

STORMWATER POLLUTION PREVENTION PLAN

for

Ascon Landfill Site Final Remedy

RISK LEVEL 2

WDID Number:

8 30C385069

Legally Responsible Person:

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Start of Construction: **3 December 2018** Completion of Construction: **11 April 2022**

Project Website:

www.asconhb.com

Table of Contents

Table of Contents	i
Qualified SWPPP Developer (QSD).....	iv
Amendment Log	v
Section 1 SWPPP Requirements	1
1.1 INTRODUCTION	1
1.2 PERMIT REGISTRATION DOCUMENTS.....	2
1.3 SWPPP AVAILABILITY AND IMPLEMENTATION	2
1.4 SWPPP AMENDMENTS.....	2
1.5 RETENTION OF RECORDS	3
1.6 REQUIRED NAL EXCEEDANCE REPORTING	4
1.7 ANNUAL REPORT	4
1.8 CHANGES TO PERMIT COVERAGE.....	4
1.9 NOTICE OF TERMINATION	4
Section 2 Project Information.....	5
2.1 SITE DESCRIPTION	5
2.1.1 Existing Conditions	5
2.1.2 Existing Drainage	6
2.1.3 Stormwater Run-on from Offsite Areas	7
2.1.4 Geology and Groundwater.....	7
2.2 PROJECT DESCRIPTION.....	8
2.2.1 Findings of the Construction Site Sediment and Receiving Water Risk Determination	9
2.2.2 Construction Schedule	11
2.2.3 Potential Construction Activity and Pollutant Sources.....	11
2.2.4 Identification of Non-Stormwater Discharges	11
2.2.5 Required Site Map Information	12
2.2.6 Remediated Condition	13
2.3 PERMITS AND GOVERNING DOCUMENTS	13
Section 3 Best Management Practices	14
3.1 SCHEDULE FOR BMP IMPLEMENTATION.....	14
3.2 EROSION AND SEDIMENT CONTROL	15
3.2.1 Erosion Control	15
3.2.2 Sediment Controls	19
3.3 NON-STORMWATER CONTROLS AND WASTE AND MATERIALS MANAGEMENT	22

3.3.1	Non-stormwater Controls	22
3.3.2	Materials Management and Waste Management.....	25
3.4	POST-CONSTRUCTION STORMWATER MANAGEMENT MEASURES	31
Section 4	BMP Inspection, Maintenance, and Rain Event Action Plans	32
4.1	BMP INSPECTION AND MAINTENANCE.....	32
4.2	RAIN EVENT ACTION PLANS.....	32
Section 5	Training	34
Section 6	Responsible Parties and Operators	35
6.1	RESPONSIBLE PARTIES.....	35
6.2	CONTRACTOR LIST.....	36
Section 7	Construction Site Monitoring Program	37
7.1	PURPOSE.....	37
7.2	MONITORING REQUIREMENTS.....	37
7.3	WEATHER AND RAIN EVENT TRACKING.....	37
7.3.1	Weather Tracking	37
7.3.2	Rain Gauge Readings	38
7.4	VISUAL MONITORING AND SAMPLING EXCEPTIONS.....	38
7.5	VISUAL MONITORING.....	38
7.5.1	Routine Observations and Inspections.....	39
7.5.2	Rain-Event Triggered Observations and Inspections	40
7.5.3	Visual Monitoring Locations.....	41
7.5.4	Visual Monitoring Documentation Procedures	44
7.5.5	Visual Monitoring Follow-up and Reporting	44
7.6	WATER QUALITY SAMPLING AND ANALYSIS.....	44
7.6.1	Sampling and Analysis of Stormwater Discharges for pH and Turbidity	45
7.6.2	Sampling and Analysis of Stormwater Discharges for Non-Visible Pollutants	47
7.6.3	Sampling and Analysis of Non-stormwater Discharges	51
7.6.4	Sampling and Analysis Plan for pH, Turbidity, and Suspended Sediment Concentration in Receiving Water	52
7.6.5	Sampling and Analysis Plan for Other Pollutants Required by the Regional Board.....	52
7.7	ACTIVE TREATMENT SYSTEM (ATS) MONITORING.....	53
7.8	BIOASSESSMENT MONITORING	53
7.9	WATERSHED MONITORING OPTION	53
7.10	QUALITY ASSURANCE QUALITY CONTROL	53
7.10.1	Field Logs.....	53
7.10.2	Clean Sampling Techniques	53
7.10.3	Chain of Custody	54

7.10.4	QA/QC Samples	54
7.10.5	Data Verification	55
7.11	RECORDS RETENTION.....	56
CSMP Attachment 1:	Example Forms.....	57
CSMP Attachment 2:	Monitoring Records.....	63
CSMP Attachment 3:	Field Instrument Manuals.....	64
Section 8	References	65
<i>Appendix A:</i>	<i>Calculations.....</i>	<i>66</i>
<i>Appendix B:</i>	<i>Site Maps</i>	<i>68</i>
<i>Appendix C:</i>	<i>Permit Registration Documents.....</i>	<i>69</i>
<i>Appendix D:</i>	<i>SWPPP Amendment Certifications.....</i>	<i>70</i>
<i>Appendix E:</i>	<i>Submitted Changes to PRDs.....</i>	<i>72</i>
<i>Appendix F:</i>	<i>Construction Schedule.....</i>	<i>73</i>
<i>Appendix G:</i>	<i>Construction Activities, Materials Used, and Associated Pollutants</i>	<i>74</i>
<i>Appendix H:</i>	<i>CASQA Stormwater BMP Handbook Portal: Construction Fact Sheets</i>	<i>75</i>
<i>Appendix I:</i>	<i>BMP Inspection Form</i>	<i>76</i>
<i>Appendix J:</i>	<i>Project Specific Rain Event Action Plan Template</i>	<i>82</i>
<i>Appendix K:</i>	<i>Training Reporting Form</i>	<i>84</i>
<i>Appendix L:</i>	<i>Responsible Parties</i>	<i>85</i>
<i>Appendix M:</i>	<i>Contractors and Subcontractors</i>	<i>86</i>
<i>Appendix N:</i>	<i>Construction General Permit</i>	<i>87</i>

Qualified SWPPP Developer (QSD)

Approval and Certification of the Stormwater Pollution Prevention Plan

Project Name: *Ascon Landfill Site Final Remedy*

Project Number: *HC1457*

“This Stormwater Pollution Prevention Plan and Attachments were prepared under my direction to meet the requirements of the California Construction General Permit (SWRCB Orders No. 2009-009- DWQ as amended by Order 2010-0014-DWQ). I certify that I am a Qualified SWPPP Developer in good standing as of the date signed below.”



10/19/18

QSD Signature

Date

Misty Steele

#1365

QSD Name

QSD Certificate Number

Senior Engineer, Geosyntec Consultants

(562) 257-1401

Title and Affiliation

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Email

Amendment Log

Project Name: Ascon Landfill Site Final Remedy

Waste Discharge Identification (WDID): 8 30C385069

Amendment No.	Date	Section No.	Requested By	Brief Description of Amendment (include reasons for change, site location, and BMP modifications)	Prepared and Approved By:
1	7/26/19	Section 7.0 (CSMP)	Santa Ana Regional Water Quality Control Board	<ul style="list-style-type: none"> - Update BMPs used to reflect what has been implemented at the Site to date. - Revise Construction Site Monitoring Program to include additional non-visible pollutant sampling and analysis at discharge locations identified in the SWPPP and to update site drainage characteristics. - Add potential discharge locations north and south of Magnolia gate (S-1N and S-1S). - Revise Site Map to reflect current site conditions and construction activities. 	<p>Prepared By: Misty Steele</p> <p>Approved By: Ian Robb</p>
2	1/28/2020	Sections 2 (Project Description) and 7 (CMSP)	Department of Toxic Substances Control	<ul style="list-style-type: none"> - Update BMPs used to reflect what has been implemented at the Site to date. - Revise Construction Site Monitoring Program to update Site drainage characteristics and revise methods for non-visible pollutant laboratory analysis. - Remove potential discharge locations north and south of Magnolia gate (S-1N and S-1S) due to additional BMPs that have been implemented in this area. - Revise Site Map to reflect current site conditions and construction activities. - Update Construction End Date based on most recent estimates of work completion. 	<p>Prepared By: Misty Steele</p> <p>Approved By: Ian Robb</p>

Section 1 SWPPP Requirements

1.1 INTRODUCTION

The Ascon Landfill Site Final Remedy Project (Project) will serve as the final remedial action and closure activity for the Ascon Landfill Site (Site). The Site is approximately 38 acres and is located at 21641 Magnolia Street, Huntington Beach, California. The property is owned by Cannery Hamilton Properties, LLC (the LRP) and managed and maintained by the Ascon Landfill Site Responsible Parties¹ (RPs), the construction Project proponents, as an inactive industrial solid waste landfill. The Site location is shown on Figure 1 in Appendix B.

This Stormwater Pollution Prevention Plan (SWPPP) is designed to comply with California's General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (General Permit) Order No. 2009-0009-DWQ as amended by Order No. 2010-0014-DWQ (NPDES No. CAS000002) issued by the State Water Resources Control Board (State Water Board). This SWPPP has been prepared in accordance with the **Risk Level 2** requirements included in the General Permit and following the SWPPP Template provided on the California Stormwater Quality Association Stormwater *Best Management Practice Handbook Portal: Construction* (CASQA, 2009). In accordance with the General Permit, Section XIV, this SWPPP is designed to address the following:

- Pollutants and their sources, including sources of sediment associated with construction, construction site erosion and other activities associated with construction activity, are controlled;
- Where not otherwise required to be under a Regional Water Quality Control Board (Regional Water Board) permit, all non-stormwater discharges are identified and either eliminated, controlled, or treated; and
- Site Best Management Practices (BMPs) are effective and result in the reduction or elimination of pollutants in stormwater discharges and authorized non-stormwater discharges from construction activity to the Best Available Technology/Best Control Technology (BAT/BCT) standard.

Calculations applicable to this Project are included in Appendix A.

¹ The RPs are Chevron U.S.A. Inc., Texaco Inc. (Chevron U.S.A. Inc. and Texaco Inc. are now considered a single party as they are wholly-owned subsidiaries of Chevron Corp.), Conoco Inc., Phillips Petroleum Company (Conoco Inc. and Phillips Petroleum Company are now combined as ConocoPhillips Company), ExxonMobil Corp., Shell Oil Company, Atlantic Richfield Company (ARC), The Dow Chemical Company, TRW (now Northrop Grumman Systems Corporation), and Southern California Edison Company. Two of the RPs, Chevron and ConocoPhillips, created the limited liability corporation called Cannery Hamilton Properties, LLC (CHP) to purchase the Site, and CHP is the current Site owner.

1.2 PERMIT REGISTRATION DOCUMENTS

Required Permit Registration Documents (PRDs) will be submitted to the State Water Board via the Stormwater Multiple Application and Report Tracking System (SMARTS) by the Legally Responsible Person (LRP). The Project-specific PRDs include:

- Notice of Intent (NOI);
- Risk Assessment (Construction Site Sediment and Receiving Water Risk Determination);
- Annual Fee; and
- Signed Certification Statement (LRP Certification is provided electronically with SMARTS PRD submittal).

A copy of the submitted PRDs will also be kept in Appendix C along with the Waste Discharge Identification (WDID) confirmation.

1.3 SWPPP AVAILABILITY AND IMPLEMENTATION

The discharger will make the SWPPP available at the construction site during working hours (see Section 7.4 of CSMP for working hours) while construction is occurring and will be made available upon request by a State or Municipal inspector.

The SWPPP was implemented concurrently with the start of ground disturbing activities and the second amendment was implemented at the time of certification.

1.4 SWPPP AMENDMENTS

The SWPPP will be revised:

- If BMPs do not meet the objectives of reducing or eliminating pollutants in stormwater discharges;
- When there is a change in construction or operations which may affect the discharge of pollutants to surface waters, groundwater(s), or a municipal separate storm sewer system (MS4);
- When there is a change in the Project duration that changes the Project's risk level; or
- When deemed necessary by the Qualified SWPPP Developer (QSD). The QSD has determined that the changes listed in Table 1.1 can be field determined by the Qualified SWPPP Practitioner (QSP). All other changes will be made by the QSD as formal amendments to the SWPPP.

The following items will be included in each amendment:

- Who requested the amendment;
- The location of proposed change;
- The reason for change;

- The original BMP proposed, if any; and
- The new BMP proposed, if applicable.

Amendments will be logged at the front of the SWPPP, and certification will be kept in Appendix D. The SWPPP text will be revised, replaced, and/or hand annotated as necessary to properly convey the amendment. SWPPP amendments must be made by a QSD. The following changes have been designated by the QSD as "to be field-determined" and constitute minor changes that the QSP may implement based on field conditions.

Table 1.1 List of Changes to be Field Determined

Candidate changes for field location or determination by QSP ⁽¹⁾	Check changes that can be field-located or field-determined by QSP
Increase quantity of an Erosion or Sediment Control Measure	☒
Relocate/Add stockpiles or stored materials	☒
Relocate or add toilets	☒
Relocate vehicle storage and/or fueling locations	☒
Relocate areas for waste storage	☒
Relocate water storage and/or water transfer location	☒
Changes to access points (entrance/exits)	☒
Change type of Erosion or Sediment Control Measure	☒
Changes to location of erosion or sediment control	☒
Minor changes to schedule or phases	☒
Changes in construction materials	☒

(1) Any field changes not identified for field location or field determination by QSP must be approved by QSD

1.5 RETENTION OF RECORDS

Paper or electronic records of documents required by this SWPPP will be retained for a minimum of three years from the date generated or date submitted, whichever is later, for the following items:

- A copy of the SWPPP;
- All required PRDs;
- Inspection reports;
- Compliance certifications and annual reports;
- Non-compliance reports;

- Training records; and
- Sampling data.

These records will be available at the Site until construction is complete. Records assisting in the determination of compliance with the General Permit will be made available within a reasonable time to the Regional Water Board, State Water Board or U.S. Environmental Protection Agency (EPA) upon request. Requests by the Regional Water Board for retention of records for a period longer than three years will be adhered to.

1.6 REQUIRED NAL EXCEEDANCE REPORTING

If a Numeric Action Level (NAL) exceedance occurs, the QSP will immediately notify Tamara Zeier and Steve Howe of Project Navigator, Ltd., and the LRP will submit a report electronically to the Regional Water Board within 10 days of identification of the exceedance using SMARTS. Corrective measures will be implemented immediately following the discharge during which the exceedance occurred.

Reporting requirements for NAL exceedances are discussed in Section 7.6.1.4.

1.7 ANNUAL REPORT

The General Permit requires that permittees prepare, certify, and electronically submit an Annual Report no later than September 1st of each year. Reporting requirements are identified in Section XVI of the General Permit. Annual reports will be filed in SMARTS and in accordance with information required by the on-line forms.

1.8 CHANGES TO PERMIT COVERAGE

The General Permit allows for the reduction or increase of the total acreage covered under the General Permit when: a portion of the Project is complete and/or conditions for termination of coverage have been met; when ownership of a portion of the Project is purchased by a different entity; or when new acreage is added to the Project.

Modified PRDs will be filed electronically within 30 days of a reduction or increase in total disturbed area if a change in permit-covered acreage is to be sought. The SWPPP will be modified appropriately and will be logged at the front of the SWPPP, and certification of SWPPP amendments are to be kept in Appendix D. Updated PRDs submitted electronically via SMARTS can be found in Appendix E.

1.9 NOTICE OF TERMINATION

A Notice of Termination (NOT) must be submitted electronically by the LRP via SMARTS to terminate coverage under the General Permit. The NOT must include a final Site Map and representative photographs of the Project site that demonstrate final stabilization has been achieved. The NOT will be submitted within 90 days of completion of construction. The Regional Water Board will consider a construction site complete when the conditions of the General Permit, Section II.D, have been met.

Section 2 Project Information

2.1 SITE DESCRIPTION

The Ascon Landfill Site Final Remedy Project encompasses the entire Ascon Landfill Site, approximately 38 acres, and is located at 21641 Magnolia Street in Huntington Beach, California, at the southwest corner of Hamilton Avenue and Magnolia Street. The Site is located approximately ½-mile north of Pacific Coast Highway (CA-1) and approximately ½ mile north of Huntington Beach State Beach. The Site is located in an area of residential, recreational, commercial, and industrial land use at 33.648605° North, 117.972963° West, and is identified on Figure 1 in Appendix B.

Along Magnolia Street and Hamilton Avenue, the Site is partitioned by a setback approximately 20 feet from the current fence line along Magnolia Street and approximately 30 feet from the current fence line along Hamilton Avenue. The area outside this setback was dedicated to the City of Huntington Beach (City) and is hereinafter referred to as the City easement².

2.1.1 Existing Conditions

Historically, the Site was used as an industrial and oil field waste disposal facility. The Site, which no longer accepts waste, currently consists of four visible impoundments (referred to as Lagoons 1-2, and 3 through 5) and one liner-covered pit (Pit F). The lagoons, including former lagoons, their associated berms, and Pit F, occupy approximately 36 acres of the Site and contain industrial waste materials from oil well drilling and construction debris within their earthen embankments. Several former pits and lagoons were, over the course of approximately 30 years, filled in or covered by imported soil and construction debris. These areas currently appear as solid ground with scattered vegetative or gravel covering. During the second half of 2017, the southern portion of Lagoon 5 was solidified with Portland cement to provide access to two historical oil wells so they could be abandoned to current Division of Oil and Gas and Geothermal Resources (DOGGR) prior to the start of this Project. Approximately 98% of the Site is pervious. Potential chemical hazards in soil and groundwater at the Site include:

- Arsenic;
- Benzene;
- Benzidine;
- Benzo(a)pyrene;
- Bis(2-ethylhexyl) phthalate;
- Chlordane;
- Chromium (VI);
- Copper;
- Dibenz(a,h)anthracene;
- Dieldrin;
- Ethylbenzene;

² The City easement is also considered the City Right of Way.

- Heptachlor Epoxide;
- Lead;
- Methane;
- Naphthalene;
- Phenanthrene;
- Polychlorinated biphenyl (PCBs) (Aroclor 1260); and
- Thallium.

2.1.2 Existing Drainage

The Site is elevated by an average of approximately 15 feet relative to the immediate surrounding areas. The elevation of the Site ranges from 5 to 27 feet above mean sea level (msl). Five distinct drainage areas have been identified at the Site as discussed in Section 7.5.3.1.

Surface drainage for the non-lagoon areas generally flows towards the southeast through vegetated swales and corrugated pipe into a detention basin located in the southeast corner of the Site, though there are some exceptions to this general drainage pattern:

- The northwest corner (DA3) has been partially excavated in preparation for construction of the northwest detention basin. This area has been stabilized with a long-term, bentonite-derived, sprayed on cover to prevent stormwater from contacting site-derived material and is nearly completely surrounded by a filter-fabric gravel bag berm. Additional controls in this area include a silt fence and 16-foot PVC vinyl barrier fence supported by two rows of concrete k-rail. Stormwater discharge from this area is not anticipated. Precipitation that falls onto the bentonite-derived, sprayed on cover in this area is expected to pond and eventually evaporate or will be managed otherwise onsite.
- Lagoon 5 and the stabilized slopes along the northern and northwestern perimeter of the Site (DA3) drain north toward Hamilton Avenue. Silt fence is installed at both the top and bottom of slopes in this area. Disturbed areas are stabilized with hydraulically applied mulch or a long-term, bentonite derived, sprayed on cover to prevent stormwater from contacting site-derived material. Both the north and northwest slopes have toe drains that collect drainage and seepage water, which is pumped out, as needed, and managed onsite. Stormwater discharge from this area is not anticipated.
- Stormwater that falls in DA4 flows east toward Magnolia Street. Disturbed areas in DA4 are stabilized with a combination of hydraulically applied mulch, a long-term, bentonite derived, sprayed on cover, fiber roll, and/or soil binders to minimize erosion from site-derived material. Additional controls along the eastern Site boundary include a shallow earthen berm, sandbags, silt fence, and 16-foot PVC vinyl barrier fence supported by two rows of concrete k-rail. Stormwater that ponds in localized depressions is pumped, as needed, to the southeast sedimentation basin (DA2) and discharged via the basin outlet at ALS-4. Stormwater discharge from this area is otherwise not anticipated.

- The stabilized slopes along the southwestern perimeter of the Site (DA5) drain west toward the adjacent property or ponds in the southwest corner of the Site. Stormwater does not contact disturbed material in this area.
- The stabilized slopes along the southern perimeter of the Site (DA5) drain toward the adjacent property. A gravel bag berm is installed along the southern property border to detain the minimal amount of runoff from the southern perimeter slopes.

Existing drainage patterns and stormwater conveyance systems are shown on Figure 2 in Appendix B.

2.1.3 Stormwater Run-on from Offsite Areas

In especially wet years and during large storm events, ponding has been observed in the southwest and southeast corners of the Site and along the southern and eastern property boundaries as a result of limited run-on from adjacent areas. Due to the Site's elevated grade relative to its surroundings, run-on does not come into contact with active construction areas or disturbed materials. Additional preventative measures, such as the installation of gravel or sand bag berms, will be used when excavating in areas known to be seasonally impacted by run-on and below the grade level of adjacent streets to prevent the occurrence of run-on. Scheduling of grading activities in these areas will also be avoided, when feasible, when large storms are predicted to reduce the potential for run-on to come into contact with active construction areas and disturbed materials.

2.1.4 Geology and Groundwater

The Site is located in the southwestern portion of the Coastal Plain geomorphology of Orange County, which is bordered by the Santa Ana Mountains on the east, the San Joaquin Hills to the southeast, and the Pacific Ocean to the south and west. The Site and the surrounding area are characterized by hydrologic soil group C, consisting chiefly of soils with a layer that impedes downward movement of water and/or have moderately fine to fine soil structure.

In the vicinity of the Site, groundwater is found in willow sandy units, referred to as the Semi-perched Aquifer, and a deeper sandy unit known as the Talbert Aquifer. Borings drilled throughout the Site generally indicate that the Site is underlain by a silty-clay soil layer which may significantly impede the infiltration of contaminants into deeper zones. The Talbert Aquifer occurs at a depth of about 70 feet below ground surface (bgs) and has limited beneficial use due to saltwater intrusion. The Site and its underlying aquifers are on the seaward side of the Talbert Water Injection Barrier, a line of wells along Ellis Avenue, an east-west street located approximately three miles to the north, that inject recycled potable water into the underlying aquifers to prevent seawater intrusion into the usable aquifers further inland. Due to the Site's location on the seaward side of this injection barrier, the underlying aquifers are not used as water resources, and there are no drinking water wells within 3 miles of the Site.

2.2 PROJECT DESCRIPTION

The Project will serve as the final remedial action and closure activity for the Site. In general, the Project incorporates the following activities:

- Excavation of Pit F;
- Excavation of the waste around the Site perimeter and City easement and reconsolidation within the Site;
- Installation and operation of a vapor collection and treatment system;
- Construction of an engineered cap over the reconsolidated waste;
- Construction of a surface water drainage system;
- On-going groundwater monitoring; and
- On-going perimeter vapor probe monitoring.

Prior to Project commencement, thirty-six (36) existing groundwater monitoring wells that could not be protected during the Project were abandoned (i.e., destroyed) using proper destruction methods in accordance with California Well Standards and as required by the Orange County Environmental Health Division.

The main components of the Project will be implemented in 14 general steps:

Step 1 – Mobilization & Site Setup: The Contractor will mobilize equipment, materials, and construction personnel to the Site and set up temporary facilities, controls, and utilities required to complete the Project, including an area for dry truck decontamination and installation of sediment perimeter controls (e.g., silt fence, gravel/sand bag berm, or k-rail).

Step 2 – Vegetation and Debris Clearing: The Contractor will clear existing vegetation from the Site within the limits of construction. Concrete, broken concrete structures, and piping encountered during clearing and excavation will be crushed and/or re-used onsite.

Step 3 – Pit F Excavation: A negative-pressure enclosure (tent) will be placed over Pit F to contain emissions for treatment. The waste material will be excavated using the slurry trench method and loaded into sealed bins located inside the tent. The slurry will solidify in the trench to backfill the excavation and support the placement of overlying soil and construction of the engineered cap.

Step 4 – Material Strengthening in Lagoons 4 and 5: The Contractor will construct a buttress along the northern and eastern boundaries of Lagoons 4 and 5 to facilitate the waste reconsolidation.

Step 5 – Waste Reconsolidation: Waste material located outside of the future engineered cap area will be excavated and reconsolidated within the Site beneath the final cap.

Step 6 – Cap Installation: An engineered cap will be constructed within the Site interior over existing and reconsolidated waste. The cap on the top deck will consist of a combination

of geomembrane, geocomposite, geonet, and imported clean soil. The side slope cap will consist of geonet and imported clean soil.

Step 7 – Vapor Treatment System: A vapor treatment system will be constructed along the western perimeter of the Site to extract and treat vapors from underneath the cap prior to discharging to the atmosphere, as necessary.

Step 8 – Surface Water Drainage System: A surface water drainage system will be constructed to divert stormwater from the top deck of the landfill into two detention basins located in the northwest and southeast corners of the Site.

Step 9 – Erosion and Sediment Control Implementation: Erosion and sediment control for the final cap will consist of a vegetated surface to mitigate erosion long-term. Fiber rolls will be installed after final cap construction to mitigate sediment transportation before sufficient vegetation has been established.

Step 10 – Installation of Hardscaping: Perimeter roads will consist of an aggregate base, and the two existing Site entrances will be concrete.

Step 11 – Perimeter Site Security Fence Installation: Site security fencing is planned to be installed three inches inside of the property line.

Step 12 – Vapor Monitoring Probe Installation: Soil vapor monitoring probes along each side of the approximately square shaped cap will be installed outside of the cap along the perimeter access road, with screens at approximately five feet below ground surface (i.e., above groundwater level).

Step 13 – Groundwater Well Installation: A total of four groundwater monitoring wells will be installed and utilized as part of the post-remedy long-term groundwater monitoring program.

Step 14 – Demobilization: The Contractor will demobilize equipment, materials, and temporary facilities from the Site.

The limits of grading are shown on Figure 2 in Appendix B. As of the date of this amendment, Steps 1, 2, and 4 have been completed.

2.2.1 Findings of the Construction Site Sediment and Receiving Water Risk Determination

A construction site risk assessment has been performed for the Project, and the resultant risk level is Risk Level 2.

The risk level was determined through the use of the default K and LS values provided by the SWRCB. The risk level is based on Project duration, location, proximity to impaired receiving waters, and soil conditions. A copy of the Risk Level determination submitted on SMARTS with the PRDs is included in Appendix C.

Table 2.1 and Table 2.2 summarize the sediment and receiving water risk factors and document the sources of information used to derive the factors.

Table 2.1 Summary of Sediment Risk

RUSLE Factor	Value	Method for establishing value	
R	141	EPA Soil Erosivity Calculator	
K	0.32	Default value provided by the SWRCB	
LS	1.22	Default value provided by the SWRCB	
Total Predicted Sediment Loss (tons/acre)			55
Overall Sediment Risk: Low Sediment Risk: < 15 tons/ acre Medium Sediment Risk: >= 15 and < 75 tons/acre High Sediment Risk: >= 75 tons/acre			<input type="checkbox"/> Low <input checked="" type="checkbox"/> Medium <input type="checkbox"/> High

Table 2.2 Summary of Receiving Water Risk

Receiving Water Name	303(d) Listed for Sediment Related Pollutant⁽¹⁾	TMDL for Sediment Related Pollutant⁽¹⁾	Beneficial Uses of COLD, SPAWN, and MIGRATORY⁽¹⁾
Pacific Ocean	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Overall Receiving Water Risk			<input checked="" type="checkbox"/> Low <input type="checkbox"/> High

⁽¹⁾ If yes is selected for any option, the Receiving Water Risk is High; TMDL is Total Maximum Daily Load.

Risk Level 2 sites are subject to both the narrative effluent limitations and numeric effluent standards. The narrative effluent limitations require stormwater discharges associated with construction activity to minimize or prevent pollutants in stormwater and authorized non-stormwater through the use of controls, structures and best management practices. Discharges from Risk Level 2 sites are subject to the Numeric Action Levels (NALs) for pH and turbidity shown in Table 2.3. This SWPPP has been prepared to address Risk Level 2 requirements (General Permit Attachment D).

Table 2.3 Numeric Action Levels

Parameter	Unit	Numeric Action Level Daily Average
pH	pH units	Lower NAL = 6.5 Upper NAL = 8.5
Turbidity	NTU	250 NTU

Additional requirements for sampling and analysis of non-visible pollutants are required by the Regional Water Board for this Project site and are discussed in Section 7.6.2.

2.2.2 Construction Schedule

The Site sediment risk was determined based on construction taking place between 3 December 2018 and 11 April 2022. Modification or extension of the schedule (start and end dates) may affect risk determination and permit requirements. The LRP will contact the QSD if the schedule changes during construction to address potential impact to the SWPPP. The estimated schedule for planned work can be found in Appendix F.

2.2.3 Potential Construction Activity and Pollutant Sources

Appendix G includes a list of construction activities and associated materials that are anticipated to be used onsite. These activities and associated materials could potentially contribute pollutants, other than sediment, to stormwater runoff.

The anticipated activities and associated pollutants were used in Section 3 to select the Best Management Practices for the Project. Location of anticipated pollutants and associated BMPs are shown on Figure 2 in Appendix B.

For sampling requirements for non-visible pollutants associated with construction activity, please refer to Section 7.6.2. For a full and complete list of onsite products that could become pollutants, refer to the Safety Data Sheets (SDS), which are retained onsite at the construction trailer.

2.2.4 Identification of Non-Stormwater Discharges

Non-stormwater discharges consist of discharges which do not originate from precipitation events. The General Permit provides allowances for specified non-stormwater discharges that do not cause erosion or carry other pollutants.

Non-stormwater discharges into storm drainage systems or waterways, which are not authorized under the General Permit and listed in the SWPPP, or authorized under a separate NPDES permit, are prohibited.

There are no authorized non-stormwater discharges identified on this Project site.

Should authorized non-stormwater discharges occur, they will be managed with the stormwater and non-stormwater BMPs described in Section 3 of this SWPPP and will be minimized by the QSP.

Activities at this Site that may result in unauthorized non-stormwater discharges include:

- Vehicle and equipment cleaning, fueling, and maintenance operations;
- Vehicle and equipment wash water (e.g., concrete washout water);
- Slurries from concrete mixing operations;
- Sanitary and septic wastes; and
- Runoff from dust control operations.

Steps will be taken, including the implementation of appropriate BMPs, to eliminate unauthorized discharges. Discharges of construction materials and wastes, such as fuel, resulting from dumping, spills, or direct contact with rainwater or stormwater runoff, are also prohibited.

2.2.5 Required Site Map Information

The construction Project's Site Maps showing the Project location, surface water boundaries, geographic features, construction site perimeter and general topography and other requirements identified in Attachment B of the General Permit are located in Appendix B. Table 2.4 identifies Map or Sheet Nos. where required elements are illustrated.

Throughout the duration of the Project, the Site Map(s) detailing locations of BMPs and sampling will be updated at least quarterly and/or as major construction phases (i.e., grading) are concluded and prior to the next phase of construction beginning. A laminated copy of the BMP Site Map will be available in the construction trailer at all times for reference by Contractor personnel and will exhibit changes, such as daily truck routes and sanitary facility location, in grease pencil or dry erase marker.

Table 2.4 Required Map Information

Included on Map/Plan Sheet No. ⁽¹⁾	Required Element
1	The Project's surrounding area (vicinity)
2	Site layout
2	Construction site boundaries
2	Drainage areas
2	Discharge locations
2	Sampling locations
2	Areas of soil disturbance (temporary or permanent)
2	Active areas of soil disturbance (cut or fill)
2	Locations of runoff BMPs
2	Locations of erosion control BMPs
2	Locations of sediment control BMPs
NA	Active Treatment System (ATS) location (if applicable)
NA	Locations of sensitive habitats, watercourses, or other features which are not to be disturbed
3	Locations of all post-construction BMPs (vegetation as the final stabilization measure)
2	Waste storage areas
2	Vehicle storage areas

Table 2.4 Required Map Information

Included on Map/Plan Sheet No. ⁽¹⁾	Required Element
2	Material storage areas
2	Entrances and Exits
2	Fueling Locations

Notes: (1) Indicate maps or drawings on which information is included (e.g., Vicinity Map, Site Map, Drainage Plans, Grading Plans, Progress Maps, etc.)

2.2.6 Remediated Condition

As part of the Site remediation, an engineered final cover consisting of a geomembrane, geocomposite, and geonet layer, cover soil, and vegetated layer will be constructed to cap the waste in place. Impervious areas of the Site will include the concrete Site entrances and the concrete surface water drainage system, which consists of down drains and perimeter v-ditches. The total impervious area is anticipated to consist of less than 2% of the Project area.

The final grading of the Site will be such that the Site will be split into two drainage areas, each flowing to an unlined detention basin via a series of turf-reinforced, mat-lined diversion berms, concrete-lined down drains, and concrete-lined perimeter channels. The existing detention basin in the southeastern corner of the Site will be re-graded, and a new basin will be constructed in the northwestern corner of the Site as part of the Project. Skimmers will be installed within each of the basins to control the discharge of collected stormwater to the City of Huntington Beach's storm drain system. Anticipated post-construction drainage patterns and conveyance systems are presented on Figure 3 in Appendix B.

2.3 PERMITS AND GOVERNING DOCUMENTS

In addition to the General Permit, the following Ascon Landfill Site documents have been considered while preparing this SWPPP:

- South Coast Air Quality Management District (AQMD) Permits (Rule 1150/1166 and several Permits-to-Operate);
- Industrial General Permit SWPPP;
- Interim Removal Measure Construction General Permit SWPPP;
- Water Quality Management and Operations and Maintenance Plans;
- Remedial Action Plan Environment Impact Report;
- Revised Final Remedial Design Report; and
- Remedy Implementation Plan.

Section 3 Best Management Practices

3.1 SCHEDULE FOR BMP IMPLEMENTATION

Table 3.1 BMP Implementation Schedule

	Best Management Practice	Implementation Schedule	Duration of Use
Erosion Control	EC-1 – Scheduling	Prior to construction	Entirety of Project
	EC-3 – Hydraulic Mulch	By December 20, 2019	Through April 2020
	EC-4 – Hydroseed	Prior to site demobilization and cessation of construction activities	Final week of Project to aid in final stabilization
	EC-5 – Soil Binders	As needed for stabilization of inactive disturbed areas	Until final stabilization measures in place
	EC-7 – Geotextiles and Mats	Following final grading of engineered cap	Final 3 months of Project to aid in final stabilization
	EC-9 – Drainage Swales	Prior to construction	Entirety of Project
	EC-10 – Velocity Dissipation Devices	Prior to construction	Entirety of Project
	EC-11 – Slope Drains	Following final grading of engineered cap	Final 2 months of Project to aid in final stabilization
	EC-16 – Non-Vegetated Stabilization	Prior to construction	Entirety of Project
Sediment Control	SE-1 – Silt Fence	Prior to construction (and/or SE-5, SE-6, and/or other)	Entirety of Project
	SE-2 – Sediment Basin	Prior to construction	Entirety of Project
	SE-4 – Check Dams	By November 22, 2019	Through April 2020
	SE-5 – Fiber Roll	Prior to and throughout construction (and/or SE-5, SE-6, and/or other)	Entirety of Project
	SE-6 – Gravel Bag Berm	Prior to construction (and/or SE-5, SE-6, and/or other)	Entirety of Project
	SE-8 – Sandbag Barrier	Throughout construction, as needed (and/or SE-5, SE-6, and/or other)	Entirety of project
	SE-10 – Storm Drain Inlet Protection	Prior to construction	Entirety of Project
Tracking Control	TC-1 Stabilized Construction Entrance and Exit	Prior to construction	Entirety of Project
	TC-2 Stabilized Construction Roadways	Prior to construction	Entirety of Project
	SE-7 Street Sweeping	As needed	Entirety of Project
Wind Erosion	WE-1 Wind Erosion Control	Prior to construction	Entirety of Project

3.2 EROSION AND SEDIMENT CONTROL

Erosion and sediment controls are required by the General Permit to provide effective reduction or elimination of sediment-related pollutants in stormwater discharges and authorized non-stormwater discharges from the Site. Applicable BMPs are identified in this section for erosion control, sediment control, tracking control, and wind erosion control.

3.2.1 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 stormwater runoff. Erosion control BMPs protect the soil surface by covering and/or binding soil particles.

This construction Project implements the following practices to provide effective temporary and final erosion control during construction:

1. The area of soil disturbing operations are controlled such that the Contractor is able to implement erosion control BMPs quickly and effectively;
2. Non-active areas are stabilized within 14 days of cessation of construction activities;
3. Erosion in concentrated flow paths is controlled by applying erosion control blankets, check dams, erosion control seeding or alternate methods; and
4. Prior to the completion of construction, permanent erosion control will be applied to remaining disturbed soil areas.

Sufficient erosion control materials are maintained onsite to allow implementation in conformance with this SWPPP.

The following temporary erosion control BMP selection table indicates the BMPs that are or will be implemented to control erosion on the construction site. Fact Sheets for erosion control BMPs are provided in Appendix H.

Table 3.2 Temporary Erosion Control BMPs

CASQA Fact Sheet	BMP Name	Meets a Minimum Requirement ⁽¹⁾	BMP Used?		If not used, state reason
			YES	NO	
EC-1	Scheduling	✓	✓		
EC-2	Preservation of Existing Vegetation	✓		✓	Existing vegetation must be removed for implementation of the remedial action. Vegetative cover will be established following completion of the Project.
EC-3	Hydraulic Mulch	✓ ⁽²⁾	✓		
EC-4	Hydroseed	✓ ⁽²⁾	✓		
EC-5	Soil Binders	✓ ⁽²⁾	✓		
EC-6	Straw Mulch	✓ ⁽²⁾		✓	EC-3, EC-4, EC-5, and EC-7 used instead
EC-7	Geotextiles and Mats	✓ ⁽²⁾	✓		
EC-8	Wood Mulching	✓ ⁽²⁾		✓	EC-3, EC-4, EC-5, and EC-7 used instead
EC-9	Earth Dike and Drainage Swales	✓ ⁽³⁾	✓		
EC-10	Velocity Dissipation Devices		✓		
EC-11	Slope Drains		✓		
EC-12	Stream Bank Stabilization			✓	
EC-14	Compost Blankets	✓ ⁽²⁾		✓	EC-3, EC-4, EC-5, and EC-7 used instead
EC-15	Soil Preparation-Roughening			✓	
EC-16	Non-Vegetated Stabilization	✓ ⁽²⁾	✓		
WE-1	Wind Erosion Control	✓	✓		
Alternate BMPs Used:					If used, state reason:

⁽¹⁾ Applicability to a specific Project will be determined by the QSD.

⁽²⁾ The QSD will ensure implementation of one of the minimum measures listed or a combination thereof to achieve and maintain the Risk Level requirements.

⁽³⁾ Run-on from offsite will be directed away from all disturbed areas; diversion of offsite flows may require design/analysis by a licensed civil engineer and/or additional environmental permitting.

These temporary erosion control BMPs are or will be implemented in conformance with the following guidelines and as outlined in the BMP Fact Sheets provided in Appendix H. If there is a conflict between documents, the Site Map prevails over narrative in the body of the SWPPP or guidance in the BMP Fact Sheets. The narrative in the body of the SWPPP prevails over guidance in the BMP Fact Sheets.

EC-1 – Scheduling

- Existing BMPs are in place year-round. Additional BMPs will be installed as applicable. Construction activities are planned and performed to minimize the area and duration of exposure of soil to erosion by wind, rain, runoff and vehicle tracking.
- The area that can be graded and left exposed at one time within a drainage area that leads to potential Site discharge will be limited to the amount of acreage that the Contractor can adequately protect prior to a likely precipitation event. A likely precipitation event is defined as a forecasted 50% chance of any amount of rain.
- Sequencing of construction activities will be considered when scheduling work to minimize soil-disturbing activities and major grading operations during the rainy season.

EC-3 – Hydraulic Mulch

- Bonded fiber matrix mixed with a plant based tackifier is applied to disturbed areas on the eastern portion and some areas in the northern portion of the Site (Lagoon 5) to stabilize exposed soil.

EC-4 – Hydroseed

- Hydroseed mixed with mulch and tackifier will be applied to the top deck and side slopes of the final cover prior to demobilization of Contractor personnel from the Site.
- The application unit used for hydroseeding will be equipped with an agitator to maintain the seed in suspension with the unit's tank prior to and during application.
- Tackifier will be applied in accordance with the specifications listed in the Final Remedy Design Technical Specifications.
- Planting and seeding will be performed during periods when weather and soil conditions are normal for the season and suitable in accordance with locally accepted horticulture practice.
- Hydroseed will be applied only when winds are calm, it is not raining, and rain is not predicted to occur for at least 72 hours.
- Hydroseed slurry (i.e., mulch, seed, and soil binder) will be mixed immediately prior to application.
- Hydroseed slurry will be applied in a one-step application that lays successive layers from at least two different directions. Soil will be sprayed with a uniform, visible coat of slurry until complete, even coverage is achieved.

EC-5 – Soil Binders

- Soil binders are applied to inactive disturbed areas (and reapplied as needed) as a temporary erosion control measure.

EC-7 – Geotextiles and Mats

- Geotextiles will be used in series with fill material and cover soil as part of the engineered cap following final grading.

EC-9 – Earth Dike and Drainage Swales

- Earthen drainage swales are utilized throughout the Site to contain and direct stormwater runoff to onsite detention basins.
- Following final grading, additional diversion berms and swales will be installed on the top deck and side slopes of the engineered cap to direct stormwater runoff to onsite detention basins.

EC-10 – Velocity Dissipation Devices

- Large cobble is installed at the inlet to each existing detention basin.
- Splash walls will be installed at base of slope drains and in newly constructed detention basins.

EC-11 – Slope Drains

- Stormwater will be conveyed from the final cap top deck to sediment basins by earthen diversion berms and concrete lined slope drains and perimeter v-ditches.
- Velocity dissipation devices will be installed at the base of slope drains.

EC-16 – Non-Vegetated Stabilization

- Access roads and vehicle parking areas are stabilized with aggregate.
- The final Site remedy includes aggregate cover on the perimeter road and concrete driveways at the Site entrances and exits.

WE-1 – Wind Erosion Control

- Wind Erosion Controls is provided to prevent or alleviate dust generated by construction activities. Care is taken to prevent over-watering, which may result in runoff or erosion.
- Exposed areas are watered to maintain moist conditions using the following water sources:
 - Potable water is used on clean fill or non-impacted soil areas;
 - Groundwater that may result from dewatering activities will be used for dust suppression over waste material, provided odors do not constitute a nuisance. Groundwater will not be used for dust control or moisture conditioning on clean fill or non-impacted areas;

- Decontamination water may be used for dust suppression over waste material but will not be used for dust control or moisture conditioning on clean fill or non-impacted areas.
- Excavation activities are not conducted if measured wind speed is greater than 15 mph averaged over 15 minutes or if the instantaneous wind speed is greater than 25 mph.

3.2.2 Sediment Controls

Sediment controls are temporary or permanent structural measures that are intended to complement the selected erosion control measures and reduce sediment discharges from active construction areas. Sediment controls are designed to intercept and settle out soil particles that have been detached and transported by the force of water.

The following sediment control BMP selection table indicates the BMPs that are or will be implemented to control sediment on the construction site. Fact Sheets for sediment control BMPs are provided in Appendix H.

Table 3.3 Temporary Sediment Control BMPs

CASQA Fact Sheet	BMP Name	Meets a Minimum Requirement ⁽¹⁾	BMP used		If not used, state reason
			YES	NO	
SE-1	Silt Fence	✓ ^{(2) (3)}	✓		
SE-2	Sediment Basin		✓		
SE-3	Sediment Trap			✓	
SE-4	Check Dams		✓		
SE-5	Fiber Rolls	✓ ⁽²⁾⁽³⁾	✓		
SE-6	Gravel Bag Berm	✓ ⁽³⁾	✓		
SE-7	Street Sweeping	✓	✓		
SE-8	Sandbag Barrier		✓		
SE-9	Straw Bale Barrier			✓	
SE-10	Storm Drain Inlet Protection	✓ RL 2&3		✓	Inlet protection not used along Magnolia Street due to safety concerns (bicycle traffic), flooding and drainage issues.
SE-11	Active Treatment System (ATS)			✓	
SE-12	Manufactured Linear Sediment Controls			✓	
SE-13	Compost Sock and Berm	✓ ⁽³⁾		✓	SE-1, SE-5, and SE-6 used
SE-14	Biofilter Bags	✓ ⁽³⁾		✓	SE-1, SE-5, and SE-6 used
TC-1	Stabilized Construction Entrance and Exit	✓	✓		
TC-2	Stabilized Construction Roadway		✓		
TC-3	Entrance Outlet Tire Wash			✓	
Alternate BMPs Used: K-rail		If used, state reason: To provide a safety barrier between crews and traffic traveling on Magnolia Street and Hamilton Avenue, k-rail may be used instead of SE-1, SE-5, and/or SE-6.			

⁽¹⁾ Applicability to a specific Project will be determined by the QSD.

⁽²⁾ The QSD will ensure implementation of one of the minimum measures listed or a combination thereof to achieve and maintain the Risk Level requirements.

⁽³⁾ Risk Level 2 & 3 will provide linear sediment control along toe of slope, face of slope, and at the grade breaks of exposed slope.

These temporary sediment control BMPs will be implemented in conformance with the following guidelines and in accordance with the BMP Fact Sheets provided in Appendix H. If there is a conflict between documents, the Site Map prevails over narrative in the body of the SWPPP or guidance in the BMP Fact Sheets. The narrative in the body of the SWPPP prevails over guidance in the BMP Fact Sheets.

SE-1 – Silt Fence

- Silt fence is installed as a perimeter control and may be installed directly adjacent to grading activities, as needed.

SE-4 – Check Dams

- Filter-fabric gravel bag check dams are installed south of the southeast basin along the southern property line to minimize potential impacts from stormwater run-on to the Site.

SE-5 – Fiber Rolls

- In accordance with the General Permit, fiber rolls are installed every 20 feet on the 3% slope draining toward Magnolia Street (eastern portion of the Site) to control runoff and sediment in this area.
- Fiber rolls may be installed as a perimeter control and directly adjacent to grading activities, as needed.
- After installation of final cover is complete, fiber roll will be used on side slopes to provide sediment control while final cover vegetation is establishing.

SE-6 – Gravel Bag Berm

- A gravel bag berm is currently in place along southern perimeter of the Site and will remain in place throughout excavation activities.
- Filter-fabric gravel bag berms are in place in the northwest corner surrounding the area that has been excavated for the future northwest basin (which is stabilized with a long-term, bentonite-derived, sprayed on cover) to filter stormwater that may leave the area.
- Filter-fabric gravel bag berms are in place at the toe of the 3:1 slope on the eastern portion of the site (which is stabilized with a long-term, bentonite-derived, sprayed on cover) and along the northern edge of Lagoon 5 (which is stabilized with hydraulic mulch and a portion of which is graded toward the north/Hamilton Avenue) to reduce potential sediment in runoff generated from these areas.
- Additional gravel bags may be installed as a perimeter control or directly adjacent to grading activities, as needed.

SE-7 – Street Sweeping

- Street sweeping is conducted as needed to remove soil that is tracked offsite onto Magnolia Street. Street sweeping may be implemented manually or using mechanical equipment.

SE-8 – Sandbag Barrier

- Sandbags have been placed in the southeastern corner of the Site to limit the amount of run-on received from Magnolia Street.
- A sandbag barrier is in place at the Magnolia Street gate (no longer in use) to provide continuous linear sediment control along the eastern property boundary and along a portion of the eastern property boundary north of the Magnolia Street gate to limit the amount of run-on received from Magnolia Street.
- Additional sandbags may be installed as a perimeter control or directly adjacent to grading activities, as needed.

TC-1 – Stabilized Construction Entrance and Exit

- The Site entrance and exit are paved.
- Area directly preceding truck exit is stabilized with aggregate and rumble plates.
- Dry decontamination with a brush is used at Site exit to prevent tracking. During wet weather events, wet decontamination methods may be used. Decontamination water will be disposed of in accordance with WM-10, as needed.

TC-2 – Stabilized Construction Roadways

- Site access roads are stabilized with aggregate.

3.3 NON-STORMWATER CONTROLS AND WASTE AND MATERIALS MANAGEMENT

3.3.1 Non-stormwater Controls

Non-stormwater discharges into storm drainage systems or waterways, which are not authorized under the General Permit, are prohibited. Non-stormwater discharges for which a separate NPDES permit is required by the local Regional Water Board are prohibited unless coverage under the separate NPDES permit has been obtained for the discharge. The selection of non-stormwater BMPs is based on the list of construction activities with a potential for non-stormwater discharges identified in Section 2.2.4 of this SWPPP.

The following non-stormwater control BMP selection table indicates the BMPs that are or will be implemented to control sediment on the construction site. Fact Sheets for temporary non-stormwater control BMPs are provided in Appendix H.

Table 3.4 Temporary Non-stormwater BMPs

CASQA Fact Sheet	BMP Name	Meets a Minimum Requirement ⁽¹⁾	BMP used		If not used, state reason
			YES	NO	
NS-1	Water Conservation Practices	✓	✓		
NS-2	Dewatering Operation		✓		
NS-3	Paving and Grinding Operation		✓		
NS-4	Temporary Stream Crossing			✓	
NS-5	Clear Water Diversion			✓	
NS-6	Illicit Connection/Discharge	✓	✓		
NS-7	Potable Water/Irrigation		✓		
NS-8	Vehicle and Equipment Cleaning	✓	✓		
NS-9	Vehicle and Equipment Fueling	✓	✓		
NS-10	Vehicle and Equipment Maintenance	✓	✓		
NS-11	Pile Driving Operation			✓	
NS-12	Concrete Curing		✓		
NS-13	Concrete Finishing			✓	
NS-14	Material and Equipment Use Over Water			✓	
NS-15	Demolition Removal Adjacent to Water			✓	
NS-16	Temporary Batch Plants			✓	
Alternate BMPs Used:			If used, state reason:		

⁽¹⁾ Applicability to a specific Project will be determined by the QSD.

Non-stormwater BMPs are or will be implemented in conformance with the following guidelines and in accordance with the BMP Fact Sheets provided in Appendix H. If there is a conflict between documents, the Site Map prevails over narrative in the body of the SWPPP or guidance in the BMP Fact Sheets. The narrative in the body of the SWPPP prevails over guidance in the BMP Fact Sheets.

NS-1 – Water Conservation Practices

- Water handling equipment is kept in good working condition.
- Water leaks are repaired promptly.

NS-2 – Dewatering Operation

- Groundwater encountered that may during storm drain piping installation will be pumped out and checked for objectionable odors.
- The pumped groundwater will be used for dust suppression over waste material, provided odors do not constitute a nuisance. Groundwater from dewatering or trenches will not be used for dust control or moisture conditioning in clean fill or non-impacted areas.

NS-3 – Paving and Grinding Operation

- Paving and grinding activities will be rescheduled if rain is forecasted.
- Pavement removal activities will not be conducted in the rain.
- Drip pans or absorbent materials are placed under paving equipment when not in use.
- Waste concrete paving materials will be collected by dry methods, such as sweeping or shoveling.
- Portland cement concrete waste will be disposed of in conformance with WM-8, Concrete Waste Management.

NS-6 – Illicit Connection/Discharge

- The Site is inspected regularly for illicitly discharged or illegally dumped material.
- The Site perimeter is observed for evidence of illicitly discharged or illegally dumped material.

NS-7 – Potable Water/Irrigation

- The water supply line is inspected regularly to verify that it is not leaking.

NS-8 – Vehicle and Equipment Cleaning

- Equipment will be cleaned prior to demobilizing from the Site using dry methods. During wet weather events, wet decontamination methods may be used. Decontamination water will be disposed of in accordance with WM-10, as needed.

NS-9 – Vehicle and Equipment Fueling

- Equipment is fueled in a designated fueling area. Mobile fueling will be conducted away from drainage courses, when necessary.
- Spill kits are available in fueling areas.
- Absorbent pads may be utilized at the nozzle during fueling to capture drips.
- Flow rates are reduced as the tank nears capacity and fueling will stop prior to completely filling tanks to avoid overfilling.

NS-10 – Vehicle and Equipment Maintenance

- A spill kit is available in the equipment maintenance area.
- Drip pans are used below connection points or under parked equipment, as needed.
- Hoses or connection devices are drained, blown down, capped, or vented, as necessary.
- Absorbent pads are used to wipe fittings and connections during maintenance.

NS-12 – Concrete Curing

- Over spray of curing compounds will be avoided.
- The drift will be minimized by applying the curing compound close to the concrete surface. The amount of compound applied that covers the surface but does not allow any runoff of the compound.
- Proper storage and handling techniques for concrete curing compounds will be used. Refer to WM-1, Material Delivery and Storage.

3.3.2 Materials Management and Waste Management

Materials management control practices consist of implementing procedural and structural BMPs for handling, storing and using construction materials to prevent the release of those materials into stormwater discharges. The amount and type of construction materials to be utilized at the Site will depend upon the type of construction and the length of the construction period. The materials may be used continuously, such as fuel for vehicles and equipment, or the materials may be used for a discrete period, such as soil binders for temporary stabilization.

Waste management consist of implementing procedural and structural BMPs for handling, storing and ensuring proper disposal of wastes to prevent the release of those wastes into stormwater discharges.

Materials and waste management pollution control BMPs are or will be implemented to minimize stormwater contact with construction materials, wastes, and service areas and to prevent materials and wastes from being discharged offsite. The primary mechanisms for stormwater contact that are addressed include:

- Direct contact with precipitation;
- Contact with stormwater run-on and runoff;

- Wind dispersion of loose materials;
- Direct discharge to the storm drain system through spills or dumping; and
- Extended contact with some materials and wastes, such as asphalt cold mix and treated wood products, which can leach pollutants into stormwater.

A list of construction activities is provided in Section 2.2.3. The following Materials and Waste Management BMP selection table indicates the BMPs that are or will be implemented to handle materials and control construction site wastes associated with these construction activities. Fact Sheets for Materials and Waste Management BMPs are provided in Appendix H.

Table 3.5 Temporary Materials Management BMPs

CASQA Fact Sheet	BMP Name	Meets a Minimum Requirement ⁽¹⁾	BMP used		If not used, state reason
			YES	NO	
WM-1	Material Delivery and Storage	✓	✓		
WM-2	Material Use	✓	✓		
WM-3	Stockpile Management	✓	✓		
WM-4	Spill Prevention and Control	✓	✓		
WM-5	Solid Waste Management	✓	✓		
WM-6	Hazardous Waste Management	✓	✓		
WM-7	Contaminated Soil Management		✓		
WM-8	Concrete Waste Management	✓	✓		
WM-9	Sanitary-Septic Waste Management	✓	✓		
WM-10	Liquid Waste Management		✓		
Alternate BMPs Used:				If used, state reason:	

⁽¹⁾ Applicability to a specific Project will be determined by the QSD.

Material management BMPs are or will be implemented in conformance with the following guidelines and in accordance with the BMP Fact Sheets provided in Appendix H. If there is a conflict between documents, the Site Map prevails over narrative in the body of the SWPPP or guidance in the BMP Fact Sheets. The narrative in the body of the SWPPP prevails over guidance in the BMP Fact Sheets.

WM-1 – Material Delivery and Storage

- Areas of the Site for material delivery and storage are designated.
- Designated storage areas are kept clean and well organized.
- Materials being stored which could release pollutants by wind or runoff transport are protected by overhead cover, secondary containment, tarpaulins, or other appropriate methods. Portland cement will not be stockpiled.
- Regular inspections of storage areas are conducted to monitor inventory and check for leaking containers.
- Chemicals, drums or bagged materials not stored in a covered location are stored on pallets and, when possible, in secondary containment.
- Secondary containment is provided for liquids.
- Secondary containment areas are covered, when possible, to prevent accumulation of rainwater. Contained stormwater will be handled per WM-10.

WM-2 – Material Use

- Materials are used in accordance with manufacturer directions and in a manner to prevent release of pollutants.
- An accurate, up-to-date inventory of materials delivered and stored onsite is kept.
- Application of erodible landscape material is discontinued two days prior to a forecasted rain event or during periods of precipitation.

WM-3 – Stockpile Management

- Stockpiles of loose material (i.e., soil, spoils, and aggregate) that are not actively being used will be protected with temporary perimeter sediment berms (e.g., fiber rolls).
- Stockpiles of clean fill or non-impacted material that remain inactive/undisturbed for 14 or more days will be covered.
- Stockpiles of VOC impacted material are covered at all times (per the site specific SCAQMD Rule 1166 Permit).

WM-4 – Spill Prevention and Control

- If a spill were to occur at the Site, it will never be cleaned-up by hosing off the area.

- Fuel products, lubricating fluids, grease or other products and/or waste released from the Contractor's vehicles, equipment, or operations will be collected and disposed of immediately in accordance with State, Federal and local laws, if needed.
- If a spill occurs during a rain event, the area will be covered and bermed as quickly as possible. The spill will be cleaned up as soon as possible after cessation of rain.
- Spill cleanup materials are stored near potential spill areas (e.g., material storage and equipment staging areas).

WM-5 – Solid Waste Management

- There are designated temporary waste storage areas on the Site.
- The Site is kept clean of litter and waste.
- Non-hazardous construction wastes (e.g., vegetation, trash, and construction debris) are collected from throughout the Site regularly and deposited at the designated waste storage areas.
- When practical, non-hazardous Site wastes will be stored within covered, water-tight dumpsters and/or containers that prevent exposure to rain and prevent loss of wastes when it is windy.
- Waste materials are removed from the storage areas by the Contractor or a licensed subcontractor on a regular basis and disposed or recycled in accordance with all Federal, State, and local regulations.
- Dumpsters are hosed out on the Site. Any required dumpster cleaning will be done offsite by the trash hauling Contractor.
- Solid waste that accumulates at erosion and sediment control devices is removed immediately.
- Dumpsters are closed at the end of every business day and during rain events when equipped with lids.
- Decontamination wastes, such as contaminated protective equipment used by onsite personnel, will be managed onsite and disposed in a designated area onsite determined by the Construction Manager.

WM-6 – Hazardous Waste Management

- Hazardous wastes and containers will be placed in a designated hazardous waste storage area that has secondary containment to minimize the mixing of wastes with stormwater and to prevent the direct release of liquid waste to stormwater. The temporary storage and removal of hazardous wastes from the Site will be in accordance with all applicable State and Federal laws.
- Materials excavated from Pit F will be placed in plastic lined roll-off bins. As a primary containment measure, the excavated material will be wrapped in plastic liner to reduce

the potential for nuisance odors and leaking. As a secondary containment measure, bins will be covered and secured. Bins containing excavated material that remain onsite for more than 24-hours will be inspected daily for leaks.

- Wastes will be segregated and recycled where feasible (e.g., paints, solvents, used oil, batteries, anti-freeze). Wastes will not be mixed since this can cause chemical reactions, will make recycling impossible, and would complicate disposal.
- Covered waste bins will be designated for the disposal of all empty product (e.g., paints, solvents, glues, petroleum products, concrete, exterior finishes, pesticides, fertilizers, etc.) containers. The original product label will not be removed as it contains important safety and disposal information.
- Toxic wastes and chemicals will not be disposed of in dumpsters designated for construction debris.
- Universal waste will be handled and disposed of in accordance with applicable local, State and Federal regulation.
- Employees and subcontractors will be trained on proper storage practices.

WM-7 – Contaminated Soil Management

- Excavated materials with VOC concentrations greater than 50 ppm (VOC-contaminated soil per site specific SCAQMD Rule 1166 permit) are segregated and hauled to the 1166 treatment cell (to be located in the southern portion of Lagoon 1) for onsite treatment.
- Excavated materials with VOC concentrations greater than 1,000 ppm will be immediately hauled to the 1166 treatment cell, or transported offsite (within one hour), or placed in sealed roll-off containers and transported to the treatment cell or offsite within 30 days of excavation.

WM-8 – Concrete Waste Management

- Concrete in the form of debris is collected, crushed, and reused onsite.
- No concrete washout water will be discharged offsite.
- Concrete waste from pouring activities will be reincorporated into other onsite activities involving concrete (e.g., lagoon stabilization activities), when applicable.
- Employees and subcontractors will be trained in proper concrete waste management.
- Concrete pouring activities will cease at least 48 hours prior to predicted rain. Run-off from areas with concrete pouring activities may result in exceedance of NALs for pH.

WM-9 – Sanitary-Septic Waste Management

- Portable sanitary facilities are transported to and from the Site by a licensed Contractor, placed in a convenient location and maintained in good working order by a licensed service.

- Untreated sanitary-septic wastewater is not discharged offsite and will never be buried.

WM-10 – Liquid Waste Management

- Decontamination wastes, such as boot wash water, is managed onsite and disposed in a designated area onsite determined by the Construction Manager.

3.4 POST-CONSTRUCTION STORMWATER MANAGEMENT MEASURES

Post-construction BMPs are permanent measures installed during construction, designed to reduce or eliminate pollutant discharges from the Site after construction is completed.

This Site is located in an area subject to a Phase I Municipal Separate Storm Sewer System (MS4) permit. In accordance with MS4 permit requirements, a Water Quality Management Plan (WQMP) has been prepared for this Project. Because post-construction runoff reduction requirements have been satisfied through the MS4 program, this Project is exempt from provision XIII.A of the General Permit.

Following final grading, a series of earthen berms and channels will be installed to convey stormwater runoff from the top deck of the cap to concrete down drains on the side slopes and into concrete-lined v-ditches surrounding the perimeter of the landfill cover. The perimeter v-ditches will convey captured stormwater runoff into one of two onsite detention basins equipped with skimmers. The final cap will be hydroseeded to provide vegetative stabilization. Fiber roll will be placed on side slopes to prevent erosion during the time vegetative cover is being established. The post-grading erosion and sediment control plan is included as Figure 3 in Appendix B.

Section 4 BMP Inspection, Maintenance, and Rain Event Action Plans

4.1 BMP INSPECTION AND MAINTENANCE

The General Permit requires routine weekly inspections of BMPs, along with inspections before, during, and after qualifying rain events for Risk Level 2 projects. A BMP inspection checklist must be filled out for inspections and maintained onsite with the SWPPP. The inspection checklist includes the necessary information covered in Section 7.5. A blank inspection checklist can be found in Appendix I. Completed checklists will be kept in a separate binder labeled “BMP Inspection Reports.”

BMPs will be maintained regularly to ensure proper and effective functionality. If necessary, corrective actions will be implemented within 72 hours of identified deficiencies, or as soon as possible during times of limited labor availability (e.g., holidays), and associated amendments to the SWPPP will be prepared by the QSD.

Specific details for maintenance, inspection, and repair of construction site BMPs can be found in the BMP Fact Sheets in Appendix H.

4.2 RAIN EVENT ACTION PLANS

The Rain Event Action Plans (REAP) is a written document designed to be used as a planning tool by the QSP to protect exposed portions of Project sites and to ensure that the discharger has adequate materials, staff, and time to implement erosion and sediment control measures. These measures are intended to reduce the amount of sediment and other pollutants that could be generated during the rain event. It is the responsibility of the QSP to be aware of precipitation forecast and to obtain an electronic copy of forecasted precipitation from NOAA’s National Weather Service Forecast Office. Printed copies of forecasted precipitation will be made available upon request by a State or Municipal inspector.

The SWPPP includes a REAP template as Appendix J, but the QSP will customize the template for each rain event and as construction activities progress from one phase to the next. The QSP will maintain a paper copy of completed REAPs in compliance with the record retention requirements identified in Section 1.5. Completed REAPs will be maintained in a separate binder with the completed BMP inspection reports in the Project Navigator construction trailer.

The QSP will develop an event-specific REAP at least 48 hours in advance of a precipitation event that is forecast to have a 50% or greater chance of producing precipitation in the Project area. The REAP will be onsite and implemented at least 24 hours in advance of each predicted precipitation event.

At a minimum, the REAP will include the following Site and phase-specific information:

- Site Address;
- Calculated Risk Level (2);

- Site Stormwater Manager information, including the name, company and 24-hour emergency telephone number;
- Erosion and Sediment Control Provider information, including the name, company and 24-hour emergency telephone number;
- Stormwater Sampling Agent information, including the name, company, and 24-hour emergency telephone number;
- Activities associated with each construction phase;
- Trades active on the construction site during each construction phase;
- Trade contractor information; and
- Recommended actions for each Project phase.

Section 5 Training

Appendix L identifies the QSP(s) for the Project. To promote stormwater management awareness specific for this Project, periodic training of job-site personnel will be included as part of routine Project meetings (e.g. daily/weekly tailgate safety meetings) and task-specific trainings, as needed.

The QSP(s) will be responsible for providing this information at the meetings and subsequently completing the training logs shown in Appendix K, which identifies the site-specific stormwater topics covered and the names of Site personnel who attended the meeting. Tasks may be delegated to trained employees by the QSP, provided adequate supervision and oversight are provided. Training will correspond to the specific task delegated, including: SWPPP implementation; BMP inspection and maintenance; and record keeping. Documentation of training activities (formal and informal) is retained in SWPPP Appendix K.

Section 6 Responsible Parties and Operators

6.1 RESPONSIBLE PARTIES

Approved Signatory:

Approved Signatory(ies) who are responsible for SWPPP implementation and have authority to sign permit-related documents are identified in Appendix L. Written authorizations from the LRP for these individuals are provided in Appendix L.

Data Entry Person:

Data Entry Person(s) who are responsible for SMARTS updates are listed in Appendix L.

Qualified SWPPP Practitioner (QSP):

The QSP(s) for the Project are identified in Appendix L. The QSP will have primary responsibility and significant authority for the implementation, maintenance and inspection/monitoring of SWPPP requirements. The QSP coordinates with the BMP implementation contractor to implement and maintain site BMPs. Note: A Qualified SWPPP Developer (QSD) can also serve the role of QSP. The QSP will be available at all times throughout the duration of the project. Duties of the QSP include but are not limited to:

- Overall SWPPP implementation, coordinating with the BMP implementation contractor to have the materials and manpower available for the successful maintenance of the BMPs specified in the SWPPP;
- Conducting and documenting regular inspections of the BMPs contained in this SWPPP (as discussed in Section 4). The findings of these inspections are discussed with the Site Superintendent who in turn makes available the necessary resources to repair/replace any defective control devices identified in the inspection;
- Directing ongoing regular BMP maintenance activities (e.g. fiber roll replacement, sediment removal, timely waste disposal, etc.);
- Overseeing necessary corrective actions for BMPs identified during regular Site inspections;
- Maintaining all Site records pertaining to inspection and maintenance of BMPs as well as records detailing the dates on which major construction activities began and were completed;
- Maintaining an up-to-date copy of this SWPPP onsite at all times, from commencement of construction to final Site stabilization;
- Making a copy of the SWPPP available for inspection by outside authorized regulatory authorities upon request;
- Ensuring that field engineering activities are planned and conducted in accordance with the SWPPP;

- Acting as the Site spill coordinator to document spills, work with Construction Manager and Site Safety Officer to implement clean-up activities, minimize impact to stormwater, and ensure that the proper reporting, if necessary, is completed;
- Ensuring all subcontractors involved with construction activities, which may potentially affect stormwater quality at the Site, are made aware of the applicable provisions of this SWPPP; and
- Conducting training for Site personnel (including subcontractor personnel). This involves increasing awareness of the need to comply with the SWPPP, which includes minimizing sediment in stormwater discharges offsite, keeping a clean site, and minimizing the potential for construction materials and wastes from entering stormwater discharges.

6.2 CONTRACTOR LIST

Appendix M includes a list of the contractors, subcontractors, and individuals that will be working at the Site.

Section 7 Construction Site Monitoring Program

7.1 PURPOSE

This Construction Site Monitoring Program (CSMP) was developed to address the following objectives:

1. To demonstrate that the Site is in compliance with the Discharge Prohibitions and Numeric Action Levels of the Construction General Permit;
2. To determine whether non-visible pollutants are present at the Site and are causing or contributing to exceedances of water quality objectives;
3. To determine whether immediate corrective actions, additional BMP implementation, or SWPPP revisions are necessary to reduce pollutants in stormwater discharges and authorized non-stormwater discharges; and
4. To determine whether BMPs included in the SWPPP and REAP are effective in preventing or reducing pollutants in stormwater discharges and authorized non-stormwater discharges.

7.2 MONITORING REQUIREMENTS

This Project has been determined to be a Risk Level 2 Project. The General Permit identifies the following types of monitoring as being applicable for a Risk Level 2 Project:

- Visual inspections of BMPs;
- Visual monitoring of the Site for non-stormwater discharges;
- Visual monitoring of the Site related to qualifying rain events;
- Sampling and analysis of Site runoff for pH and turbidity;
- Sampling and analysis of Site runoff for non-visible pollutants, when applicable; and
- Sampling and analysis of non-stormwater discharges, when applicable.

7.3 WEATHER AND RAIN EVENT TRACKING

Visual monitoring, inspection, and sampling and analysis requirements of the General Permit are triggered by a qualifying rain event. The General Permit defines a qualifying rain event as any event that produces ½ inch of precipitation. A minimum of 48 hours of dry weather will be used to distinguish between separate qualifying storm events.

7.3.1 Weather Tracking

The QSP will consult the National Oceanographic and Atmospheric Administration (NOAA) for weather forecasts on a regular basis (to be obtained at <https://www.weather.gov/>). Weather reports related to the prediction and occurrence of qualifying rain events will be obtained and maintained electronically and printed at the request of a State or Municipal inspector. Printed

forecasts will be maintained with the associated site inspection report and/or REAP in a binder labeled “BMP Inspection Reports.”

7.3.2 Rain Gauge Readings

The QSP will install one (1) rain gauge on the Site in accordance with the following:

- The gauge will be located in an open area away from obstructions such as trees or overhangs.
- The gauge will be mounted and leveled on a post at a height of 3 to 5 feet, with the gauge extending several inches beyond the post.
- The post will not be located in an area where rainwater can indirectly splash from sheds, equipment, trailers, etc.

The rain gauge will be read following each rain event, regardless of size, by onsite personnel during normal Site scheduled hours. The date and time of each reading will be recorded on the *Rain Gauge Log Sheet* in CSMP Attachment 1 “Example Forms.” Once the rain gauge reading has been recorded, accumulated rain will be emptied. Completed *Rain Gauge Log Sheet* forms will be maintained with the SWPPP in CSMP Attachment 2 “Monitoring Records.”

For comparison with the Site rain gauge, the nearest appropriate governmental rain gauge is:

CW1521 Huntington Beach; Lat: 33.672 °N Long: 117.97117 °W

7.4 VISUAL MONITORING AND SAMPLING EXCEPTIONS

This Project is not required to collect stormwater discharge samples or conduct visual observations (inspections) under the following conditions:

- During dangerous weather conditions such as flooding and electrical storms; and
- Outside of scheduled Site business hours.

Scheduled Site business hours are: Monday through Friday, 7 am – 6 pm (excluding major holidays).

If monitoring (visual monitoring or sample collection) of the Site is unsafe because of the dangerous conditions noted above, then the QSP will document the conditions for why an exception to performing the monitoring was necessary. The exemption documentation will be filed in CSMP Attachment 2 “Monitoring Records.”

7.5 VISUAL MONITORING

Visual monitoring includes both routine and rain event triggered inspections and observations. Inspections of BMPs are required to identify and record BMPs that need maintenance to operate effectively, that have failed, or that could fail to operate as intended. Visual observations of the Site are required to observe stormwater discharges and drainage areas to identify any spills, leaks, or uncontrolled pollutant sources.

Table 7.1 identifies the required frequency of visual observations and inspections. Inspections and observations will be conducted at the locations identified in Section 7.5.3.

Table 7.1 Summary of Visual Monitoring and Inspection Requirements

Type of Inspection	Frequency
<i>Routine Inspections</i>	
BMP Inspections	Weekly ¹
BMP Inspections – Tracking Control	Daily, while Site is active
Non-stormwater Discharge Observations	Quarterly during daylight hours
<i>Rain Event Triggered Inspections</i>	
Site Inspections Prior to a Qualifying Event	Within 48 hours of a qualifying event ²
BMP Inspections During an Extended Storm Event	Every 24-hour period of a rain event ³
Site Inspections Following a Qualifying Event	Within 48 hours of a qualifying event ²

¹ Most BMPs must be inspected weekly; Tracking Control must be inspected daily while Site is active.

² Inspections are required during scheduled Site operating hours.

³ Inspections are required during scheduled Site operating hours regardless of the amount of precipitation on any given day.

Visual monitoring will be conducted by the QSP or staff trained by and under the supervision of the QSP. The name(s) and contact number(s) of the Site visual monitoring personnel are listed below, and their training qualifications are provided in Appendix K.

Assigned Inspector: Julie Walters, QSP (562) 257-1401
 Alternate Inspector: Misty Steele, QSD (562) 257-1401
 Alternate Inspector: Stew Aadnes, Construction Manager (858) 647-6559

7.5.1 Routine Observations and Inspections

Routine site inspections and visual monitoring are necessary to ensure that the Project is in compliance with the requirements of the Construction General Permit.

7.5.1.1 Routine BMP Inspections

Inspections of BMPs are conducted to identify and record:

- BMPs that are properly installed;
- BMPs that need maintenance to operate effectively;
- BMPs that have failed; and
- BMPs that could fail to operate as intended.

7.5.1.2 *Non-stormwater Discharge Observations*

Each drainage area will be inspected for the presence of or indications of prior unauthorized and authorized non-stormwater discharges. Inspections will record:

- Presence or evidence of any non-stormwater discharge (authorized or unauthorized);
- Pollutant characteristics (floating and suspended material, sheen, discoloration, turbidity, odor, etc.); and
- Source of discharge.

7.5.2 **Rain-Event Triggered Observations and Inspections**

Visual observations of the Site and inspections of BMPs are required prior to a qualifying rain event, every 24-hour period during a qualifying rain event and following a qualifying rain event. Pre-rain inspections will be conducted after consulting NOAA and determining that a precipitation event with a 50% or greater probability of producing ½ inch or more precipitation has been predicted.

7.5.2.1 *Visual Observations Prior to a Forecasted Qualifying Rain Event*

Within 48 hours prior to a qualifying event, a stormwater visual monitoring site inspection will be conducted and will include observations of the following locations:

- Stormwater drainage areas to identify any spills, leaks, or uncontrolled pollutant sources;
- BMPs to identify if they have been properly implemented; and
- Any stormwater storage and containment areas to detect leaks and ensure maintenance of adequate freeboard.

Consistent with guidance from the State Water Resources Control Board, pre-rain BMP inspections and visual monitoring will be triggered by a NOAA forecast that indicates a probability of precipitation of 50% or more in the Project area.

7.5.2.2 *BMP Inspections During an Extended Storm Event*

During an extended rain event, BMP inspections will be conducted to identify and record:

- BMPs that are properly installed;
- BMPs that need maintenance to operate effectively;
- BMPs that have failed; and
- BMPs that could fail to operate as intended.

If the Site is not accessible during the rain event, the visual inspections will be performed at all relevant outfalls, discharge points, and downstream locations. The inspections should record any Project maintenance activities.

7.5.2.3 *Visual Observations Following a Qualifying Rain Event*

Within 48 hours following a qualifying rain event (½ inch of rain or more), a stormwater visual monitoring site inspection is required to observe:

- Stormwater drainage areas to identify any spills, leaks, or uncontrolled pollutant sources;
- BMPs to identify if they have been properly designed, implemented, and effective;
- Need for additional BMPs;
- Any stormwater storage and containment areas to detect leaks and ensure maintenance of adequate freeboard; and
- Discharge of stored or contained rain water.

7.5.3 Visual Monitoring Locations

BMP inspections will be conducted at the locations shown on Figure 2 in Appendix B, which is updated quarterly to reflect changing site conditions. The required non-stormwater and rain event related inspections and observations identified in Sections 7.5.1 and 7.5.2 will be conducted at the locations listed in this section.

7.5.3.1 *Stormwater Drainage Areas*

There are five drainage areas at the Site as shown on Figure 2 located in Appendix B. Table 7.2 identifies each drainage area by location. As the Project progresses, the drainage areas identified below will be altered and/or become obsolete until only two drainage areas remain, as illustrated on Figure 3 in Appendix B. Figure 2 will continue to be updated at least quarterly and/or when major changes occur.

Table 7.2 Project Drainage Areas

Drainage Area	Description
DA1	Within Lagoons 1-2, 3, and 4. Material in Lagoons 1-2 has been covered with a mixture of plastic sheeting, long-term foam, and a long-term, bentonite derived, sprayed on cover to prevent stormwater contact with site-derived material. Material in Lagoon 3 has been covered with a long-term, bentonite derived, sprayed on cover to prevent stormwater contact with site-derived material. Lagoon 4 has been lined with a geotextile fabric that is partially covered with crushed concrete and site-derived soil. Soils in Lagoon 4 are stabilized with soil binders to prevent erosion. Stormwater that falls within Drainage Area 1 is contained within the lagoons and discharged to the Orange County Sanitation District, if necessary. Stormwater is not discharged off-site.
DA2	Non-lagoon areas west of Lagoons 1-3 and north of the southern perimeter slope. A vegetated swale conveys runoff along the western and southern perimeters of the Site towards detention basins located in the southwest and southeast corners of the Site. A portion of the area east of Lagoons 1-2 and west of the Pit F enclosure drains to a

Table 7.2 Project Drainage Areas

Drainage Area	Description
<p align="center">DA2 (continued)</p>	<p>temporary drain inlet located south of the Pit F enclosure and into the southeast detention basin. Non-vegetated areas in Drainage Area 2 are stabilized with a combination of asphalt, aggregate, and hydraulically applied wood mulch with a plant based tackifier to minimize erosion. Stormwater runoff that has accumulated in the southeast detention basin may discharge through the detention basin outlet structure at ALS-4.</p>
<p align="center">DA3</p>	<p>The area west of Lagoon 4 that has been excavated in preparation for construction of the northwest detention basin, Lagoon 5, and the north, northwestern and northeastern (adjacent to Lagoon 5) Site perimeter slopes. The excavated area is stabilized with a long-term, bentonite derived, sprayed on cover and almost completely surrounded by a filter-fabric gravel bag berm. Lagoon 5 has been lined with geotextile fabric, covered with site-derived soil and stabilized with hydraulically applied wood mulch with a plant based tackifier. Perimeter slopes in DA3 are vegetated to prevent erosion. Silt fence has been installed at the top and bottom of slopes (interior to the 16-foot vinyl PVC barrier fence which is held in place by two rows of concrete k-rail) within Drainage Area 3 as a perimeter sediment control.</p>
<p align="center">DA4</p>	<p>The eastern portion of the Site that is east of Lagoon 3 and south of Lagoon 5. Two broken concrete stockpiles are located in the western portion of the drainage area. Exposed soils are stabilized with a combination of fiber rolls, hydraulically applied wood mulch with a plant based tackifier, a long-term, bentonite derived, sprayed on cover, and soil binders to prevent contact with site-derived material and erosion. A filter-fabric gravel bag berm is installed at the bottom of the slope on the eastern edge of the drainage area, and a silt fence/sandbag barrier installed interior to the 16-foot vinyl PVC barrier fence (held in place by two rows of concrete k-rail) serves as a perimeter sediment control.</p>
<p align="center">DA5</p>	<p>Southwestern and southern perimeter slopes and southeast and southwest corners. Slopes in DA5 are vegetated. Runoff from the southern slope is detained by a gravel bag berm installed along the perimeter fence. Run-on from the Huntington Beach Channel levee to the southwest of the Site may cause ponding in the southwest corner, outside of the southwest detention basin. Run-on from the property to the south may comingle with stormwater runoff from the southern slope and cause ponding in the southeast corner, outside of the southeast detention basin. A sandbag barrier is installed in the southeast corner to limit the amount of run-on received from Magnolia Street. Run-on and ponded stormwater runoff in DA5 do not come into contact with areas of active construction activity or disturbed, site-derived material.</p>

7.5.3.2 *Stormwater Storage and Containment Areas*

There are three stormwater storage and containment areas on the Site. Stormwater storage and containment areas are shown on Figure 2 in Appendix B. Table 7.3 identifies each stormwater storage and containment area by location.

Table 7.3 Stormwater Storage and Containment Areas

Location	Description
Lagoons 1-2 and 3	Impoundments in the central/northern portion of the Site
SW1	Stormwater detention basin at southwest corner of Site
SW2	Stormwater detention basin at southeast corner of Site

As the Project progresses, the Lagoon and SW1 containment areas will become obsolete. A new containment area, to be located in the northwest corner of the Site, will be constructed as part of the post-construction facility drainage plan, as illustrated on Figure 3 in Appendix B. The southeast basin will also be reconstructed during grading activities. The northwest and southeast detention basins will be equipped with skimmer units. Figure 2 will continue to be updated at least quarterly and/or when major changes occur.

7.5.3.3 *Stormwater Discharge Locations*

There are two construction stormwater discharge locations identified at the Site. The discharge locations are shown on Figure 2 in Appendix B and identified in Table 7.4.

Table 7.4 Construction Stormwater Discharge Locations

Drainage Area	Location	Description
2	ALS-4	Southeast detention basin discharge to Magnolia Street under normal basin operating conditions. Following large storm events that result in significant flooding onsite, water may be pumped from the eastern boundary of the Site (Drainage Area 4) into the southeast detention basin and discharged through ALS-4.
5	SE Corner	Southeast corner of site; ponded water may accumulate over the course of the rainy season and could potentially discharge in this location. In the event that a large storm event, or series of events, causes the southeast detention basin to overflow the basin spillway, this sample location will also characterize runoff from Drainage Area 2 that has accumulated in the southeast detention basin.

As the Project progresses, an additional stormwater discharge location, at the northwest detention basin, will be constructed as part of the post-construction facility drainage plan, as illustrated on

Figure 3 in Appendix B. The SE Corner discharge location will become obsolete following final grading. Figure 2 will be updated at least quarterly and/or when major changes occur.

7.5.4 Visual Monitoring Documentation Procedures

Inspections and observations will be documented on the Site-specific BMP Inspection Report (included as Appendix I). Additionally, visual observations of stormwater discharges during rain events will be documented on the *Stormwater Discharge Visual Observation Log Sheet* (included in CSMP Attachment 1 “Example Forms”). Photographs used to document observations will be maintained electronically by the QSP.

Completed reports will be maintained onsite in a binder labeled “BMP Inspection Reports.”

7.5.5 Visual Monitoring Follow-up and Reporting

Correction of deficiencies identified by the observations or inspections, including required repairs or maintenance of BMPs, will be initiated and completed as soon as possible. If identified deficiencies require design changes, including additional BMPs, the implementation of changes will be initiated within 72 hours of identification, given sufficient labor is available, and be completed as soon as possible. When design changes to BMPs are required, the SWPPP will be amended to reflect the changes.

Deficiencies identified in inspection reports and the implementation status of corrective actions will be tracked on the *BMP Inspection Report* by the QSP and maintained onsite in a binder labeled “BMP Inspection Reports.”

7.6 WATER QUALITY SAMPLING AND ANALYSIS

As a Risk Level 2 Project and per a request from the Santa Ana Regional Water Quality Control Board (RWQCB), the following types of water quality sampling and analysis are required when discharge is produced by a qualifying storm event:

- Sampling and analysis of Site stormwater discharges for pH and turbidity;
- Sampling and analysis of Site stormwater discharges for non-visible pollutants; and
- Sampling and analysis of non-stormwater discharges, when applicable.

Water quality sampling and analysis will be conducted by the QSP or staff trained by and under the supervision of the QSP. The name(s) and contact number(s) of the Site water quality sampling and analysis personnel are listed below, and their training qualifications are provided in Appendix K.

Assigned Inspector:	Julie Walters, QSP	(562) 257-1401
Alternate Inspector:	Misty Steele, QSD	(562) 257-1401
Alternate Inspector:	Stew Aadnes, Construction Manager	(858) 647-6559

7.6.1 Sampling and Analysis of Stormwater Discharges for pH and Turbidity

Stormwater discharge samples will be collected and analyzed for pH and turbidity during all qualifying rain events that result in a discharge from the Project site.

7.6.1.1 *Sample Locations*

Construction stormwater discharge locations are identified and described in Table 7.4. At a minimum, pH and turbidity samples will be collected from each discharge location draining an area containing disturbed soils. A minimum of three samples will be collected per day of discharge during a qualifying event. Samples will be representative of the total discharge from the Project each day of discharge during the qualifying event. Additionally, if discharge is observed during a post-qualifying storm event inspection, three samples will be collected for analysis of pH and turbidity. Further sampling will not be conducted following 48-hours with no additional rainfall except to characterize releases of stored or contained stormwater.

If necessary, one sample of stored or collected water from a qualifying storm event will be tested for pH and turbidity when discharged. Stored or collected water from a qualifying event may be sampled at the point of release from the storage or containment area or at the corresponding Site discharge location.

Run-on samples will be collected, when feasible, if the QSP identifies that run-on has the potential to contribute to an exceedance of a NAL.

Samples will be collected during the Site's scheduled hours regardless of the time of year and phase of the construction.

7.6.1.2 *Sample Collection*

Sampling personnel will collect grab samples that are representative of the entire runoff stream for pH and turbidity analysis. Samples will be collected by dipping a collection container (either a 500-milliliter polypropylene or glass beaker) into the runoff flow path facing upstream until a sufficient volume has been collected (approximately 250 milliliters). Vials used for turbidity analysis will not be used to collect samples. Samples of ponded, sluggish or stagnant water will not be collected.

Sample personnel will adhere to the following sample collection procedures:

- Do not park vehicles in the immediate sample collection area;
- Wear clean, powder-free nitrile gloves when collecting samples;
- Change gloves whenever something not known to be clean has been touched;
- Change gloves between sampling locations; and
- Decontaminate the sample collection container between sampling locations and dispose of wash and rinse water appropriately (i.e., not into storm drain or receiving water).

7.6.1.3 *Sample Analysis*

Immediately following collection, pH and turbidity samples will be analyzed in accordance with the instrument manufacturer’s instructions and the results will be recorded on the *Effluent Sampling Field Log Sheet* (CSMP Attachment 1 “Example Forms”).

The following field instruments will be used to analyze pH and turbidity:

Table 7.5 Field Instruments

Field Instrument (Manufacturer and Model)	Constituent	Units	Detection Limit
Oakton ecoTestr pH2	pH	pH Units (SU)	0.1 SU
Hach 2100p	Turbidity	Nephelometric Turbidity Units (NTU)	1 NTU

The QSP may authorize alternate equipment, provided that the equipment meets the Construction General Permit’s requirements. The QSP will:

- Maintain instruments in accordance with manufacturer’s instructions;
- Calibrate instruments before each sampling and analysis event; and
- Record calibration results on the *Effluent Sampling Field Log Sheet*.

Instructions for calibration and operation of each instrument are located in CSMP Attachment 3 “Field Instrument Manuals” and will be kept onsite with the SWPPP. Field sampling staff will review and follow the instructions in completing measurement of the samples, as needed.

7.6.1.4 *Data Evaluation and Reporting*

This Project is subject to NALs for pH and turbidity. Compliance with the NALs for pH and turbidity are based on a weighted daily average. Following sampling and analysis, the QSP will immediately calculate the weighted arithmetic average of the pH and turbidity samples to determine if the NALs, shown in the table below, have been exceeded.

Table 7.6 Numeric Action Levels

Parameter	Units	Daily Average
pH	pH units	Lower NAL = 6.5 Upper NAL = 8.5
Turbidity	NTU	250 NTU

In the event that the pH or turbidity NAL is exceeded, the QSP will immediately notify Tamara Zeier and Steve Howe, of Project Navigator, investigate the cause of the exceedance, and identify corrective actions.

Exceedances of NALs will be electronically reported to the State Water Board by the LRP through the SMARTs system within 10 days of the conclusion of the storm event. If requested by the Regional Board, a NAL Exceedance report will be submitted. The NAL Exceedance Report will contain the following information:

- Analytical method(s), method reporting unit(s), and MDL(s) of each parameter;
- Date, place, time of sampling, visual observation, and/or measurements, including precipitation; and
- Description of the current BMPs associated with the sample that exceeded the NAL and the proposed corrective actions taken.

7.6.2 Sampling and Analysis of Stormwater Discharges for Non-Visible Pollutants

In accordance with a Santa Ana Regional Water Quality Control Board (RWQCB) request, sampling for non-visible pollutants will be conducted during all qualifying rain events that produce a discharge from the Site (RWQCB, 2019). One sample per day of discharge during a qualifying event will be collected, as needed, at the locations identified in Table 7.4 for laboratory analysis of non-visible pollutants. Additionally, if discharge is observed during a post-qualifying storm event inspection, one sample will be collected for laboratory analysis of non-visible pollutants. Further sampling will not be conducted following 48-hours with no additional rainfall except to characterize releases of stored or contained stormwater.

If necessary, one sample of stored or contained water from a qualifying storm event will be collected and analyzed for non-visible pollutants when discharged. Stored or collected water from a qualifying event may be sampled at the point of release from the storage or containment area or at the corresponding Site discharge location.

In the event that a qualifying event occurs outside of the Site's scheduled hours, one sample will be collected for laboratory analysis of non-visible pollutants if discharge is still occurring during the post-qualifying storm event inspection.

Samples will be collected during the Site's scheduled hours regardless of the time of year and phase of the construction.

7.6.2.1 Sample Collection

Samples for laboratory analysis will be collected and maintained in accordance with the SWAMP 2008 Quality Assurance Program Plan (QAPrP). Sampling personnel will collect grab samples that are representative of the entire runoff stream. Samples will be collected by dipping a collection container (either a 500-milliliter polypropylene or glass beaker) into the runoff flow path facing upstream until a sufficient volume has been collected and transferring the collected water into a laboratory-supplied sample container. Samples of ponded, sluggish or stagnant water will not be collected.

Depending upon the specific analytical test, some containers may contain preservatives. These containers will **never** be dipped into the runoff stream and will not be overfilled to maintain proper sample preservation.

To maintain sample integrity and prevent cross-contamination, sample collection personnel will adhere to the following protocols:

- Submit samples for laboratory analysis only in laboratory-provided sample containers;
- Wear clean, powder-free nitrile gloves when collecting samples;
- Change gloves whenever something not known to be clean has been touched;
- Change gloves between sampling sites;
- Decontaminate all sampling equipment between sampling locations using a trisodium phosphate water wash and distilled water rinse. Dispose of wash and rinse water appropriately (i.e., not into storm drain or receiving water). Do not decontaminate laboratory-provided sample containers;
- Do not smoke during sampling events;
- Never sample near a running vehicle;
- Do not park vehicles in the immediate sample collection area (even non-running vehicles);
- Do not eat or drink during sample collection; and
- Do not breathe, sneeze, or cough in the direction of an open sample container.

7.6.2.2 *Sample Handling*

Samples for laboratory analysis will be handled as follows, immediately following sample collection:

- Secure sample container caps;
- Complete sample container labels;
- Seal containers in re-sealable storage bags;
- Place sample containers into a cooler with ice;
- Document sample information (time/date) on the *Effluent Sampling Field Log Sheet*; and
- Complete the COC.

Samples will be delivered by sampling personnel to the analytical laboratory as soon as possible following sample collection. Hold times are measured from the time the sample is collected to the time the sample is analyzed. The General Permit requires that samples be received by the analytical laboratory within 48 hours of the physical sampling (unless required sooner by the analytical laboratory). All samples for laboratory analysis will be kept on ice and maintained

between 0 and 6 degrees Celsius from sample collection through delivery to the laboratory. If samples cannot be delivered to the laboratory on the same day as sample collection, they will be stored overnight in a refrigerator to maintain the appropriate temperature required for preservation.

7.6.2.3 *Sample Documentation Procedures*

Sample documentation procedures include the following:

Sample Bottle Identification Labels: Sampling personnel will attach an identification label to each sample bottle. Sample identification will uniquely identify each sample location.

Field Log Sheets: Sampling personnel will complete the *Effluent Sampling Field Log Sheet* for each sampling event.

Chain of Custody: Sampling personnel will complete the COC for each sampling event. The sampler will sign the COC when the samples are turned over to the testing laboratory.

All original data documented on sample bottle identification labels, *Effluent Sampling Field Log Sheet*, and COCs will be recorded using waterproof ink. These will be considered accountable documents. If an error is made on an accountable document, the individual will make corrections by lining through the error and entering the correct information. The erroneous information will not be obliterated. All corrections will be initialed and dated.

7.6.2.4 *Sample Analysis*

Samples will be analyzed using the analytical methods identified in the Table 7.7 for the required monitoring parameters.

Samples will be analyzed by:

Laboratory Name:	Eurofins Calscience Laboratories, Inc.
Street Address:	7440 Lincoln Way
City, State Zip:	Garden Grove, CA 92841-1427
Telephone Number:	(714) 895-5494

ELAP Certification Number: 2792

Samples will be delivered to the laboratory by sampling personnel.

Table 7.7 Non-Visible Pollutant Monitoring Parameters

Constituent	Container Type	Preservation	Method	Holding Time	Reporting Units	Target Reporting Limit
Hydrocarbons						
Total Recoverable Petroleum Hydrocarbons	500 mL amber glass	4 °C	EPA 8015B	Extract in 7 days, analyze within 40 days	µg/L	50
General Chemistry						
Ammonia (NH ₃)	1 L amber glass	H ₂ SO ₄ & 4 °C	SM 4500-NH ₃ B/C	28 days	mg/L	0.10
Biological Oxygen Demand (BOD)	1 L HDPE	4 °C	SM 5210B	48 hours	mg/L	1.5
Metals						
CAM 17 Metals	250 mL HDPE	HNO ₃ & 4 °C	EPA 200.7 EPA 245.1 (mercury only)	28 days	mg/L	0.0002-0.25 ⁽¹⁾
Organics						
Volatile Organics (VOCs)	3 x 40 mL VOA vials	HCl & 4 °C	EPA 624.1	14 days	µg/L	0.50-50 ⁽¹⁾
Semi-Volatile Organics (SVOCs)	1 L amber glass	4 °C	EPA 625.1	Extract in 7 days, analyze within 40 days	µg/L	0.50-50 ⁽¹⁾
Organochlorine Pesticides	1 L amber glass	4 °C	EPA 608.3	Extract in 7 days, analyze within 40 days	µg/L	0.096-1.9 ⁽¹⁾
Polychlorinated Biphenyls (PCBs)	1 L amber glass	4 °C	EPA 608.3	Extract in 7 days, analyze within 40 days	µg/L	0.96

Notes:

(1) Target reporting limit varies by specific constituent

7.6.2.5 *Data Evaluation and Reporting*

Sampling results for non-visible pollutant monitoring will be uploaded to SMARTS within 30 days of receipt of final analytical data from the laboratory.

The QSP will complete an evaluation of the water quality sample analytical results by comparing them to the State of California Title 22 Hazardous Waste Criteria (where applicable) to evaluate if Site BMPs are protective of the environment and the public. As determined by the Site and data evaluation, appropriate BMPs will be repaired or modified to mitigate discharges of non-visible pollutants. Any revisions to the BMPs will be recorded as an amendment to the SWPPP.

The General Permit prohibits stormwater discharges that contain hazardous substances equal to or in excess of reportable quantities established in 40 C.F.R. §§ 117.3 and 302.4. The results of any stormwater discharge that indicates the presence of a hazardous substance in excess of established reportable quantities will be immediately reported to the Regional Water Board and other agencies as required by 40 C.F.R. §§ 117.3 and 302.4.

7.6.3 Sampling and Analysis of Non-stormwater Discharges

Sampling of non-stormwater discharges will be conducted when an authorized or unauthorized non-stormwater discharge is observed discharging from the Project site. Samples of authorized or unauthorized non-stormwater discharges will be collected (when they are observed) from the discharge point of the construction site where the non-stormwater discharge occurring. Site discharge locations are shown on Figure 2 in Appendix B and identified and described in Table 7.4.

There are no authorized non-stormwater discharges identified that have the potential to be discharged from the Project site. Some construction activities have the potential to result in an unplanned (unauthorized) non-stormwater discharge if BMPs fail. These activities include:

- Vehicle and equipment cleaning, fueling, and maintenance operations;
- Vehicle and equipment wash water (i.e., concrete washout water);
- Slurries from concrete mixing operations;
- Sanitary and septic wastes; and
- Runoff from dust control operations.

In the event that non-stormwater produces run-on to the Project site from offsite locations, and this run-on has the potential to contribute to a violation of a NAL, the run-on will also be sampled.

7.6.3.1 *Sample Collection*

Samples for laboratory analysis will be collected and maintained in accordance with the SWAMP 2008 Quality Assurance Program Plan (QAPrP). Sample collection, handling, and documentation requirements are described in Sections 7.6.2.1 through 7.6.2.3.

7.6.3.2 *Sample Analysis*

All non-stormwater discharges that flow through an area where they are exposed to pH altering materials will be monitored for pH. All non-stormwater discharges that flow through a disturbed area will, at a minimum, be analyzed for turbidity. The QSP will identify additional pollutants to be monitored for each non-stormwater discharge incident based on the source of the non-stormwater discharge. If the source of an unauthorized non-stormwater discharge is not known, monitoring for pH, turbidity, MBAS (Methylene Blue Active Substances [surfactants]), TOC (Total Organic Carbon), and residual chlorine or chloramines is recommended to help identify the source of the discharge.

Non-stormwater discharge run-on will be monitored, at a minimum, for pH and turbidity. The QSP will identify additional pollutants to be monitored for each non-stormwater discharge incident based on the source of the non-stormwater discharge. If the source of an unauthorized non-stormwater discharge is not known, monitoring for pH, turbidity, MBAS, TOC, and residual chlorine or chloramines is recommended to help identify the source of the discharge.

Depending on the identified source of the non-stormwater discharge, samples will be collected, preserved, and analyzed using the applicable analytical methods identified in Table 7.7.

7.6.3.3 *Data Evaluation and Reporting*

Non-stormwater discharge results will be submitted to SMARTS with the Annual Report.

The QSP will complete an evaluation of the water quality sample analytical results. pH and turbidity analysis results will be evaluated for compliance with the NALs identified in Section 7.6.1.4. Laboratory analytical results will be evaluated for the constituents suspected to be present in the non-stormwater discharge based on the source investigation. If the runoff sample results indicate the discharge of a pollutant, the BMPs, Site conditions, and surrounding influences will be assessed to determine the probable cause for the release.

As determined by the Site and data evaluation, appropriate BMPs will be repaired or modified to mitigate discharges of non-visible pollutant concentrations. Any revisions to the BMPs will be recorded as an amendment to the SWPPP.

The General Permit prohibits non-stormwater discharges that contain hazardous substances equal to or in excess of reportable quantities established in 40 C.F.R. §§ 117.3 and 302.4. The results of any non-stormwater discharge that indicate the presence of a hazardous substance in excess of established reportable quantities will be immediately reported to the Regional Water Board.

7.6.4 Sampling and Analysis Plan for pH, Turbidity, and Suspended Sediment Concentration in Receiving Water

This Project is not subject to Receiving Water Monitoring.

7.6.5 Sampling and Analysis Plan for Other Pollutants Required by the Regional Board

In a letter dated June 27, 2019, the RWQCB requested that stormwater discharges for qualifying rain events be sampled and analyzed for the non-visible pollutants listed in Table 7.7. Sampling

and analysis of the non-visible pollutants will be conducted in accordance with the procedures included in Section 7.6.2.

7.7 ACTIVE TREATMENT SYSTEM (ATS) MONITORING

This Project does not require a Project specific Sampling and Analysis Plan for an ATS because deployment of an ATS is not planned.

7.8 BIOASSESSMENT MONITORING

This Project is not subject to bioassessment monitoring because it is not a Risk Level 3 Project.

7.9 WATERSHED MONITORING OPTION

This Project is not participating in a watershed monitoring option.

7.10 QUALITY ASSURANCE QUALITY CONTROL

An effective Quality Assurance and Quality Control (QA/QC) plan will be implemented as part of the CSMP to ensure that analytical data can be used with confidence. QA/QC procedures to be initiated include the following:

- Field logs;
- Clean sampling techniques;
- COCs;
- QA/QC Samples; and
- Data verification.

Each of these procedures is discussed in more detail in the following sections.

7.10.1 Field Logs

The purpose of field logs is to record sampling information and field observations during monitoring that may explain any uncharacteristic analytical results. Sampling information to be included in the field log include the date and time of water quality sample collection, sampling personnel, and types of samples that were collected. Field observations should be noted in the field log for any abnormalities at the sampling location (color, odor, BMPs, etc.). Field measurements for pH and turbidity should also be recorded in the field log. A Visual Inspection Field Log and Effluent Sampling Field Log Sheet are included in CSMP Attachment 1 “Example Forms.”

7.10.2 Clean Sampling Techniques

Clean sampling techniques involve the use of certified clean containers for sample collection and clean powder-free nitrile gloves during sample collection and handling. As discussed in Section

7.6.2.1, adoption of a clean sampling approach will minimize the chance of field contamination and questionable data results.

7.10.3 Chain of Custody

The sample chain of custody (COC) is an important documentation step that tracks samples from collection through analysis to ensure the validity of the sample. Sample COC procedures include the following:

- Proper labeling of samples;
- Use of COC forms for all samples; and
- Prompt sample delivery to the analytical laboratory.

Analytical laboratories usually provide COC forms to be filled out for sample containers. An example COC is included in CSMP Attachment 1 “Example Forms.”

7.10.4 QA/QC Samples

QA/QC samples provide an indication of the accuracy and precision of the sample collection, sample handling, field measurements, and analytical laboratory methods. The following types of QA/QC will be conducted for this Project:

- A field duplicate for analysis of metals only at a frequency of 1 duplicate per sampling event.
(Required for all sampling plans with field measurements or laboratory analysis)
- Equipment Blanks at a frequency of 1 per sampling season.
(Only needed if equipment used to collect samples could add the pollutants to sample)
- Field Blanks at a frequency of 1 per sampling event.
(Only required if sampling method calls for field blanks)
- Travel Blanks at a frequency of 1 per sampling event.
(Required for sampling plans that include VOC laboratory analysis)

7.10.4.1 *Field Duplicates*

Field duplicates provide verification of laboratory or field analysis and sample collection. Duplicate samples will be collected, handled, and analyzed using the same protocols as primary samples. The sample location where field duplicates are collected will be randomly selected from the discharge locations. Duplicate samples will be collected immediately after the primary sample has been collected. Duplicate samples will be collected in the same manner and as close in time as possible to the original sample.

7.10.4.2 *Travel Blanks*

Travel blanks assess the potential for cross-contamination of volatile constituents between sample containers during shipment from the field to the laboratory. De-ionized water blanks are taken along for the trip and held unopened in the same cooler with the VOC samples.

7.10.5 Data Verification

After results are received from the analytical laboratory, the QSP will verify the data to ensure that they are complete, accurate, and the appropriate QA/QC requirements were met. Data will be verified as soon as the data reports are received. Data verification will include:

- Check the COC and laboratory reports. *Make sure all requested analyses were performed and all samples are accounted for in the reports.*
- Check laboratory reports to make sure hold times were met and that the reporting levels meet or are lower than the target reporting levels listed in Table 7.7.
- Check data for outlier values and follow up with the laboratory. *Occasionally typographical errors, unit reporting errors, or incomplete results are reported and should be easily detected. These errors need to be identified, clarified, and corrected quickly by the laboratory. The QSP should note data that are an order of magnitude or more different than similar locations or are inconsistent with previous data from the same location.*
- Check laboratory QA/QC results. *EPA establishes QA/QC checks and acceptable criteria for laboratory analyses. These data are typically reported along with the sample results. The QSP will evaluate the reported QA/QC data to check for contamination (method, field, and equipment blanks), precision (laboratory matrix spike duplicates), and accuracy (matrix spikes and laboratory control samples). When QA/QC checks are outside acceptable ranges, the laboratory must flag the data and usually provides an explanation of the potential impact to the sample results.*
- Check the data set for outlier values and, accordingly, confirm results, and re-analyze samples where appropriate. *Sample re-analysis should only be undertaken when it appears that some part of the QA/QC resulted in a value out of the accepted range. Sample results may not be discounted unless the analytical laboratory identifies the required QA/QC criteria were not met and confirms this in writing.*

Field data including inspections and observations must be verified as soon as the field logs are received, typically at the end of the sampling event. Field data verification will include:

- Check field logs to make sure all required measurements were completed and appropriately documented;
- Check reported values that appear out of the typical range or inconsistent; Follow up immediately to identify potential reporting or equipment problems, if appropriate, recalibrate equipment after sampling;

- Verify equipment calibrations;
- Review observations noted on the field logs; and
- Review notations of any errors and actions taken to correct the equipment or recording errors.

7.11 RECORDS RETENTION

All records of stormwater monitoring information and copies of reports must be retained for a period of at least three years from date of submittal or longer if required by the Regional Water Board.

Results of visual monitoring, field measurements, and laboratory analyses must be kept in the SWPPP along with COCs and other documentation related to the monitoring.

Records are to be kept onsite while construction is ongoing. Records to be retained include:

- The date, place, and time of inspections, sampling, visual observations, and/or measurements, including precipitation;
- The individual(s) who performed the inspections, sampling, visual observation, and/or field measurements;
- The date and approximate time of field measurements and laboratory analyses;
- The individual(s) who performed the laboratory analyses;
- A summary of all analytical results, the method detection limits and reporting limits, and the analytical techniques or methods used;
- Rain gauge readings from Site inspections;
- QA/QC records and results;
- Calibration records;
- Visual observation and sample collection exemption records; and
- The records of any corrective actions and follow-up activities that resulted from analytical results, visual observations, or inspections; and
- NAL Exceedance Reports.

Risk Level 2 Stormwater Discharge Visual Observation Log Sheet

Date and Time of Observation:		Report Date:	
Site Information			
Construction Site Name: Ascon Landfill Site Final Remedy			
Construction stage and completed activities:		Approximate area of exposed Site:	
Weather and Observations			
Estimate storm beginning: _____ (date and time)	Estimate storm duration: _____ (hours)	Estimate time since last storm: _____ (days or hours)	Rain gauge reading: _____ (inches)
Observations (If yes identify location)			
Odors	Yes <input type="checkbox"/> No <input type="checkbox"/>	Floating material	Yes <input type="checkbox"/> No <input type="checkbox"/>
Suspended Material	Yes <input type="checkbox"/> No <input type="checkbox"/>	Sheen	Yes <input type="checkbox"/> No <input type="checkbox"/>
Discolorations	Yes <input type="checkbox"/> No <input type="checkbox"/>	Turbidity	Yes <input type="checkbox"/> No <input type="checkbox"/>
Site Inspection			
BMPs or Outfalls Evaluated		Deficiencies Noted	
<i>(add additional sheets or attached detailed BMP Inspection Checklists)</i>			
Photos Taken: Yes <input type="checkbox"/> No <input type="checkbox"/> Photo Reference IDs:			
Corrective Actions Identified (note if SWPPP/REAP change is needed)			
Inspector Information			
Inspector Name:		Inspector Title:	
Signature:		Date:	

Risk Level 2 Effluent Sampling Field Log Sheet

Sampler Name:

Date:

Time Start:

Construction Site Name: **Ascon Landfill Site Final Remedy**

Sampling Event Type: Stormwater Non-stormwater Non-visible pollutant

Field Meter Calibration

pH Meter ID No./Desc.:

Calibration Date/Time:

Calibration Result:

Turbidity Meter ID No./Desc.:

Calibration Date/Time:

Calibration Result:

Field pH and Turbidity Measurements

Discharge Location Description	pH	Turbidity	Time

Grab Samples Collected

Discharge Location Description	Sample Type	Time

Additional Sampling Notes

Time End:

NAL Exceedance Evaluation Summary Report

Project Name	Ascon Landfill Site Final Remedy
Project WDID	8 30C385069
Project Location	21641 Magnolia Street, Huntington Beach, CA
Date of Exceedance	
Type of Exceedance (check one)	<p>NAL Daily Average: <input type="checkbox"/> pH <input type="checkbox"/> Turbidity</p> <p><input type="checkbox"/> Other (specify): _____</p>
Measurement or Analytical Method	<p><input type="checkbox"/> Field meter</p> <p>Sensitivity: _____</p> <p>Calibration Date: _____</p> <p>Calibration Result: 4.0 _____ 7.0 _____ 10.0 _____</p> <p><input type="checkbox"/> Laboratory (specify method): _____</p> <p>Reporting Limit: _____ MDL: _____</p>
Calculated Daily Average	<p>pH _____ (pH units)</p> <p>Turbidity _____ (NTU)</p>
Rain Gauge Measurement	_____ inches
Compliance Storm Event	_____ inches (5-year, 24-hour event)
Visual Observations on Day of Exceedance	

<p>Description of BMPs in Place at Time of Event</p>	
<p>Initial Assessment of Cause</p>	
<p>Corrective Actions Taken (deployed after exceedance)</p>	
<p>Additional Corrective Actions Proposed</p>	
<p>Completed By: _____ Date: _____ (Print Name, Title)</p>	
<p>Signature: _____</p>	

CSMP Attachment 2: Monitoring Records

Place completed Rain Gauge Log Sheets, BMP Inspection Forms, Stormwater Discharge Visual Observation and Effluent Sampling Logs, Monitoring Exceptions, and NAL/NEL Exceedance Reports in this Attachment.

CSMP Attachment 3: Field Instrument Manuals

Section 8 References

Ascon Landfill Site, Final Environmental Impact Report, Remedial Action Plan. May 2015.

Ascon Landfill Site, Revised Final Remedial Design. May 2017.

Ascon Landfill Site, Remedy Implementation Plan, August 2018.

CASQA 2009, *Stormwater BMP Handbook Portal: Construction*, November 2009,
www.casqa.org

Regional Water Quality Control Board (RWQCB), Santa Ana Region (2019). Request for Additional Parameter Sampling and Analysis Under the General Permit for Storm Water Discharge Associated with Construction and Land Disturbing Activities, Order 2009-0009-DWQ as Amended by Order No. 2010-0014-DWQ as Amended by Order No. 2012-006 DWQ, NPDES No. CAS000002, WDID 8 30C385069. June 27, 2019.

State Water Resources Control Board (2009). Order 2009-0009-DWQ, NPDES General Permit No. CAS000002: National Pollutant Discharges Elimination System (NPDES) California General Permit for Storm Water Discharge Associated with Construction and Land Disturbing Activities. Available on-line at:
http://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.shtml.

State Water Resources Control Board (2010). Order 2010-0014-DWQ, NPDES General Permit No. CAS000002: National Pollutant Discharges Elimination System (NPDES) California General Permit for Storm Water Discharge Associated with Construction and Land Disturbing Activities. Available on-line at:
http://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.shtml.

State Water Resources Control Board (2012). Order 2012-0006-DWQ, NPDES General Permit No. CAS000002: National Pollutant Discharges Elimination System (NPDES) California General Permit for Storm Water Discharge Associated with Construction and Land Disturbing Activities. Available on-line at:
http://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.shtml.

Appendix A: Calculations

1	Sediment Risk Factor Worksheet	Entry
2	A) R Factor	
3	Analyses of data indicated that when factors other than rainfall are held constant, soil loss is directly proportional to a rainfall factor composed of total storm kinetic energy (E) times the maximum 30-min intensity (I30) (Wischmeier and Smith, 1958). The numerical value of R is the average annual sum of EI30 for storm events during a rainfall record of at least 22 years. "Isoerodent" maps were developed based on R values calculated for more than 1000 locations in the Western U.S. Refer to the link below to determine the R factor for the Project site.	
4	https://www.epa.gov/npdes/rainfall-erosivity-factor-calculator-small-construction-sites	
5	R Factor Value	141
6	B) K Factor (weighted average, by area, for all Site soils)	
7	The soil-erodibility factor K represents: (1) susceptibility of soil or surface material to erosion, (2) transportability of the sediment, and (3) the amount and rate of runoff given a particular rainfall input, as measured under a standard condition. Fine-textured soils that are high in clay have low K values (about 0.05 to 0.15) because the particles are resistant to detachment. Coarse-textured soils, such as sandy soils, also have low K values (about 0.05 to 0.2) because of high infiltration resulting in low runoff even though these particles are easily detached. Medium-textured soils, such as a silt loam, have moderate K values (about 0.25 to 0.45) because they are moderately susceptible to particle detachment and they produce runoff at moderate rates. Soils having a high silt content are especially susceptible to erosion and have high K values, which can exceed 0.45 and can be as large as 0.65. Silt-size particles are easily detached and tend to crust, producing high rates and large volumes of runoff. Use Site-specific data must be submitted.	
8	Site-specific K factor guidance	
9	K Factor Value	0.32
10	C) LS Factor (weighted average, by area, for all slopes)	
11	The effect of topography on erosion is accounted for by the LS factor, which combines the effects of a hillslope-length factor, L, and a hillslope-gradient factor, S. Generally speaking, as hillslope length and/or hillslope gradient increase, soil loss increases. As hillslope length increases, total soil loss and soil loss per unit area increase due to the progressive accumulation of runoff in the downslope direction. As the hillslope gradient increases, the velocity and erosivity of runoff increases. Use the LS table located in separate tab of this spreadsheet to determine LS factors. Estimate the weighted LS for the Site prior to construction.	
12	LS Table	
13	LS Factor Value	1.22
15	Watershed Erosion Estimate (=R_xK_xLS) in tons/acre	55
16	Site Sediment Risk Factor	MEDIUM
17	Low Sediment Risk: < 15 tons/acre	
18	Medium Sediment Risk: >=15 and <75 tons/acre	
19	High Sediment Risk: >= 75 tons/acre	

Receiving Water (RW) Risk Factor Worksheet	Entry	Score
A. Watershed Characteristics	yes/no	
<p>A.1. (a) Does the disturbed area discharge (either directly or indirectly) to a 303(d)-listed waterbody impaired by sediment</p> <p style="text-align: center;"><u>OR</u></p> <p>A.1. (b) Is the disturbance located within a sub-watershed draining to a 303(d)-listed waterbody impaired by sediment</p> <p>(For help with impaired waterbodies please visit the link below) or has a USEPA approved TMDL implementation plan for sediment? http://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2010.shtml</p> <p style="text-align: center;"><u>OR</u></p> <p>A.2. Does the disturbed area discharge to a waterbody with designated beneficial uses of SPAWN & COLD & MIGRATORY? (For help please review the appropriate Regional Board Basin Plan)</p> <p>http://www.waterboards.ca.gov/waterboards_map.shtml</p>	NO	LOW
Region 1 Basin Plan Region 2 Basin Plan Region 3 Basin Plan Region 4 Basin Plan Region 5 Basin Plan Region 6 Basin Plan Region 7 Basin Plan Region 8 Basin Plan Region 9 Basin Plan		

Appendix B: Site Maps

Appendix C: Permit Registration Documents

Y/N	Permit Registration Document
Y	Notice of Intent
Y	Risk Assessment
Y	Certification
NA	Post-Construction Water Balance
Y	Copy of Annual Fee Receipt
NA	ATS Design Documents
Y	Site Map, see Appendix B

Appendix D: SWPPP Amendment Certifications

SWPPP Amendment No. 01

Project Name: Ascon Landfill Site Final Remedy

Project Number: HC1457

**Qualified SWPPP Developer’s Certification of the
Stormwater Pollution Prevention Plan Amendment**

“This Stormwater Pollution Prevention Plan and attachments were prepared under my direction to meet the requirements of the California Construction General Permit (SWRCB Order No. 2009-009-DWQ as amended by 2010-0014-DWQ and 2012-0006-DWQ). I certify that I am a Qualified SWPPP Developer in good standing as of the date signed below.”



7/26/19

QSD’s Signature

Date

Misty Steele

#1365

QSD Name

QSD Certificate Number

Principal, Geosyntec Consultants

(562) 257-1401

Title and Affiliation

Telephone

211 E. Ocean Blvd Suite 300, Long Beach, CA 90802

msteele@geosyntec.com

Address

Email

SWPPP Amendment No. 02

Project Name: Ascon Landfill Site Final Remedy

Project Number: HC1457

**Qualified SWPPP Developer's Certification of the
Stormwater Pollution Prevention Plan Amendment**

"This Stormwater Pollution Prevention Plan and attachments were prepared under my direction to meet the requirements of the California Construction General Permit (SWRCB Order No. 2009-009-DWQ as amended by 2010-0014-DWQ and 2012-0006-DWQ). I certify that I am a Qualified SWPPP Developer in good standing as of the date signed below."



1/28/2020

QSD's Signature

Date

Misty Steele

#1365

QSD Name

QSD Certificate Number

Principal, Geosyntec Consultants

(562) 257-1401

Title and Affiliation

Telephone

211 E. Ocean Blvd Suite 300, Long Beach, CA 90802

msteele@geosyntec.com

Address

Email

Appendix E: Submitted Changes to PRDs

Log of Updated PRDs

The General Permit allows for the reduction or increase of the total acreage covered under the General Permit when a portion of the Project is complete and/or conditions for termination of coverage have been met, when ownership of a portion of the Project is purchased by a different entity, or when new acreage is added to the Project.

Modified PRDs will be filed electronically within 30 days of a reduction or increase in total disturbed area if a change in permit covered acreage is to be sought. The SWPPP will be modified appropriately, with revisions and amendments recorded in Appendix C. Updated PRDs submitted electronically via SMARTS can be found in this Appendix.

This appendix includes all of the following updated PRDs (check all that apply):

- Revised Notice of Intent (NOI);

- Revised Site Map;

- Revised Risk Assessment;

- New landowner's information (name, address, phone number, email address); and

- New signed certification statement.

Legally Responsible Person

Signature of Legally Responsible Person or Approved
Signatory

Date

Name of Legally Responsible Person or Approved
Signatory

Appendix F: Construction Schedule

Appendix G: Construction Activities, Materials Used, and Associated Pollutants

Table G.1 Construction Activities and Associated Pollutants

Activity	Associated Materials or Pollutants	Pollutant Category ⁽¹⁾
Pit F Removal		
Excavation and grading of work surface	Sediment, Vehicle and Equipment Use	Sediment, Oil and Grease
Slurry excavation of Pit F material	Portland Cement, Vehicle and Equipment Use	Metals, Synthetic Organics, Oil and Grease
Waste hauling	Vehicle and Equipment Use	Oil and Grease
Sanitation facilities	Portable toilets	Nutrients
Lagoon Reinforcement		
Concrete processing/crushing	Vehicle and Equipment Use	Oil and Grease
Mixing Portland Cement with insitu drilling mud/wastes	Portland Cement	Metals, Synthetic Organics
Grading	Sediment, Vehicle and Equipment Use	Sediment, Oil and Grease
Aggregate Placement	Vehicle and Equipment Use	Oil and Grease
Woven Geotextile Installation	Vehicle and Equipment Use	Oil and Grease
Sanitation Facilities	Portable toilets	Nutrients
Waste Consolidation		
Excavation and Grading	Sediment; Vehicle and Equipment Use	Sediment; Oil and Grease
Sanitation Facilities	Portable toilets	Nutrients
Cap Installation		
Import engineered fill	Sediment; Vehicle and Equipment Use	Sediment; Oil and Grease
Grading	Sediment, Vehicle and Equipment Use	Sediment, Oil and Grease
Woven Geotextile Installation	Vehicle and Equipment Use	Oil and Grease
Sanitation Facilities	Portable toilets	Nutrients
Surface Drainage and Hardscaping		
Aggregate placement	Vehicle and Equipment Use	Oil and Grease
Concrete pouring/paving	Portland Cement, Vehicle and Equipment Use	Metals, Synthetic Organics, Oil and Grease
Sanitation Facilities	Portable toilets	Nutrients

⁽¹⁾ Categories per CASQA BMP Handbook (i.e., Sediment, Nutrients, Bacteria and Viruses, Oil and Grease, Metals, Synthetic Organics, Pesticides, Gross Pollutants, and Vector Production)

***Appendix H: CASQA Stormwater BMP Handbook Portal:
Construction Fact Sheets***

Appendix I: BMP Inspection Form

BMP INSPECTION REPORT

Date and Time of Inspection:		Date Report Written:		
Inspection Type: (Circle at least one)	Weekly <i>Complete Parts I,II,III and VII</i>	Pre-Storm <i>Complete Parts I,II,III,IV and VII</i>	During Rain Event <i>Complete Parts I, II, III, V, and VII</i>	Post-Storm <i>Complete Parts I,II,III,VI and VII</i>
Part I. General Information				
Site Information				
Site Name: Ascon Landfill Site				
Construction stage and completed activities:			Approximate area of Site exposed/disturbed? Stabilization measures in place for inactive areas?:	
Photos taken (maintained electronically)? <input type="checkbox"/> Yes <input type="checkbox"/> No				
Weather				
Is a "Qualifying Event" predicted or did one occur (i.e., 1/2" rain with 48-hrs or greater between events)? (Y/N) If yes, summarize forecast:				
Estimate storm beginning: (date and time)		Estimate storm duration: (hours)		
Estimate time since last storm: (days or hours)		Rain gauge reading and location: (in)		
Exemption Documentation (explanation required if inspection could not be conducted). Visual inspections are not required outside of business hours or during dangerous weather conditions such as flooding or electrical storms.				
Inspector Information				
Inspector Name:			Inspector Title:	
Signature:			Date:	

Part II. BMP Observations. Describe deficiencies in Part III.			
Minimum BMPs for Risk Level 2 Sites	Adequately designed, implemented and effective? (yes, no, N/A)	Action Required? (yes/no/N/A)	Action Implemented (Date)
Good Housekeeping for Construction Materials			
Inventory of products (excluding materials designed to be outdoors)			
Stockpiled construction materials not in use are in bermed areas and covered (as needed)			
All chemicals are stored in watertight containers with appropriate secondary containment, or in a completely enclosed storage shed			
Construction materials are minimally exposed to precipitation			
BMPs preventing the offsite tracking of materials are implemented and properly effective			
Good Housekeeping for Waste Management			
Wash/rinse water and materials are prevented from being disposed into the storm drain system			
Portable toilets have secondary containment to prevent discharges of waste			
Sanitation facilities are clean and with no apparent leaks or spills			
Equipment is in place to cover waste disposal containers at the end of business day and during rain events			
Discharges from waste disposal containers are prevented from discharging to the storm drain system / receiving water			
Stockpiled waste material is securely protected from wind and rain if not actively in use			
Procedures are in place for addressing spills			
Spill response personnel are designated and trained			
Equipment and materials for cleanup of spills is available onsite			
Washout areas (e.g., concrete) are contained appropriately to prevent discharge			
Good Housekeeping for Vehicle Storage and Maintenance			
Measures are in place to prevent oil, grease, or fuel from leaking into the ground, storm drains, or surface waters			
All equipment or vehicles are fueled, maintained, and stored in a designated area with appropriate BMPs			
Vehicle and equipment leaks are cleaned immediately and disposed of properly			

Part II. BMP Observations Continued. Describe deficiencies in Part III.			
Minimum BMPs for Risk Level 2 Sites	Adequately designed, implemented and effective? (yes, no, N/A)	Action Required? (yes/no)	Action Implemented (Date)
Good Housekeeping for Landscape Materials			
Stockpiled landscape materials such as mulches and topsoil are contained and covered when not actively in use			
Erodible landscape material has not been applied within two days before a forecasted rain event or during an event			
Erodible landscape materials are applied at quantities and rates in accordance with manufacturer recommendations			
Bagged erodible landscape materials are stored on pallets and covered			
Good Housekeeping for Air Deposition of Site Materials			
Good housekeeping measures are implemented onsite to control the air deposition of site materials and from site operations			
Non-stormwater Management			
Non-stormwater discharges are properly controlled			
Vehicles are cleaned in a manner to prevent non-stormwater discharges to surface waters or drainage systems			
Streets are cleaned in a manner to prevent unauthorized non-stormwater discharges to surface waters or drainage systems.			
Erosion Controls			
Wind erosion controls are effectively implemented			
Effective soil cover is provided for inactive disturbed areas (i.e., not scheduled to be disturbed for 14 days) as well as finished slopes, open space, utility backfill, and completed lots			
The use of plastic materials is limited in cases when a more sustainable, environmentally friendly alternative exists.			
Sediment Controls			
Perimeter controls are established and effective at controlling erosion and sediment discharges from the Site			
Entrances and exits are stabilized to control erosion and sediment discharges from the Site			
Sediment basins are properly maintained (where applicable)			
Linear sediment control along toe of slope, face of slope, and at grade breaks			
Limit construction activity to and from Site to entrances and exits that employ effective controls to prevent offsite tracking			

Part II. BMP Observations Continued. Describe deficiencies in Part III.			
All storm drain inlets, perimeter controls, runoff control BMPs, and pollutant controls at entrances and exits are maintained and protected from activities that reduce their effectiveness			
Inspect all immediate access roads daily			
Run-On and Run-Off Controls			
Run-on to the Site is effectively managed and directed away from all disturbed areas.			
Other			
Project SWPPP and BMP plan are up to date, available onsite and being properly implemented			
Part III. Descriptions of BMP Deficiencies			
Deficiency	Repairs Implemented: Note - Repairs must begin within 72 hours of identification, and complete repairs as soon as possible.		
	Start Date	Action	
1.			
2.			
3.			
4.			
5.			
Part IV. Additional Pre-Storm Observations. Note the presence or absence of floating and suspended materials, sheen, discoloration, turbidity, odors, and source(s) of pollutants(s).			
Do stormwater storage and containment areas have adequate freeboard? If no, complete Part III.			Yes, No, N/A
Are drainage areas free of spills, leaks, or uncontrolled pollutant sources? If no, complete Part VII and describe below.			Yes, No, N/A
Notes:			
Are stormwater storage and containment areas free of leaks? If no, complete Parts III and/or VII and describe below.			Yes, No, N/A
Notes:			

Part V. Additional During Storm Observations. If BMPs cannot be inspected during inclement weather, list the results of visual inspections at all relevant outfalls, discharge points, and downstream locations. Note odors or visible sheen on the surface of discharges. Complete Part VII (Corrective Actions) as needed.

Outfall, Discharge Point, or Other Downstream Location

Location	Description
Location	Description
Location	Description
Location	Description
Location	Description
Location	Description
Location	Description
Location	Description
Location	Description

Part VI. Additional Post-Storm Observations. Visually observe (inspect) stormwater discharges at all discharge locations within two business days (48 hours) after each qualifying rain event and observe (inspect) the discharge of stored or contained stormwater that is derived from and discharged subsequent to a qualifying rain event producing precipitation of ½ inch or more at the time of discharge. Complete Part VII (Corrective Actions) as needed.

Discharge Location, Storage or Containment Area	Visual Observation

Part VII. Additional Corrective Actions Required. Identify additional corrective actions not included with BMP Deficiencies (Part III) above. Note if SWPPP change is required.

Required Actions	Implementation Date
1.	
2.	
3.	
4.	
5.	

Additional Inspection Notes/Observations:

Appendix J: Project Specific Rain Event Action Plan Template

Risk Level 2 Rain Event Action Plan (REAP)

Date of REAP:

WDID Number: 8 30C385069

Date(s) Rain Predicted to Occur:

Predicted % chance of rain:

Predicted Rain Event Triggered Actions

The QSP will complete an event-specific REAP at least 48 hours in advance of a precipitation event forecast to have a 50% or greater chance of producing precipitation in the Project area. The REAP will be onsite and be implemented at least 24 hours in advance of any the predicted precipitation event.

Below is a list of suggested actions and items to review for this Project. Each active Trade should check all material storage areas, stockpiles, waste management areas, vehicle and equipment storage and maintenance, areas of active soil disturbance, and areas of active work to ensure the proper implementation of BMPs. Project-wide BMPs should be checked and cross- referenced to the BMP progress map.

Trade or Activity	Suggested action(s) to perform / item(s) to review prior to rain event
<input type="checkbox"/> Information & Scheduling	<input type="checkbox"/> Inform trade supervisors of predicted rain <input type="checkbox"/> Check scheduled activities and reschedule as needed <input type="checkbox"/> Alert erosion/sediment control provider <input type="checkbox"/> Alert sample collection contractor (if applicable) <input type="checkbox"/> Schedule staff for extended rain inspections (during scheduled working hours only) <input type="checkbox"/> Check Erosion and Sediment Control (ESC) material stock <input type="checkbox"/> Review BMP progress map <input type="checkbox"/> Other: _____
<input type="checkbox"/> Material storage areas	<input type="checkbox"/> Material under cover or in sheds (e.g., treated woods and metals) <input type="checkbox"/> Perimeter control around stockpiles <input type="checkbox"/> Other: _____
<input type="checkbox"/> Waste management areas	<input type="checkbox"/> Dumpsters closed <input type="checkbox"/> Drain holes plugged <input type="checkbox"/> Recycling bins covered <input type="checkbox"/> Sanitary stations are secondarily contained and protected from tipping <input type="checkbox"/> Other: _____
<input type="checkbox"/> Trade operations	<input type="checkbox"/> Exterior operations shut down for event (e.g., no concrete pours or paving) <input type="checkbox"/> Soil treatments (e.g., fertilizer) ceased within 24 hours of event <input type="checkbox"/> Materials and equipment (ex: tools) properly stored and covered <input type="checkbox"/> Waste and debris disposed in covered dumpsters or removed from Site <input type="checkbox"/> Trenches and excavations protected <input type="checkbox"/> Perimeter controls around disturbed areas <input type="checkbox"/> Exposed, greased surfaces as a result of active maintenance/repair projects are covered <input type="checkbox"/> Fueling during rain is avoided. If fueling must take place, secondary containment in the form of a bucket/bin is placed below the nozzle during active fueling operations to prevent drips or overflows from contacting the ground <input type="checkbox"/> Other: _____
<input type="checkbox"/> Site ESC BMPs	<input type="checkbox"/> Adequate capacity in sediment basins and traps <input type="checkbox"/> Site perimeter controls in place <input type="checkbox"/> Catch basin and drop inlet protection in place and clean <input type="checkbox"/> Temporary erosion controls deployed <input type="checkbox"/> Temporary perimeter controls deployed around disturbed areas and stockpiles <input type="checkbox"/> Roads swept; Site ingress and egress points stabilized <input type="checkbox"/> Other: _____
<input type="checkbox"/> Concrete rinse out area	<input type="checkbox"/> Adequate capacity for rain <input type="checkbox"/> Wash-out bins covered <input type="checkbox"/> Other: _____

<input type="checkbox"/> Spill and drips	<input type="checkbox"/> All incident spills and drips cleaned <input type="checkbox"/> Drip pans emptied <input type="checkbox"/> Other:
Trade or Activity	Suggested action(s) to perform / item(s) to review prior to rain event
<input type="checkbox"/> Other / Discussion / Diagrams	<input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____

Attach a printout of the weather forecast from the NOAA website to the REAP.

I certify under penalty of law that this Rain Event Action Plan (REAP) will be performed in accordance with the General Permit by me or under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Date: _____

 Qualified SWPPP Practitioner (Use ink)

Site Stormwater Manager Information:

Julie Walters, QSP
 Geosyntec Consultants
 24-hour phone: (562) 257-1401

Erosion and Sediment Control Provider:

Items procured by Entact (contact information in Appendix L)

Appendix K: Training Reporting Form

Trained Contractor Personnel Log Stormwater Management Training Log and Documentation

Project Name: Ascon Landfill Site Final Remedy

WDID #: 8 30C385069

Stormwater Management Topic: (check as appropriate)

- | | |
|--|---|
| <input type="checkbox"/> Erosion Control | <input type="checkbox"/> Sediment Control |
| <input type="checkbox"/> Wind Erosion Control | <input type="checkbox"/> Tracking Control |
| <input type="checkbox"/> Non-stormwater Management | <input type="checkbox"/> Waste Management and Materials Pollution Control |
| <input type="checkbox"/> Stormwater Sampling | |

Specific Training Objective: _____

Location: _____ Date: _____

Instructor: _____ Telephone: _____

Course Length (hours): _____

Attendee Roster (Attach additional forms if necessary)

Name	Company	Email

As needed, add proof of external training (e.g., course completion certificates, credentials for QSP, QSD).

Appendix L: Responsible Parties

Project Name: Ascon Landfill Site Final Remedy

WDID #: 8 30C385069

Identification of Approved Signatories

Name	Project Role	Company
Not applicable		

Identification of Authorized Data Submitters

Name of Personnel	Project Role	Company
Tamara Zeier	Project Manager	Project Navigator
Steve Howe	Project Manager (Assistant)	Project Navigator
Julie Walters	QSP	Geosyntec Consultants

Identification of QSP(s)

The following are QSPs associated with this Project:

Name of Personnel ⁽¹⁾	Company	Date
Julie Walters	Geosyntec Consultants	17 October 2018
Misty Steele	Geosyntec Consultants	17 October 2018

(1) If additional QSPs are required on the job site, add additional lines and include information here.

Appendix M: Contractors and Subcontractors

Geosyntec Consultants – Remedy Design, Engineering, and Stormwater Support
2100 Main Street, Suite 150
Huntington Beach, CA 92648
(714) 969-0800

Entact – Remediation Construction
890 Osos St Suite E
San Luis Obispo, CA 93401
(805) 250-1227

RES Environmental – Air Quality Monitoring
865 Via Lata
Colton, CA 92324
(909) 422-1001

Appendix N: Construction General Permit

Available online at:

https://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml