SECTION 015723 - STORMWATER POLLUTION PROTECTION PLAN (SWPPP)

PART 1 - GENERAL

1.1 SUMMARY

NTS: STORMWATER POLLUTION PREVENTION PLAN (SWPPP) FOR USE WITH ALL PROJECTS WHERE CONSTRUCTION ACTIVITIES, SUCH AS CLEARING, GRADING, DEMOLITION, AND EXCAVATION RESULT IN ONE OR MORE ACRES OF SOIL DISTURBANCE, OR ARE PART OF A COMMON PLAN OF DEVELOPMENT.

FOR PROJECTS THAT DISTURB BETWEEN 1 AND 5 ACRES AND WOULD QUALIFY FOR AN EPA SMALL CONSTRUCTION EROSIVITY WAIVER, CONTACT ENVIRONMENT/HEALTH/SAFETY (EHS) ENVIRONMENTAL SERVICES GROUP (ESG) STORMWATER PROGRAM MANAGER.

A. Discharges of stormwater from the Subcontractor must comply with Order No. 2009-0009-DWQ as amended by 2010-0014-DWQ and 2012-0006-DWQ, NPDES General Permit No. CAS000002, issued by the SWRCB for "Stormwater Discharges Associated with Construction and Land Disturbance Activities," hereinafter called the "Permit." Manage work activities to reduce the discharge of pollutants to surface waters, groundwater, or municipal storm sewer systems including work items for:

1. Preparation of a Stormwater Pollution Prevention Plan by LBNL's Stormwater Program Manager. SWPPP preparation includes obtaining SWPPP acceptance, preparing a Construction Site Monitoring Program (CSMP) and a Sampling and Analysis Plan (SAP). The Subcontractor's Qualified SWPPP Developer (QSD) shall amend the SWPPP and its Qualified SWPPP Practitioner (QSP) shall implement all monitoring and inspection of Best Management Practices (BMPs) at the project site.

2. Stormwater Annual Report. Stormwater Annual Report preparation includes compliance activities, certifications, sampling and analysis results, monitoring and inspection results, documentation of training, and obtaining Stormwater Annual Report acceptance. The Subcontractor's stormwater consultant shall prepare the Annual Report and provide to LBNL's Stormwater Program Manager for submittal to the State's Stormwater Multi Application Reporting and Tracking System (SMARTS) database.

3. Stormwater Sampling and Analysis. Stormwater Sampling and Analysis includes reporting of stormwater quality per qualifying rain event by the Subcontractor's QSP. Specified for Risk Level 2, the work includes preparation, collection, analysis, and reporting of stormwater samples for turbidity, pH, and potentially other constituents. (Specified for both Risk Level 1 and 2, when any breach, malfunction, leakage, or spill is observed during a visual inspection which could result in the discharge of pollutants to surface waters that would not be visually detectable in stormwater.)

4. Non-stormwater sampling by the Subcontractor's QSP. Specified for Risk Level 2, the work includes preparation, collection, analysis, and reporting of effluent for turbidity, pH, and potential non-visible pollutants at all discharge points where non-stormwater and/or authorized non-stormwater is discharged off-site.

5. Rain Event Action Plan. Required for Risk Level 2 and may also be included in the SWPPP for Risk Level 1 Projects, a REAP will be prepared and submitted 48 hours prior to any likely precipitation event. No later than 24 hours prior to the likely precipitation event the REAP will be implemented and available onsite.

B. The Subcontractor shall coordinate with The University to ensure the delivery of all engineering, material, labor and equipment for planning, documenting, submitting, monitoring, testing, installing, implementation and maintenance of all surface-water pollution prevention and erosion control measures. This work includes but is not necessarily limited to:

1. Providing a Qualified SWPPP Developer (QSD) for documentation and planning.

2. Providing a Qualified SWPPP Practitioner (QSP) for monitoring and implementation.

3. Preparing and implementing the site specific Storm Water Pollution Prevention Plan (SWPPP).

4. Submitting to and paying fees to the State Water Resources Control Board on behalf of The University.

5. Furnishing, placing, and installing effective measures for preventing runoff of soil, silts, gravel, hazardous chemicals or other materials prohibited by the Regional Water Quality Control Board (RWQCB) from entering the storm water drainage system.

6. Management of on-site construction materials in such a manner as to prevent said materials from contacting storm water or wash water and running off into the storm drain system.

C. Complying with applicable standards and regulations specified herein.

D. Maintaining the most current revised SWPPP plan at the Subcontractor's work site.

E. Reviewing any changes in the SWPPP plan at the weekly progress meetings. The Subcontractor shall submit a numbered checklist of the current status of each prevention measure on the site.

F. Filing reports as required by the Permit.

G. Filing the Notice of Termination (NOT) in a timely manner upon completion. Do not start work until:

1. The Subcontractor has procured the services of a qualified stormwater consultant

2. SWPPP has been reviewed and accepted

3. Waste Discharge Identification Number (WDID) is issued

4. SWPPP review requirements have been fulfilled.

5. The Subcontractor has procured, installed, and will maintain all BMPs as specified in the SWPPP and its Attachments.

H. Project Risk Level Determination

ESG's stormwater program manager will complete the Project's Risk Level Determination (RL1, 2, or 3)

1.2 REFERENCE STANDARDS

A. 40 CFR - Title 40; 2024.

1.3 ENVIRONMENTAL ENFORCEMENT

A. The San Francisco Bay Regional Water Quality Control Board (RWQCB) has the authority to enforce applicable stormwater NPDES regulations. Agency enforcement may include but is not limited to: citations, orders to abate, bills for cleanup costs and administration, civil suits, and/or criminal charges. Contract compliance action by the University shall not be construed to void or suspend any enforcement actions by this or other regulatory agencies. Failure to comply with surface water pollution measures as described in the Project specific SWPPP and appropriate permits may result in The University's halting work and pursuing other contractual remedy until remedial action is performed by the Subcontractor.. The costs associated with lost time, rework, cleanup, or regulatory penalties resulting from the Subcontractor's failure to comply with provisions of the appropriate plan shall be wholly borne by the Subcontractor. If time is of the essence in

applying the remedy, The University may, at cost to the Subcontractor, enact required remedy. If the field conditions show, as determined by the University, that water pollution is leaving the site, the Subcontractor shall implement additional BMPs to prevent the discharge of pollution at no additional cost to The University.

1.4 DEFINITIONS AND ABBREVIATIONS

Active and Inactive areas	(1) Active areas have soil disturbing work activities occurring at least once within 14 days, and (2) Inactive areas are areas that have not been disturbed for at least 15 days.
ATS	Active Treatment System
BMPs	Best Management Practices meeting Best Available Technology economically achievable and Best Conventional Pollutant Control Technology.
Construction Phase	Construction phases are (1) construction including, demolition, grading, excavation, and land development, (2) street and utilities, (3) vertical construction, and (4) final landscaping and soil stabilization.
CSMP	Construction Site Monitoring Program
EHS	Environment/Health/Safety
ESG	Environmental Services Group
HMA	Hot Mix Asphalt
NAL	Numeric Action Level
NPDES	National Pollutant Discharge Elimination System
NOI	Notice of Intent
NWH	The hours normally worked on this Project.
PCC	Portland Cement Concrete
QSD	Qualified SWPPP Developer
QSP	Qualified SWPPP Practitioner
Qualified Rain Event	A qualified rain event is a storm that produces at least 0.5 inch of precipitation with a 48-hour or greater period between storms.
REAP	Rain Event Action Plan
RWQCB	Regional Water Quality Control Board
SAP	Sampling and Analysis Plan
SMARTS	Stormwater Multi Application Reporting and Tracking System
SWRCB	State Water Resources Control Board
SWPPP	Stormwater Pollution Prevention Plan
WDID	Waste Discharge Identification Number
WPCD	Water Pollution Control Drawings

1.5 SUBMITTALS

A. Upon NTS: contract approval, start the following process for SWPPP acceptance:

1. Notify Environment/Health/Safety Division (EHS) Environmental Services Group (ESG)’s Stormwater Program Manager and allow 4 weeks for SWPPP preparation. If revisions are required after review by the Subcontractor, ESG’s Stormwater Program Manager will make the revisions and notify the Subcontractor when the revisions are complete.

2. When all parties have accepted the SWPPP, ESG’s Stormwater Program Manager will upload the accepted SWPPP to the SMARTS database.

3. Prior to the start of the rainy season (October 1), the Subcontractor will prepare and submit a dewatering plan to ESG for review and approval. The dewatering plan shall be prepared and receive ESG’s approval prior to the Subcontractor submitting an application for a Special Waste Water Discharge Permit described in item 4.

4. Prior to the start of the rainy season, the Subcontractor shall prepare and submit a Special Waste Water Discharge Permit application from the East Bay Municipal Utilities District (EBMUD) for permitted stormwater discharges to the sanitary sewer system. The Subcontractor's contact person shall be identified on the permit application, and will obtain ESG's Representative signature in the certification section of the permit application. All costs and fees associated with the Special Waste Water Discharge Permit shall be paid by the Subcontractor.

B. Submit:

1. Stormwater training records including training dates and subjects for the Subcontractor's employees. Include dates and subjects for ongoing training, including tailgate meetings.

2. Employee training records:

a. Within 5 days of SWPPP acceptance for existing employees

b. Within 5 days of training for new employees

c. At least 5 days before start of work for the Subcontractor's employees

C. The Subcontractor's stormwater consultant shall prepare a Stormwater Annual Report for the reporting period from July 1st to June 30th. Submit the report no later than August 1 if construction occurs from July 1 through June 30 or within 15 days after contract acceptance if construction ends before June 30. The Stormwater Annual Report will be electronically submitted via SMARTS by the ESG's Stormwater Program Manager.

D. Submit the Stormwater Annual Report as follows:

1. Submit the Stormwater Annual Report to ESG's Stormwater Program Manager and allow 10 days for review. If revisions are required, ESG's Stormwater Program Manager will provide comments and notify the Subcontractor's stormwater consultant when the review is complete.

2. Change and resubmit the Stormwater Annual Report within 5 days of receipt of ESG's Stormwater Program Manager's review and comments. ESG's Stormwater Program Manager's review resumes when the complete Stormwater Annual Report is resubmitted.

3. Upon final review and approval, the Annual Report will be uploaded to the SMARTS database by ESG's Stormwater Program Manager.

E. ESG's Stormwater Program Manager will notify the Subcontractor when the Annual Report has been submitted, certified, and accepted by the State Water Board.

F. The Annual Report submittal shall include:

1. An approved report format.

2. Project information, including description and location.

3. Stormwater monitoring information including:

a. Summary and evaluation of sampling and analysis results including laboratory reports

b. Analytical methods, reporting units, detections limits for analytical parameters

c. Summary of corrective actions

d. Identification of corrective actions or compliance activities that were not implemented

e. Summary of violations

f. Names of individuals performing stormwater inspections and sampling

g. Logistical information for inspections and sampling including location, date, time, and precipitation

h. Visual observations and sample collection records

4. Include documentation on training for:

a. Individuals responsible for NPDES permit compliance

b. Individuals responsible for BMP installation, inspection, maintenance, and repair

c. Individuals responsible for preparing, revising, and amending the SWPPP

G. At least 5 days before operating any construction support facility, the Subcontractor shall submit:

1. A plan showing the location and quantity of BMP practices associated with the construction support facility

2. A copy of the NOI approved by the RWQCB and the SWPPP approved by the RWQCB if the Subcontractor will be operating a batch plant or a crushing plant under the General Industrial Permit (see 1.5.A.9 below).

H. Submit all field-generated SWPPP forms, e.g. Weekly Inspection Reports, REAPS, and Sampling & Monitoring Data, on a monthly basis. Forms shall be submitted to ESG's Stormwater Program Manager in an electronic format (for example scanned and emailed), and shall be due the first full week of the next consecutive month.

1.6 QUALITY CONTROL AND ASSURANCE

A. Training

1. The Subcontractor shall provide stormwater training for:

a. Project managers

b. Supervisory personnel

c. Employees involved with BMP work

2. Train all employees in the following subjects:

a. BMP work and regulations

b. Implementation and maintenance for:

1) Temporary soil stabilization

2) Temporary sediment control

3) Tracking control

4) Wind erosion control

5) Material pollution prevention and control

6) Waste management

7) Non-stormwater management

8) Identifying and handling hazardous substances

9) Potential dangers to humans and the environment from spills and leaks or exposure to toxic or hazardous substances

3. Subcontractor employees must receive initial stormwater training by the Subcontractor's qualified stormwater professional training before working on the site.

4. Conduct weekly training meetings covering:

   a. BMP deficiencies and corrective actions

   b. BMPs that are required for work activities during the week

   c. Spill prevention and control

   d. Material delivery, storage, use, and disposal

   e. Waste management

   f. Non-stormwater management procedures

5. Training for personnel to collect water quality samples must include:

   a. SAP review

   b. Health and safety review

   c. Sampling simulations

6. If the Subcontractor operates construction support facilities, protect stormwater systems or receiving waters from the discharge of potential pollutants by using BMPs.

7. Construction support facilities include:

   a. Staging areas

   b. Storage yards for equipment and materials

   c. Mobile operations

   d. Batch plants for Portland Cement Concrete (PCC) and Hot Mix Asphalt (HMA)

   e. Crushing plants for rock and aggregate

   f. Other facilities installed for your convenience such as haul roads

8. If the Subcontractor operates a batch plant to manufacture PCC, HMA, or other material; or a crushing plant to produce rock or aggregate, obtain coverage under the General Industrial Permit. The Subcontractor must be covered under the General Industrial Permit for batch plants and crushing plants.

9. Discharges from manufacturing facilities such as batch plants must comply with the general waste discharge requirements for Order No. 2014-0057-DWQ, NPDES General Permit No. CAS000001,

issued by the SWRCB for "Discharges of Stormwater Associated with Industrial Activities Excluding Construction Activities." For the General Industrial Permit, go to:

http://www.waterboards.ca.gov/

B. The Subcontractor's QSD must have the following qualifications:

1. The QSD shall have attended a State Water Board-sponsored or approved QSD training course, and passed State Water Board QSD exam, before September 2011. The QSD shall provide a copy of the valid certification for inclusion in the SWPPP.

2. Valid registrations or certification described in the Permit.

C. The Qualified SWPPP Practitioner (QSP) shall be either a Qualified SWPPP Developer (QSD) or have the following qualifications:

1. The QSP shall have attended a State Water Board-sponsored or -approved QSP training course before September 2011 and passed the State Water Board QSP exam. The QSP shall provide a copy of the valid certification for inclusion in the SWPPP.

D. At the site, the Subcontractor's QSP must:

1. Be responsible for BMP implementation

2. Be the primary contact for BMPs

3. Oversee the maintenance of BMPs

4. Oversee and enforce hazardous waste management practices

5. Have the authority to mobilize crews to make immediate repairs to BMP practices

6. Ensure that all employees have current water pollution control training

7. Implement the accepted SWPPP and amend the SWPPP when required

E. The QSP must oversee:

1. Inspections of BMPs identified in the SWPPP

2. Inspections and reports for visual monitoring

3. Preparation and implementation of REAPs

4. Sampling and analysis

5. Preparation and submittal of:

a. NAL exceedance reports

b. SWPPP annual certification

c. Annual reports

d. BMP status reports

e. Stormwater Pollution Prevention Plan (SWPPP)

1.7 GENERAL

A. SWPPP work includes preparing a SWPPP including a CSMP, obtaining SWPPP acceptance, amending the SWPPP by the Subcontractor's QSD, and inspecting and reporting on BMP practices at the site by the Subcontractor's QSP. The SWPPP must comply with the Permit.

B. The Subcontractor may request, or ESG's Stormwater Program Manager may order, changes to the BMP work. Changes may include the addition of new BMP implementation.

C. The SWPPP must include sections as specified for the Project Risk Level as follows:

1. For Risk Level 1:

a. Schedule

b. CSMP

2. For Risk Level 2:

a. Schedule

b. CSMP

c. Adherence to Effluent Standards for NALs

d. REAP

D. The SWPPP must include BMPs for:

1. Stormwater and non-stormwater from areas outside of the site related to the Subcontractor's work activities such as:

a. Staging areas

b. Storage yards

c. Access roads

2. Activities or mobile operations related to Subcontractor-obtained NPDES permits

3. Construction support facilities

E. The SWPPP must include, if applicable, a copy of permits obtained by The University such as Fish & Game permits, US Army Corps of State Representatives permits, and RWQCB 401 Certifications.

F. The Subcontractor's QSD shall amend the SWPPP if:

1. Changes in work activities could affect the discharge of pollutants

2. BMP practices are added by change order work

3. BMP practices are added at your discretion

4. Changes in the amount of disturbed soil are substantial

5. Objectives for reducing or eliminating pollutants in stormwater discharges have not been achieved

6. There is a Permit violation

G. Each amendment of the SWPPP will be signed by the Subcontractor's QSD and include a listing of the date of initial preparation and the date of each amendment in the SWPPP.

H. Whenever the Subcontractor amends the SWPPP, follow the same process specified for SWPPP acceptance.

I. Retain a printed copy of the accepted SWPPP at the site.

1.8 SWPPP SCHEDULE

A. The SWPPP schedule must:

1. Describe when work activities will be performed that could cause the discharge of pollutants into stormwater

2. Describe BMP practices associated with each construction phase

3. Identify soil stabilization and sediment control practices for disturbed soil areas

1.9 CONSTRUCTION SITE MONITORING PROGRAM (CSMP)

A. ESG's Stormwater Program Manager will prepare a CSMP as part of the SWPPP. The CSMP must be developed before starting work and be revised to reflect current construction activities as necessary.

B. The CSMP must include sections for the Project Risk Level as follows:

1. For Risk Level 1:

a. Visual Monitoring

b. SAP for Non-Visible Pollutants

2. For Risk Level 2:

a. Visual Monitoring

b. SAP for Non-Visible Pollutants

c. SAP for sediment and turbidity

d. SAP for pH

3. For Active Treatment System (ATS) discharges:

a. Visual Monitoring

b. SAP for temporary active treatment systems

1.10 VISUAL MONITORING

A. The Subcontractor's QSP must oversee the performance of visual inspections for qualifying rain events.

B. For each qualifying rain event, perform visual inspections and record observations during normal working hours as follows:

1. Obtain rainfall data from the University rain gauge

2. Observe:

a. Within 2 days before the storm:

1) Drainage areas for spills, leaks, or uncontrolled pollutants

2) Proper implementation of BMP practices

3) Stormwater storage areas for leaks and adequate freeboard

b. Every 24 hours during the storm:

1) BMPs for effective operation

2) BMPs needing maintenance and repair

c. Within 2 days after the storm event:

1) Discharge locations

2) BMPs to evaluate the design, implementation, and effectiveness

3) To identify where additional BMPs may be needed

C. Perform non-stormwater discharge (authorized or unauthorized) visual inspections as follows:

1. At least once during each of the following periods:

a. January through March

b. April through June

c. July through September

d. October through December

2. Observe during daylight hours the presence or evidence of any non- stormwater discharge, pollutant characteristics (floating and suspended materials, sheen, discoloration, turbidity, odors, etc.), and source.

3. If the presence or evidence of unauthorized non-stormwater discharges was observed, the response taken to eliminate the unauthorized non-stormwater discharge shall be documented.

D. The Subcontractor's QSP must prepare visual inspection reports that include the following:

1. Name of personnel performing the inspection, inspection date, and date inspection report completed

2. Storm and weather conditions

3. Locations and observations

4. Corrective actions taken

E. Maintain visual inspections reports at the site as part of the SWPPP.

1.11 SAMPLING AND ANALYSIS PLAN (SAP)

A. ESG's Stormwater Program Manager will include an SAP in the CSMP to monitor the effectiveness of BMP practices.

B. The Subcontractor's stormwater consultant will assign trained personnel to collect water quality samples and will document their training in the SAP.

C. Describe the following water quality sampling procedures in the SAP:

1. Sampling equipment
2. Sample preparation
3. Collection
4. Field measurement methods
5. Analytical methods
6. Quality assurance and quality control
7. Sample preservation and labeling
8. Collection documentation
9. Sample shipping
10. Chain of custody
11. Data management and reporting
12. Precautions from the construction site health and safety plan
13. Laboratory selection and certifications

D. Whenever the Subcontractor's assigned field personnel take samples, comply with the equipment manufacturer's recommendation for collection, analysis methods, and equipment calibration.

E. Samples taken for laboratory analysis must follow water quality sampling procedures and be analyzed by a State-certified laboratory under 40 CFR Part 136, "Guidelines Establishing Test Procedures for the Analysis of Pollutants."

F. The SAP will identify the State-certified laboratory, sample containers, preservation requirements, holding times, and analysis method. For a list of State-certified laboratories, go to:

http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx

G. Include procedure for sample collection during precipitation.

H. Retain water quality sampling documentation and analytical results with the SWPPP at the site.

I. Show pollutant sampling locations on SWPPP drawings.

J. If discharges or sampling locations change because of changed work activities or knowledge of site conditions, the Subcontractor's QSD shall amend the SAP.

K. If the Project is Risk Level 2, include procedures for collecting and analyzing at least 3 samples for each day of each qualifying rain event. Describe the collection of effluent samples at all locations where the stormwater is discharged off-site.

1.12 ANALYTICAL RESULTS AND EVALUATION

A. Submit an electronic copy (in file format .xls, .txt, .csv, .dbs, or .mdb) and a printed copy of water quality analytical results, and quality assurance and quality control to ESG's Stormwater Program Manager within 48 hours of field analysis sampling, and within 10 days for laboratory analysis. Also, provide an evaluation of whether the downstream samples show levels of the tested parameter that are higher than the control sample.

B. Electronic water quality analysis results must have the following information:

1. Sample identification number

2. Contract number

3. Constituent

4. Reported value

5. Analytical method

6. Method detection limit

7. Reported limit

1.13 SAP FOR NON-VISIBLE POLLUTANTS

A. The SAP will include a description of the sampling and analysis strategy for monitoring non-visible pollutants.

B. The SAP will identify potential non-visible pollutants present at the site associated with any of the following:

1. Construction materials and waste

2. Existing contamination due to historical site usage

3. Application of soil amendments, including soil stabilization materials, with the potential to change pH or contribute toxic pollutants to stormwater

C. SWPPP Water Pollution Control Drawings (WPCD) must show the locations planned for storage and use of potential non-visible pollutants. The WPCD will be revised by the Subcontractor's QSP to reflect active site conditions

D. The SAP will include sampling procedures for the following conditions when observed during a stormwater visual inspection. For each of the following, collect at least one sample for each qualifying storm event:

1. Materials or waste containing potential non-visible pollutants that are not stored under watertight conditions

2. Materials or waste containing potential non-visible pollutants that are stored under watertight conditions, but a breach, leakage, malfunction, or spill is observed; the leak or spill has not been cleaned up before precipitation; and material or waste could discharge non-visible pollutants to surface waters or drainage system

3. Chemical applications, including fertilizer, pesticide, herbicide, methyl methacrylate concrete sealant, or non-pigmented curing compound used during precipitation or within 24 hours preceding precipitation, and could discharge pollutants to surface waters or drainage system

4. Applied soil amendments, including soil stabilization materials that could change pH levels or contribute toxic pollutants to stormwater runoff and discharge pollutants to surface waters or drainage

system, unless available independent test data indicates acceptable concentrations of non-visible pollutants in the soil amendment

5. Stormwater runoff from an area contaminated by historical usage of the site that could discharge pollutants to surface waters or drainage systems

E. The SAP will provide sampling procedures and schedule for:

1. Sample collection during the first 2 hours of each rain event which generates runoff

2. Sample collection during normal working hours

3. Each non-visible pollutant source

4. Uncontaminated control sample

F. The SAP will identify all discharge locations for sampling downstream and a control sample, and reasons for selecting those locations. Select a control sample location where the sample will not be exposed to materials, waste, or areas associated with potential non-visible pollutants or disturbed soil areas.

1.14 SAP FOR SEDIMENT AND TURBIDITY

A. If the Project is Risk Level 2, sample and analyze for turbidity:

Parameter	Test Method	Detection Limit (Min)	Unit
Turbidity	Field test with calibrated portable instrument	1	NTU

1.15 SAP FOR PH

A. If the Project is Risk Level 2, sample and analyze for pH:

Parameter	Test Method	Detection Limit (Min)	Unit
pH	Field test with calibrated portable instrument	0.2	pH units

1.16 RAIN EVENT ACTION PLAN (REAP)

A. REAP work includes preparing and submitting REAP forms and monitoring weather forecasts. The Subcontractor’s QSP must submit a REAP to protect the site at least 48 hours before a likely precipitation event.

B. Prepare a REAP when the National Weather Service is predicting at least a 50 percent probability of precipitation within 48 hours of producing precipitation in the Project area.

C. For the REAP, use approved forms and include:

1. Site location

2. Risk Level

3. Contact information including 24-hour emergency phone numbers for:

a. The Subcontractor’s QSP

b. The Subcontractor’s erosion and sediment control providers

c. The Subcontractor’s stormwater sampling providers

4. Storm information

5. Construction phase information for:

   a. Construction including active and inactive areas for work activities for building roads and structures

   b. Plant Establishment including maintenance on vegetation installed for final stabilization where areas are inactive

   c. Suspension where work activities are suspended and areas are inactive

6. Construction phase information including:

   a. Construction activities

   b. The Subcontractors and trades on the site

   c. Pre-storm activities including:

      1) Responsibilities of the Subcontractor's QSP

      2) Responsibilities of the crew and crew size

      3) Stabilization for active and inactive disturbed soil areas

      4) Stockpile management

      5) Corrective actions taken for deficiencies identified during pre-storm visual inspection

   d. Activities to be performed during storm events including:

      1) Responsibilities of the Subcontractor's QSP

      2) Responsibilities of the crew and crew size

      3) BMP maintenance and repair

   e. Description of flood contingency measures

D. The Subcontractor must have the REAP onsite at least 48 hours before a predicted rain event. A printed copy of each REAP must be at the site as part of the SWPPP.

E. Implement the REAP including mobilizing crews to complete activities no later than 24 hours before precipitation occurs.

1.17 SWPPP IMPLEMENTATION

A. The University has a rain gauge that can be remotely accessed and precipitation is recorded continuously and recorded during all rain events.

B. Monitor the National Weather Service Forecast Office on a daily basis. For forecasts, go to:

http://www.srh.noaa.gov/forecast

C. Whenever the Subcontractor's QSP or ESG's Stormwater Program Manager identifies a deficiency in the implementation of the accepted SWPPP:

1. Correct the deficiency immediately, unless the ESG's Stormwater Program Manager agrees to a later date for making the correction via email or in writing

2. Correct the deficiency before precipitation occurs

D. If the Subcontractor fails to correct the deficiency by the agreed date or before the onset of precipitation, The University may correct the deficiency and deduct the cost of correcting the deficiency from payment.

E. Continue SWPPP implementation during any temporary suspension of work activities.

1.18 NUMERIC ACTION LEVELS (NALS)

A. If the Project is Risk Level 2, then it is subject to NALs:

Parameter	Test Method	Detection Limit (Min)	Unit	Numeric Action Level
pH	Field test with calibrated portable instrument	0.2	pH units	Lower NAL = 6.5 Upper NAL = 8.5
Turbidity	Field test with calibrated portable instrument	1	NTU	250 NTU

1.19 STORMWATER SAMPLING AND ANALYSIS

A. Stormwater Sampling and Analysis work includes preparation, collection, analysis, and reporting of stormwater samples for turbidity, pH, and other constituents. If the Project is Risk Level 2, and there is a qualified rain event that produces runoff, comply with the Project's SAP for preparation, collection, analysis, and reporting of stormwater samples. Collect:

1. Samples when any breach, malfunction, leakage, or spill is observed which could result in the discharge of pollutants to surface waters. The samples should be collected at the nearest storm drain inlet location from the breach, malfunction, leakage, or spill location for the identified non-visible pollutants, and samples should be collected from the identified corresponding uncontaminated control sample.

2. At least 3 samples for each day and each location of each qualifying rain event

3. Samples for all locations where the stormwater is discharged off the Project site

B. Perform sample collection during:

1. First 2 hours of each qualified rain event that produces runoff

2. Normal working hours

C. The Subcontractor is not required to physically collect samples during dangerous weather conditions such as flooding or electrical storms.

1.20 INSPECTION

A. The Subcontractor's QSP must oversee inspections for BMPs identified in the SWPPP:

1. Within 48 hours before a forecasted storm

2. Within 48 hours after a qualifying rain event

3. At 24-hour intervals during extended precipitation

4. On a predetermined schedule, a minimum of once a week

B. The Subcontractor’s QSP must oversee daily inspections of:

1. Storage areas for hazardous materials and waste

2. Hazardous waste disposal and transporting activities

3. Hazardous material delivery and storage activities

4. BMPs specified under "Construction Site Management" of these specifications

C. The Subcontractor’s QSP must prepare BMP status reports that include the following:

1. Location and quantity of installed BMPs

2. Location and quantity of disturbed soil for the active or inactive areas

D. Within 24 hours of finishing the weekly inspection, the Subcontractor’s QSP must submit:

1. Copy of the completed site inspection report

2. Copy of the BMP status report

1.21 STORMWATER ANNUAL REPORT

A. Stormwater Annual Report work includes certifications, monitoring and inspection results, and obtaining Stormwater Annual Report acceptance. The Subcontractor must prepare a Stormwater Annual Report. The report must:

1. Use an approved report format

2. Include Project information including description and location

3. Include stormwater monitoring information including:

a. Summary and evaluation of sampling and analysis results including laboratory reports

b. Analytical methods, reporting units, detections limits for analytical parameters

c. Summary of corrective actions

d. Identification of corrective actions or compliance activities that were not implemented

e. Summary of violations

f. Names of individuals performing stormwater inspections and sampling

g. Logistical information for inspections and sampling including location, date, time, and precipitation

h. Visual observations and sample collection records

4. Include documentation on training for:

a. Individuals responsible for NPDES permit compliance

b. Individuals responsible for BMP installation, inspection, maintenance, and repair

c. Individuals responsible for preparing, revising, and amending the SWPPP

1.22 NAL EXCEEDANCE REPORT

A. If the Project is Risk Level 2 and an effluent sample exceeds a NAL, notify the ESG's Stormwater Program Manager and submit a NAL Exceedance Report to ESG's Stormwater Program Manager no later than 48 hours after the conclusion of the storm event. The report must include:

1. The following field sampling results and inspections:

a. Analytical methods, reporting units, and detection limits

b. Date, location, time of sampling, visual observation and measurements

c. Quantity of precipitation of the storm event

2. Description of BMPs and corrective actions taken to manage NAL exceedance.

1.23 PERMIT VIOLATION

A. If there is a Permit violation, the Subcontractor shall notify The University immediately and corrections shall be made as necessary to comply with the General Permit.

B. The Subcontractor is responsible for any fines, and additional sampling, testing and monitoring that result from their negligence to comply with the General Permit requirements without any compensation from The University. If The University is forced to pay any fines or fees to the SWRCB due to the negligence of the Subcontractor to comply with the General Permit requirements, the costs shall be deducted from the Subcontractor's contract value.

C. If the Regional Water Quality Board or The University is at the site, the Subcontractor shall notify The University within twenty-four (24) hours and shall provide a written notice of any deficiencies noted and/or changes requested by the inspector.

D. Violation of the General Permit may cause The University to issue a stop-work notice and take necessary actions to require the Contractor to correct and comply with the Permit requirements and regulations. All costs related to the stop-work action and corrective work to comply with the General Permit shall be at the sole expense of the Contractor.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION 015723

NTS: ADD A CHANGE LOG TO THE END OF EACH SECTION. THIS IS FOR INTERNAL USE.

DATE	REVIEWER	PARAGRAPH	SUMMARY OF UPDATE
5/20/2022	BKF		MASTER SPECIFICATIONS UPDATE
7/8/2022	B.MULHOLLAND		REVIEWED AND ACCEPTED REVISIONS
