the project only include the construction of overhead or underground utilities without creating new impervious surfaces? | ☐ Yes ☐ No |
| 3. | Does the project fall under routine maintenance? Examples include, but are not limited to: roof or exterior structure surface replacement, resurfacing or reconfiguring surface parking lots or existing roadways without expanding the impervious footprint, and routine replacement of damaged pavement (grinding, overlay, and pothole repair). | ☒ Yes ☐ No |

**PART D: PDP Exempt Requirements.**

**PDP Exempt projects are required to implement site design and source control BMPs.**

**If "yes" was checked for any questions in Part D, continue to Part F and check the box labeled "PDP Exempt."**

**If "no" was checked for all questions in Part D, continue to Part E.**

1. **Does the project ONLY include new or retrofit sidewalks, bicycle lanes, or trails that:**
   - **Are designed and constructed to direct storm water runoff to adjacent vegetated areas, or other non-erodible permeable areas? Or;**
   - **Are designed and constructed to be hydraulically disconnected from paved streets and roads? Or;**
   - **Are designed and constructed with permeable pavements or surfaces in accordance with the Green Streets guidance in the City's Storm Water Standards manual?**

   ☐ Yes; PDP exempt requirements apply ☐ No; next question

2. Does the project ONLY include retrofitting or redeveloping existing paved alleys, streets or roads designed and constructed in accordance with the Green Streets guidance in the City's Storm Water Standards Manual?

   ☐ Yes; PDP exempt requirements apply ☐ No; project not exempt.

**PART E: Determine if Project is a Priority Development Project (PDP).**
Projects that match one of the definitions below are subject to additional requirements including preparation of a Storm Water Quality Management Plan (SWQMP).

**If "yes" is checked for any number in PART E, continue to PART F and check the box labeled "Priority Development Project".**

**If "no" is checked for every number in PART E, continue to PART F and check the box labeled "Standard Development Project".**

1. **New Development that creates 10,000 square feet or more of impervious surfaces collectively over the project site.** This includes commercial, industrial, residential, mixed-use, and public development projects on public or private land. ☐ Yes ☐ No
2. **Redevelopment project that creates and/or replaces 5,000 square feet or more of impervious surfaces on an existing site of 10,000 square feet or more of impervious surfaces.** This includes commercial, industrial, residential, mixed-use, and public development projects on public or private land. ☐ Yes ☐ No
3. **New development or redevelopment of a restaurant.** Facilities that sell prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (SIC 5812), and where the land development creates and/or replace 5,000 square feet or more of impervious surface. ☐ Yes ☐ No
4. **New development or redevelopment on a hillside.** The project creates and/or replaces 5,000 square feet or more of impervious surface (collectively over the project site) and where the development will grade on any natural slope that is twenty-five percent or greater. ☐ Yes ☐ No
5. **New development or redevelopment of a parking lot that creates and/or replaces 5,000 square feet or more of impervious surface (collectively over the project site).** ☐ Yes ☐ No
6. **New development or redevelopment of streets, roads, highways, freeways, and driveways.** The project creates and/or replaces 5,000 square feet or more of impervious surface (collectively over the project site). ☐ Yes ☐ No

7. **New development or redevelopment discharging directly to an Environmentally Sensitive Area.** The project creates and/or replaces 2,500 square feet of impervious surface (collectively over project site), and discharges directly to an Environmentally Sensitive Area (ESA). "Discharging directly to" includes flow that is conveyed overland a distance of 200 feet or less from the project to the ESA, or conveyed in a pipe or open channel any distance as an isolated flow from the project to the ESA (i.e. not commingled with flows from adjacent lands). ☐ Yes ☐ No

8. **New development or redevelopment projects of a retail gasoline outlet (RGO) that create and/or replaces 5,000 square feet of impervious surface.** The development project meets the following criteria: (a) 5,000 square feet or more or (b) has a projected Average Daily Traffic (ADT) of 100 or more vehicles per day. ☐ Yes ☐ No

9. **New development or redevelopment projects of an automotive repair shops that creates and/or replaces 5,000 square feet or more of impervious surfaces.** Development projects categorized in any one of Standard Industrial Classification (SIC) codes 5013, 5014, 5541, 7532-7534, or 7536-7539. ☐ Yes ☐ No

10. **Other Pollutant Generating Project.** The project is not covered in the categories above, results in the disturbance of one or more acres of land and is expected to generate pollutants post construction, such as fertilizers and pesticides. This does not include projects creating less than 5,000 sf of impervious surface and where added landscaping does not require regular use of pesticides and fertilizers, such as slope stabilization using native plants. Calculation of the square footage of impervious surface need not include linear pathways that are for infrequent vehicle use, such as emergency maintenance access or bicycle pedestrian use, if they are built with pervious surfaces of if they sheet flow to surrounding pervious surfaces. ☐ Yes ☐ No

**PART F: Select the appropriate category based on the outcomes of PART C through PART E.**

1. The project is **NOT SUBJECT TO PERMANENT STORM WATER REQUIREMENTS.** ☒
2. The project is a **STANDARD DEVELOPMENT PROJECT.** Site design and source control BMP requirements apply. See the Storm Water Standards Manual for guidance. ☐
3. The project is **PDP EXEMPT.** Site design and source control BMP requirements apply. See the Storm Water Standards Manual for guidance. ☐
4. The project is a **PRIORITY DEVELOPMENT PROJECT.** Site design, source control, and structural pollutant control BMP requirements apply. See the Storm Water Standards Manual for guidance on determining if project requires a hydromodification plan management ☐

Lester Del Rosario — Associate Civil Engineer

Name of Owner or Agent *(Please Print)* — Title

Lester Del Rosario — 6/29/17

Signature — Date

# D INSPECTION FORM

# WATER POLLUTION CONTROL PLAN SELF-INSPECTION FORM

## SITE INFORMATION

**Project:** _____

**Date:** **Time of Day:**

*The information contained in this inspection report was gathered and evaluated by qualified personnel before submittal. Based on my review of the information and inquiry of those who gathered and evaluated the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.*

**Inspector Name:** _____ **Inspector Signature:** _____

## GENERAL INSPECTION INFORMATION

**Location of work:** _____ **Station Number:** _____

**WPCP onsite?** ☐ Yes ☐ No

**Is site work occurring?** ☐ Yes ☐ No

**Description of Work:** _____

_____

**Best Management Practice's Inspected and Implemented On-site**

☐ Sediment Control ☐ Good Housekeeping ☐ Waste Management ☐ Tracking Control

☐ Sweeping / Dust

**Additional Comments:** Describe any BMP maintenance required, deficiencies, unusual conditions, situations or special requirements needed to do the work such as diversion of water, construction of staging area, replacement of bank material, presence of utilities, etc.

**Channel Material Removed**

| Type Removed | Quantity (linear Feet) |
|---|---|
| Silt/Sand | |
| Debris | |
| Vegetation | |

**Stockpile Area Material Removed**

| Type | Quantity/Unit |
|---|---|
| Sediment | |
| Debris | |
| Vegetation | |
| Tires (#) | |
| | |

**Equipment**

| Equipment Number | Description | Idle/Down | Additional Remarks |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |