WATER POLLUTION CONTROL PLAN
for

Project Name (Group Job)

LOCATED AT:

Address/Location

PREPARED BY:

Consultant Company Name
Consultant Address
Consultant Phone Number

PREPARED FOR:

Contractor Company Name
Contractor Address
Contractor Phone Number

PREPARATION DATE:

Preparation Date

CITY OF SAN DIEGO
PUBLIC WORKS
DEPARTMENT

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1.0 PROJECT INFORMATION

1.1 INTRODUCTION

Section 43.03 of the San Diego Municipal Code requires the City of San Diego (City) to necessitate implementing effective best management practices (BMPs) to reduce discharges of pollutants in storm water from construction sites to the maximum extent practicable and effectively prohibit non-storm water discharges from construction sites into the Municipal Separate Storm Sewer Systems (MS4). These BMPs must be site specific, seasonally appropriate, and construction phase appropriate. BMPs must be implemented at each construction site year-round. Dry season BMP implementation must plan for and address unseasonal rain events that may occur during the dry season (May 1 through September 30).

A Water Pollution Control Plan (WPCP) must be developed and implemented for all Group Job projects that

- Result in disturbance of less than one acre of total land area, or are considered maintenance projects and are not part of a larger common plan of development or sale, or
- Result in disturbance of an acre or more of total land area and are considered regular maintenance projects performed to restore the original line, grade, or capacity of the facility, or
- Result in disturbance of one to five acres of total land area and can demonstrate that there will be no adverse water quality impacts by applying for a Construction Rainfall Erosivity Waiver.

This template was developed specifically for the City's Group Jobs, which are maintenance projects, performed in City rights-of-way, and generally—but not always—linear underground projects. Group Jobs may consist of, but not limited to, the following activities:

- Performing asphalt and concrete cutting;
- Trenching and shoring the trench;
- Stockpiling trench backfill, aggregate, cold mix asphalt, etc.;
- Bypass piping and pumping of potable water or sewage;
- Removing pipe laterals, manholes, vaults, and related appurtenances that are disposed of off-site;
- Covering trenches at the end of each day with metal plates and cold mix asphalt;
- Installing new pipeline and associated features;
- Backfilling the trench upon pipeline completion;
- Restoring the site to its original condition, which may include replacing asphalt, concrete, and curb/gutter and landscaping repair;
- Roadway striping; and
- Cleaning the site.

Heavy equipment, various construction materials, and a portable sanitary facility (restroom) is typically located within the jobsite. Work is not performed during precipitation.

Since Group Jobs are generally similar in nature, assumptions have been made in this Group Job WPCP template regarding the potential pollutants, pollutant sources, construction materials, and wastes. For instance, it is assumed little to no erosion sources will exist, as Group Jobs are usually located in paved roadways (i.e., other than trenching, stockpiling trench soils, and very minor landscape work, no earthwork is performed). The projects typically don't have disturbed slopes. Vehicle (truck and auto)

fueling, maintenance, and cleaning are performed off-site. Equipment (i.e., backhoes, bobcats, pumps, etc.) fueling and emergency maintenance may be performed on-site, but washing occurs off-site. Potable water sources, other than the water lines, are not present. **If any of these assumptions are not accurate for the project, this Group Job WPCP template must be modified to reflect the appropriate site conditions, construction activities, potential pollutants, and best management practices (BMPs) to control potential pollutants.**

This WPCP is required to be updated by the QCP or Contractor whenever there is a change in construction operations or BMP implementation or deemed necessary by the Resident Engineer.

NOTE: It is the responsibility of the Contractor to ensure that all construction activities comply with local and state regulations, including San Diego Municipal Code Sect. 43.03. The guidance and template provided here is for the WPCP developer's convenience and does not alleviate responsibility to determine the appropriate level of BMP planning and implementation to prevent pollutant discharges.

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 construction activities;
- To identify non-storm water discharges and eliminate unauthorized non-storm water discharges, illicit connections, and dumping;
- To establish, construct, implement, and maintain best management practices (BMPs) to reduce or eliminate pollutants in storm water discharges and authorized non–storm water discharges from the construction site; and
- To develop an inspection program to determine the effectiveness of site BMPs.

1.3 RESPONSIBILITY FOR WPCP DEVELOPMENT AND IMPLEMENTATION

This WPCP shall be completed and 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).

1.4 AVAILABILITY

This WPCP shall remain at the jobsite at all times during business hours by the Contractor's Foreman 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, and the City of San Diego shall be permitted entry to the site for reviewing this WPCP, inspecting the site, and/or collecting storm water samples.

1.5 AMENDMENTS

This WPCP shall be amended whenever there is a change in construction 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.

1.6 GENERAL PROJECT INFORMATION

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

1.6.1 Project Location

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

Table 1
Project Location and Contact Information

Contact Information			
City Project Manager (PM) Name:	**Resident Engineer (RE) Name**:		
Mailing Address:	**City**: San Diego	**State**: CA	**Zip Code:**
Telephone No.: **PM:** **RE**:	**Email address**: **PM:** **RE**:		
Project Information			
Project Location:	**City:** San Diego	**State:** CA	**Zip Code:**
Drawing No.(s):	**WBS No. (s):**		
City Enforcement Agency Information			
Telephone No.: (619) 235-1000 (Storm Water Hotline) **Website:** Storm Water Division - Storm Water Service Request			

1.6.2 Project Description

The project description is provided in Table 2.

Table 2
Project Description

Project Scope:	(Example: The project consists of approximately XXXX linear feet (LF) or X.XX miles of X inch sewer mains being installed. Additionally, approximately XXXX linear feet or X.XX miles of XX inch water mains will be installed.)
Fill Material and Borrow Area Location(s):	(Example: Imported backfill material from Lakeshire Landfill.)
Existing Storm Water Features:	(Example: The project generally drains to the west)
Sources of Run-on to the Jobsite:	(Example: The project is upstream to two storm drain inlets which will be protected)
Discharge Locations:	(Example: The project is within an established neighborhood w/ existing storm drain inlets)
Other Site Features:	

1.6.3 Project Size

The size of the project and disturbed area is described in Table 3.

Table 3
Project Size

Total Project Length (miles or ft):	**Estimated Amount of Disturbed Area (ft^2 or acres):**

1.6.4 Construction Schedule

The construction schedule is provided in Appendix D, including an indication of activities to be performed in the rainy season, the phase of construction, and construction BMP installation and removal.

1.6.5 Site Priority and Special Project Features

The site priority, as identified on the City's Form DS-560 (see Appendix C), and Special Project Features, are provided in Table 4 (to filled out by the PM)

Table 4
Site Priority and Special Project Features

This table to be completed by City staff **Site Priority**	**Check One**	
High: Projects where the site is 1 acre or more and tributary to an impaired water body for sediment (e.g., Peñasquitos watershed); 1 acre or more within or directly adjacent to or discharging directly to a coastal lagoon or other receiving water within a Water Quality Sensitive Area; or subject to phased grading or advanced treatment requirements.	☐	
Medium: Projects 1 acre or more, but not subject to a high priority designation.	☐	
Low: Projects requiring a WPCP, but not subject to a medium or high priority designation.	☐	
Special Project Features	**No**	**Yes**
1) Water Quality Sensitive Areas: Projects discharging 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 (as defined in Attachment C of the San Diego Municipal Storm Water Permit, Order No R9-2007-0001).	☐	☐
2) ASBS: Projects within Areas of Special Biological Significance (ASBS) as defined in Order No. R9-2010-0003.	☐	☐

1.6.6 Site Features, Construction Activities, and Associated Potential Pollutants

Potential pollutant sources may stem from construction materials that are not designed to be outdoors and exposed to environmental conditions (i.e., are used in the process of construction, but are not the final product). Construction materials have the potential to come into contact with storm water when stored or used outdoors on the site.

Table 5
Determination of Site Features, Activities, and Potential Pollutants

No.	Site Feature Question	No	Yes	If *Yes*, Select BMPs from Table:
1	Is there run-on to the jobsite from surrounding areas?	☐	☐	8
2	Will the site discharge storm water to nearby storm drain inlets?	☐	☐	7, 10 and 8
3	Will concentrated flows and/or large accumulations of water occur at the jobsite?	☐	☐	8
4	Is the jobsite adjacent to a waterway or sensitive habitat (i.e., wetland, vernal pool, etc.)?	☐	☐	7
5.a	If number 1 under Table 4 is Yes, additional BMPs are required. Refer to the *Storm Water Standards*, Section 5.3.3 (City of San Diego 2012) and include description and analysis in the appendix.	☐	☐	N/A (See Appendix E)
5.b	If number 2 under Table 4 is Yes, non-storm water discharge (i.e. hydrostatic testing, potable water, etc.) is prohibited. Discharges shall be located a sufficient distance from such designated areas to assure maintenance of natural water quality conditions in these areas.	☐	☐	13

Table 5 (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)
6	Will there be soil-disturbance activities (i.e., stockpiling, trenching, etc.)?	☐	☐	7	Sediment
7	Will there be asphalt paving, cutting, and/or patching?	☐	☐	11	Asphalt, aggregate
8	Will there be stockpiling (i.e., soil, concrete, solid waste, etc.) for over 24 hours?	☐	☐	7, 10, and 11	Stockpiled material, *please specify:*
9	Will there be slurries from concrete or mortar mixing, coring, or saw cutting?	☐	☐	9 and 10	Concrete materials, aggregate, slurry water
10	Will wash water or liquid waste be generated from this project?	☐	☐	9, 10, and 13	Liquid waste, *please specify:*
11	Will there be dewatering operations?	☐	☐	13	Dewatering water, *please specify:*
12	Will a wastewater bypass be utilized as part of the project?	☐	☐	9 and 10	Wastewater
13	Will there be storage of construction materials that have the potential to pollute storm water, such as Portland cement, curing compounds, asphalt emulsions, etc.?	☐	☐	11	Construction materials, *please specify:*
14	Will trash or solid wastes (including landscaping wastes) be generated from this project?	☐	☐	10	Solid waste, *please specify:*
15	Will hazardous materials or wastes, including paint, be stored or handled at the jobsite?	☐	☐	9 and 10	Hazardous material, *please specify:*
16	Will construction equipment and/or vehicles be stored, fueled, or maintained at the jobsite?	☐	☐	9, 10, 12, and 13	Engine fluids, fuels, oil, grease
17	Will portable sanitary facilities (“Porta-potties”) be used at the jobsite?	☐	☐	9 and 10	Sanitary waste

Table 5 (Continued)
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)
18	Will dust (i.e., from driving on unpaved roads, etc.) or particulates (i.e., from sandblasting, concrete cutting, painting, etc.) be generated from this project?	☐	☐	14	Sediment, particulate construction materials, *please specify:*
19	Other activities will be performed that are not described above?	☐	☐	Select applicable BMPs from Tables 7–14	*Please specify:*
20	Final stabilization of the site is required.	☐	☐	15	Not applicable

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, as per *California RWQCB San Diego Region Order No. R9-2013-0001*, the following discharges to the City's MS4 are allowed as long as they are not a source of pollutants to receiving waters:

- Diverted stream flows;
- Rising groundwater;
- Uncontaminated groundwater infiltration;
- Springs;
- Flows from riparian habitats and wetlands;
- Discharges from potable water sources; and
- Discharges from foundation and footing drains.

1.8 BMP PLAN

The BMP Plan (attached as Appendix A) shall include:

- The site boundary and limits of construction;
- Key site features;
- Storm water conveyance features and discharge points;
- Drainage areas and direction of flow;
- Nearby water bodies (including Clean Water Act Section 303(d) List of Impaired Segments in the site's vicinity);
- Municipal storm water system features (i.e., inlets, curbing, etc.);
- Proposed areas of soil disturbance and potential pollutant sources;
- Proposed areas of material, stockpile, and waste storage areas;
- Proposed locations of portable sanitary facilities;
- Proposed locations where underlying soil is potentially contaminated; and
- Proposed locations of all BMP implementation areas.

The BMP Plan shall be updated as construction progresses to provide current project and BMP status, as well as future planned operations and BMP implementation.

2.0 BEST MANAGEMENT PRACTICES

The BMPs listed in this WPCP will be implemented throughout the project's 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 legally disposed of or covered). Sufficient BMP materials will be maintained at the jobsite to allow implementation with this WPCP and emergency installation in the event of a breech. Locations where BMPs will be implemented are to be shown on the BMP Plan in Appendix A.

BMPs must be implemented on construction sites to reduce pollution to the maximum extent practicable. Sections 5.0 and Appendix H of the City's *Storm Water Standards* (2012), which is available online at http://www.sandiego.gov/development-services/pdf/news/stormwatermanual.pdf outlines the requirements for construction storm water BMPs. The following BMP categories must be addressed:

- Erosion and 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 6 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 Storm Water Quality Association (CASQA) *Construction BMP Handbook Portal*, 2010, online at: http://www.casqa.org/LeftNavigation/ConstructionBMPHandbookPortalSWPPPTemplate/tabid/200/Default.aspx, (subscription required); or

- 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 AND SEDIMENT 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. The goal of sediment control is to capture soil particles which have become detached from disturbed areas by water or wind. See *Storm Water Standards* (City of San Diego 2012), Section 5.1. Erosion and sediment controls are provided in Table 6.

Group Jobs are generally performed in roadways and the primary soil-disturbing activity is trenching; therefore, these projects and have very low erosion potential. Sediment sources are stockpiles, areas where concrete and asphalt have been removed, and very small areas of disturbed landscaping. Source control of potential pollutant areas should be the focus of BMP implementation. BMPs such as perimeter controls, although required by the *Storm Water Standards* (City of San Diego 2012), Section 5.1, may be infeasible in roadways. Likewise, storm drain inlet protection may cause flooding or ponding hazards. Storm drain inlets located within and downstream of the project should be covered during dry weather. If a ponding hazard is anticipated, the inlet protection may be removed during rain events. However, it should be ensured that pollutants from the jobsite will not discharge to the unprotected inlets via good housekeeping (i.e., thorough street sweeping, stockpile control, etc.) and upstream BMPs, such as

installing gravel bag check dams in the gutter upstream of the drain to slow the velocity of runoff and pre-filter before reaching the drain. If no ponding hazard exists, block and gravel inlet filters and compost sock filters, which allow for moderate runoff flow-through (certain types of compost socks may also filter metals and oil/grease) are recommended.

Sediment control BMPs that require trenching and backfilling (i.e., fiber rolls and silt fence) are not included as optional BMPs in this template, since trenching and backfilling would not be possible in roadways. Gravel bag barriers and compost socks do not require trenching/backfilling and may be used in roadways. Gravel bags and fiber rolls should be stacked if necessary to capture the appropriate volume of material or storm water and they should be turned upslope at the ends to ensure runoff does not flow around the BMP. Sand bags are not recommended; if the bag is compromised, the sand can be a pollutant source.

Trenches are to be covered with metal plates, compacted cold mix patch, or other material and loose construction and landscaping materials, including stockpiles, must be covered and bermed at the end of each work day. The stockpile shall not be located in the gutter. Exposed areas shall be inspected frequently and if signs of erosion are observed, additional BMPs shall be implemented. Schedule and/or phase the project to avoid construction in the rainy season and to expose as little soil as possible at any one time. Additional protection is required if work is done within the rainy season and prior to a rain event in the dry season.

Year-round protection of waterways and sensitive areas is required. The *Storm Water Standards* (City of San Diego 2012), Section 5.1.2 requires preserving natural hydraulic features and riparian area buffers where possible. Gravel bags and/or compost socks can be used to protect resources, such as water bodies, wetlands, or other sensitive area adjacent to the site.

Sediment tracking must be controlled to comply with performance standards from the *Storm Water Standards* (City of San Diego 2012), Section 5.1. If applicable, construction site entrance/exit(s) should be stabilized if sediment tracking is expected to occur; shaker plates or similar may be used. The entrance/exit(s) should be designed so that vehicles and equipment cannot be driven around the stabilization measures. Roads 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 6
Erosion and Sediment Control BMPs

Best Management Practices	References		Check Applicable BMP
	CASQA BMP	Caltrans BMP	
Scheduling/Phasing Construction	EC-1	SS-1	☐
Gravel Bag Barriers	SE-6	SC-6	☐

Table 6 (Continued)
Erosion and Sediment Control BMPs

Best Management Practices	References		Check Applicable BMP
	CASQA BMP	Caltrans BMP	
Compost Socks and Berms	SE-13	-	☐
Check Dams	SE-4	SC-4	☐
Storm Drain Inlet Protection	SE-10	SC-10	☐
Construction Entrance/Exit Stabilization	TC-1	TC-1	☐
Street Sweeping and Vacuuming	SE-7	SC-7	☐
Manage Soil Stockpiles	WM-3	WM-3	☐
Describe any additional erosion and sediment control BMPs to be implemented:			
Describe where erosion and sediment control BMPs will be implemented/installed:			

2.2 RUN-ON AND SITE STORM WATER MANAGEMENT CONTROLS

All run-on entering the jobsite and runoff that discharges off the jobsite, must be managed to prevent contact with pollutants. Run-on and site storm water management BMPs are provided in Table 7. Run-off from the jobsite must be directed away from all disturbed areas. If runoff or dewatering operation discharges are concentrated and discharging to an unpaved area, the velocity must be controlled using outlet protection. 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 may be used to reduce velocity of concentrated flows and trap sediment.

Table 7
Run-On and Site Storm Water Management BMPs

Best Management Practices	References		Check Applicable BMP
	CASQA BMP	Caltrans BMP	
Divert Run-on from Surrounding Areas	EC-9, SE-6, SE-13	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	☐

Table 7 (Continued)
Run-On and Site Storm Water Management BMPs

Best Management Practices	References		Check Applicable BMP
	CASQA BMP	Caltrans BMP	
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:			

2.3 MATERIALS AND WASTE MANAGEMENT CONTROLS

BMPs must be installed to control all construction and waste materials. Additionally, construction-related materials, spills, and residues must be prevented from entering the MS4. Materials and waste management BMPs are provided in Table 9–12. Keep an inventory of construction materials that will be used outdoors and exposed to precipitation, other than those designed for this purpose (i.e., poles, bricks, etc.). Designate areas for material 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 construction materials to precipitation.

2.3.1 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 the contractor receives spill prevention, control, and reporting training. Ample spill control materials should be stored at the jobsite. Significant spills must be reported to the City Enforcement Agency within 24 hours.

Table 8
Spill Control BMPs

Best Management Practices	References		Check Applicable 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:			

2.3.2 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. 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.

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. Vacuuming of concrete slurry needs to take place immediately during the saw cutting process. Liquid waste that discharges from the site is considered an illicit discharge; BMPs must be implemented to prevent them.

Install secondary containment for portable restrooms to prevent leaks. Portable restrooms must be located away from storm water conveyance features (i.e. 50 feet minimum from storm drain inlet) and vehicle/equipment traffic.

Table 9
Waste Management BMPs

Best Management Practices	References		Check Applicable 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:			

2.3.3 Material Storage and Handling

Manage and store construction 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 saw 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 10
Material Storage and Handling BMPs

Best Management Practices	References		Check Applicable 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	☐
Describe any additional material storage and handling BMPs to be implemented:			
Describe where material storage and handling BMPs will be implemented:			

2.3.4 Vehicle and Equipment Management

Vehicle and equipment management BMPs are needed if these will be used, fueled, maintained, and/or parked at the jobsite. Storage, service, cleaning, and maintenance areas for vehicles and equipment shall be identified with signage and fully contained. 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 11
Vehicle and Equipment Management BMPs

Best Management Practices	References		Check Applicable 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:			

2.4 NON-STORM WATER MANAGEMENT CONTROLS

Non-storm water discharges are defined as any discharges to the storm water conveyance system that are not entirely composed of storm water. Non-storm water management BMPs are provided in Table 12. 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. Water line breaks should be repaired as soon as possible. Vehicle and equipment cleaning should be performed off-site.

Hydrostatic discharge testing shall comply with the requirements of Order No. R9-2010-0003. All testing results for pH and chlorine shall be logged in Appendix F for discharge events that exceed or equal 325,850 gallons per day. In addition, non-storm water discharges (i.e. hydrostatic testing, potable water, etc.) to Areas of Special Biological Significance (ASBS) is prohibited as defined in Order No. R9-2010-0003. Discharges shall be located a sufficient distance from such designated areas to assure maintenance of natural water quality conditions in these areas. If discharging to the sanitary sewer within the ASBS, a Request for Authorization must be submitted to the City Public Utilities Department for review and approval.

Excess water that is drained from an existing water main that results in the comingling of dirt and water as a result from a "cut and plug" or similar operation cannot be discharged directly into a storm drain inlet without proper treatment and/or appropriate construction BMPs. This is a case by case scenario which will need to be approved by the RE. Use Table 13 below to identify and describe the anticipated means and methods of how to eliminate/prevent the non-storm water discharge during a "cut and plug."

Dewatering uncontaminated (i.e., free of sediment or any other pollutant) groundwater 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 12
Non-Storm Water Management BMPs

Best Management Practices	References		Check Applicable 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	☐
Cut and Plug or Similar Operation? Yes ☐ No ☐ **If Yes, please describe BMP below in Boxes 2 and 3**			
1. If no BMPs were selected, explain the rationale:			
2. Describe any additional non-storm water management BMPs to be implemented:			
3. Describe where non-storm water management BMPs will be implemented:			

2.5 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 13. Such particulates can include sediment, nutrients, trash, metals, bacteria, oil/grease, and organics. Ensure a water truck is available while construction activities are being performed, especially when soil and stockpiled material is being handled. Spray exposed soils with water or soil binder via water truck to ensure construction materials are not discharged through the air. Do not perform activities that may discharge particulates on windy days.

Table 13
Particulate and Dust Control BMP

Best Management Practices	References		Check Applicable BMP
	CASQA BMP	Caltrans BMP	
Wind Erosion Control	WE-1	WE-1	☐
Describe any additional particulate and dust control BMPs to be implemented:			
Describe where particulate and dust control BMPs will be implemented:			

2.6 FINAL STABILIZATION

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

- Final stabilization has been reached by one of the following:
  - Where no vegetation is present prior to construction, the site is returned to its original line and grade and/or compacted to achieve stabilization and the street is to have its final treatment (i.e. AC overlay, slurry seal, etc.); or
  - In disturbed areas that were vegetated prior to construction activities, the area disturbed must be re-established to a uniform vegetative cover equivalent to 70 percent coverage of the preconstruction vegetative conditions; or
  - Where preconstruction vegetation covers less than 100 percent of the surface, such as in arid areas, the 70 percent coverage criteria are adjusted as follows: if the preconstruction vegetation covers 50 percent of the ground surface, 70 percent of 50 percent (.70 X .50 =.35) would require 35 percent total uniform surface coverage; or
  - Equivalent stabilization measures have been employed. These measures include, but are not limited to, the use of such BMPs as blankets, reinforced channel liners, soil cement, fiber matrices, geotextiles, or other erosion resistant soil coverings or treatments.
- The site will not pose any additional sediment discharge risk than it did prior to the commencement of construction activity.
- There is no potential for construction-related storm water pollutants to be discharged into site runoff.
- Construction materials, temporary BMPs, and wastes have been removed from the site.
- Post-construction BMPs, if required, have been effectively implemented.

Table 14
Final Stabilization BMP

Best Management Practices	References		Check Applicable BMP
	CASQA BMP	Caltrans BMP	
Final Stabilization	-	-	☐
Describe final stabilization BMPs:			
Describe where final stabilization BMPs will be installed:			

3.0 BEST MANAGEMENT PRACTICE MAINTENANCE AND INSPECTION

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

3.1 BMP MAINTENANCE

Best management practice maintenance requirements are listed in Table 15. The following subsections describe the inspection program responsibilities and requirements.

Table 15
BMP Maintenance Requirements

Best Management Practices	Maintenance Requirements
Scheduling/Phasing Construction	Periodically review construction schedule to determine if activity during the rainy season can be minimized.
Gravel Bag Barriers	Replace as bags degrade or as needed. Remove sediment accumulated to 1/3 the bag height.
Compost Socks and Berms	Replace compromised socks. Remove sediment accumulated to 1/3 the sock height.
Check Dams	Remove accumulated sediment and debris when it reaches 1/3 the height of the dam.
Storm Drain Inlet Protection	Repair compromised protection and any accumulated sediment and debris. Removal of inlet protection is required before rain events in order to prevent flooding hazards.
Construction Entrance/Exit Stabilization	Install prior to construction start; replace gravel when surface voids are visible; remove post-construction.
Street Sweeping and Vacuuming	Implement as soon as possible upon sediment deposition. Immediately vacuum concrete slurry from sawcutting.
Manage Soil Stockpiles	Replace compromised covers and berms. Ensure stockpiled material is within the bermed area and not in the gutter.
Divert Run-on from Surrounding Areas	Ensure diversions are effective.
Outlet Protection	Remove accumulated sediment and debris when observed in protection devices.
Spill Prevention and Control	Ensure ample supplies of spill cleanup materials are stored in the contractor's staging area, trailer and/or within vehicles and equipment.
Reporting Significant Spills	Ensure the contractor 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.

Table 15 (Continued)
BMP Maintenance Requirements

Best Management Practices	Maintenance Requirements
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.
Contaminated Soil Management	Ensure contaminated soil is legally disposed of at the end of the work day. Otherwise it is be covered and bermed at all times and will not have the potential to contact storm water or groundwater.
Sanitary Waste Management	Contractor to conduct frequent inspection and maintenance.
Concrete Waste Management	Repair concrete washout when compromised.
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 stockpiled waste is covered and bermed at all times, unless actively using.
Manage Material Stockpiles	Replace compromised covers and berms. Ensure stockpiled material is within the bermed area. Store ample supplies of cover material and fiber rolls on site.
Material Storage and Handling	Store ample supplies of spill cleanup materials in the contractor's trailer or staging area; clean and organize storage areas; repair perimeter controls, inlet protection, containment structures, covers, and liners; spot check materials use throughout the construction period to ensure proper practices are utilized.
Paving and Grinding Operations	Arrange for regular collection of paving wastes. Inspect storm drains near paving to ensure their cover.
Concrete Management	Remove and dispose of excess hardened concrete as needed.
Vehicle and Equipment Fueling	Resupply spill cleanup materials; clean up spills, properly dispose of contaminated soil and clean up materials.
Vehicle and Equipment Maintenance	Ensure vehicles and equipment are inspected for leaks; prohibit washing vehicles on the jobsite.
Illicit Connection/Discharge Control	Prohibit contractors of illicit connections or discharge and disposing of debris on jobsite.

Table 16 (Continued)
BMP Maintenance Requirements

Best Management Practices	Maintenance Requirements
Dewatering Operations	Ensure dewatering is not causing erosion, discharges do not contain pollutants, and activities are continuously monitored. A separate permit is required for dewatering discharge entering sanitary sewer and/or storm drain (per Section 2.4).
Final Stabilization (70% of original vegetation cover)	N/A

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* (City of San Diego 2012) 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:

- Implementing all elements of the WPCP;
- 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;
- Informing the proper City representatives of non-compliance, such as unauthorized discharges, illicit connections or dumping activities, and immediately correcting the problems;
- Overseeing final stabilization; and
- Ensuring WPCP availability and retaining records.

Table 16 provides the name and contact information for the QCP and any additional persons designated by the QSP.

Table 16
Qualified Contact Person and Designees

	Name	Company/ Organization	Contact
Qualified Contact Person			**Phone No.:** **Emergency No.:** **Email:**
Additional Persons Designated by the Qualified Contact Person			**Phone No.:** **Emergency No.:** **Email:**
			Phone No.: **Emergency No.:** **Email:**

3.2.2 Self-Inspections

The QCP or his/her designees is required to perform self-inspections, as per the *Storm Water Standards* (City of San Diego 2012). The objectives are to:

- Demonstrate the site is in compliance with the City's *Storm Water Standards* (2012) 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* (City of San Diego 2012) 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;
- During the rainy season, daily;
- 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 and submitted to the REfor review. All self-inspections must be documented using a checklist (generated and formatted by the QCP or designee). The self-inspection checklist 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. All completed checklists shall be included in Appendix F of this WPCP.

3.2.3 Recordkeeping and Reports

Upon final acceptance by the RE, the QCP shall submit the following items to the RE:

- Completed site inspection checklists;
- Training documentation (if any);
- Discharge reports (if any); and
- WPCP and amendments (if any);
- City-issued corrective notices (if any).

4.0 REFERENCES

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

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

City of San Diego Municipal Code
Section 43.03 Storm Water Discharge and Management Control. Available online at http://docs.sandiego.gov/municode/MuniCodeChapter04/Ch04Art03Division03.pdf

City of San Diego
2012 *Storm Water Standards*. Available online at http://www.sandiego.gov/thinkblue/pdf/stormwatermanual.pdf. January 20.

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 BMP PLAN

B CERTIFICATION

Appendix B

This WPCP must be certified by the Contractor.

The applicant 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 activities. I certify that the BMPs selected on this form will be implemented to minimize the potentially negative impacts of this project's construction 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.			
Contractor Name:		**Date:**	Preparation Date
Contractor Signature:			

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

D CONSTRUCTION SCHEDULE

E ADDITIONAL BMPS REQUIRED FOR WATER QUALITY SENSITIVE AREAS

F HYDROSTATIC DISCHARGE REQUIREMENTS CERTIFICATION

Hydrostatic Discharge Requirements Certification (Discharge Events ≥ 325,850 gpd)

All discharge activities related to this project comply with the Regional Water Quality Control Board (RWQCB) Order No. R9-2010-0003, General Permit for Discharges of Hydrostatic Test Water and Potable Water to Surface Water and Storm Drains as referenced by (http://www.waterboards.ca.gov/sandiego/board_decisions/adopted_orders/2010/R9-2010-0003.pdf), and as follows:

Discharged water has been dechlorinated to below **0.1** *(mg/l)* level; and effluent has been maintained between **6** and **9** *(pH)* based on:

Event #	Discharge Date	Item Tested	Duration	Description of the Proposed Discharge	Method and Test Result	*Is Discharge Within Limits?* YES	NO	Comment/Action Taken
		Chlorine				☐	☐	
		pH				☐	☐	
		Chlorine				☐	☐	
		pH				☐	☐	
		Chlorine				☐	☐	
		pH				☐	☐	
		Chlorine				☐	☐	
		pH				☐	☐	

Qualified Personnel Conducting Tests (Print Name): | **SAP No.(s):**

***Signature:** | **Project Name:**

** By signing, I hereby certify and affirm under penalty of perjury that all of the statements and conditions for hydrostatic discharge events are correct.*

Have any thresholds been exceeded? Per Order No. R9-2010-0003, would this be a reportable discharge and must be reported **within 24 hours** of the event? [Reportable discharge would include violation of maximum gallons per day, any upset which exceeds any effluent limit]

G SELF-INSPECTION CHECKLISTS

H ADDITIONAL APPENDIX