

SECTION 310000 – EROSION, SEDIMENT, AND POLLUTION CONTROL

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including Division 01 Specification Sections, apply to this Section.

1.02 SUMMARY

- A. Section includes:
 - 1. Provide project administration and construction activities to control erosion, sedimentation, and pollution from the Project, according to this section and applicable local, state, and federal requirements.

1.03 DEFINITIONS

- A. Alaska Certified Erosion and Sediment Control Lead (AK-CESCL): Certification demonstrating the person has completed training, testing, and other requirements recognized by the Developer to satisfy the ADEC Construction General Permit requirement for “qualified personnel.” AK-CESCL certificates issued in conformance with, and under the authority of the AK-CESCL Memorandum of Understanding are recognized by the Developer as meeting this standard.
- B. ADEC: Alaska Department of Environmental Conservation.
- C. APDES: Alaska Pollutant Discharge Elimination System, administered by ADEC and authorized under the Clean Water Act.
- D. Area of Land Disturbance: The area of land (soil) that will be disturbed by a construction activity including, but not limited to, clearing, grubbing, excavating, constructing embankment, grading, stockpiling erodible material, or processing material. Area of pavement removal is not included if the pavement removal work does not remove the aggregate underlying the pavement.
- E. Best Management Practices (BMPs): Temporary or permanent structural and non-structural devices, schedules of activities, prohibition of practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants to waters of the United States. BMPs also include, but are not limited to, treatment requirements, operating procedures, and practices to control site runoff, spillage or leaks, sludge or waste disposal.
- F. Clean Water Act (CWA): United States Federal Water Pollution Control Act (33 U.S.C. 1251 et seq.)
- G. Construction Activity: Physical activity by the Contractor or any Subcontractor or Utility Company within the Project that may result in land disturbance. Construction Activity includes, but is not limited to, clearing, grubbing, excavating, constructing embankment, grading, stockpiling erodible material, processing material, and installation or maintenance of BMP’s.
- H. Construction General Permit (CGP): The APDES General Permit for Discharges from Large and Small Construction Activities, issued by ADEC in compliance with the CWA.
- I. NOI: The Notice of Intent submitted to ADEC, to begin Construction Activity under the CGP.

- J. NOT: The Notice of Termination submitted to ADEC, to end coverage under the CGP.
- K. Erosion and Sediment Control Plan (ESCP): A project-specific narrative developed by the Developer to identify specific information about the Project. The ESCP may include measures to minimize erosion and contain sediment within the Project site. The ESCP narrative provides general information for the Contractor's use in developing the Project SWPPP.
- L. Final Stabilization: Soil disturbing activities within an area have been completed and one of the following methods, as identified in the contract, has been completed:
 - 1. Establish a uniform and evenly distributed perennial vegetative cover with a density of 70 percent of the native background vegetative cover, or
 - 2. Construct non-erodible permanent stabilization measures (such as riprap, gabions, geotextiles, pavement, or crushed aggregate base course) where vegetative cover is not required.
- M. Haul Route: Existing or newly constructed road where construction materials are transported and where deposition of sediments or erodible materials may result from the material hauling activity or from the Contractors activity to construct or maintain the road.
- N. Hazardous Material Control Plan (HMCP): The Contractor's detailed plan for prevention of pollution from storage, use, transfer, containment, cleanup, and disposal of hazardous material, including but not limited to, petroleum products related to construction activities and equipment. The HMCP is included as an appendix to the SWPPP.
- O. Joint Inspection: SWPPP inspection performed by the Superintendent, SWPPP Manager, or SWPPP Manager's Representative, and the Engineer of Record. Joint Inspection is performed together, as a collaborative effort of the Contractor and the Developer.
- P. Operator: The party associated with a construction project, staging area, material site, material processing site, disposal site, or haul route, with either or both:
 - 1. Operational control of the plans and specifications, including ability to make modification to those plans and specifications.
 - 2. Day-to-day operational control (e.g. authorized to direct workers or equipment operations) of activities related to the project, staging area, haul route, or material or disposal site.
- Q. Pollutant: As defined in 40 CFR 122.2 (a partial listing of this definition includes solid waste, sewage, garbage, chemical wastes, dredged spoil, rock or sand).
- R. Project: The physical limits of the construction site as shown on the plans. Contractor or Commercial Operator-furnished material sites, material processing sites, disposal sites, haul routes, staging and equipment storage areas are not included in the Project.
- S. Spill Prevention, Control and Countermeasure Plan (SPCC): The Contractor's detailed plan for petroleum spill prevention and control measures that meets the requirements of 40 CFR 112.
- T. Spill Response Field Representative: The Contractor's representative with authority and responsibility for managing, implementing, and executing the HMCP and SPCC, and for the Contractor's compliance with 40 CFR 112, and other applicable federal, state, and local laws and regulations related to hazardous materials.

- U. Storm Water Pollution Prevention Plan (SWPPP): The Contractor's detailed, project-specific plan to minimize erosion and contain sediment within the Project site and to prevent discharge of pollutants that exceed applicable water quality standards. The SWPPP includes, but may not be limited to, amendments, records of activities, inspection schedules and reports, qualifications of key personnel, and all other documentation required by the CGP and this specification.
- V. Subcontractor Spill Response Coordinator: The subcontractor's representative with authority and responsibility for coordinating the subcontractor's activities in compliance with HMCP and SPCC.
- W. Subcontractor SWPPP Coordinator: The Subcontractor's representative with authority to direct the Subcontractor's work, and who is responsible for coordination with the SWPPP Manager and for the Subcontractor's compliance with the SWPPP.
- X. Superintendent: The Contractor's authorized representative in responsible charge of the work, who is duly authorized by the Contractor, in accordance with CGP, Appendix F, Section 1.12. The Superintendent has responsibility and authority for the overall operation of the Project and for Contractor-furnished sites and facilities directly related to the Project.
- Y. SWPPP Amendment: A revision or document that adds to, deletes from, or modifies the SWPPP.
- Z. SWPPP Manager: The Contractor's qualified representative responsible for CGP compliance, implementing the SWPPP, conducting inspections, updating the SWPPP, supervising work performed under this Specification Section, monitoring construction activities, and with authority to suspend work and implement corrective actions.
- AA. SWPPP Manager's Representative: The Contractor's qualified representative who may be assigned certain SWPPP Manager's tasks and authorities.
- BB. SWPPP Preparer: The Contractor's qualified representative who is responsible for designing the initial SWPPP.
- CC. SWPPP Template: A template is available for the Contractor's use in preparing the SWPPP. The template is found online at ADEC's website. Select "EPA SWPPP Template."
- DD. Temporary Stabilization: The protection of exposed soils (disturbed land) from wind and water erosion during the construction process, until final stabilization is established.

1.04 BUY AMERICAN REQUIREMENTS

- A. Provide certificates to show that all products meet the following requirements.
 - 1. American Iron and Steel (AIS)
 - 2. Build America, Buy America Act
- B. See Supplementary Conditions for details.

1.05 SUBMITTALS

- A. General: Partial and incomplete submittals will not be accepted for review. Any submittal that is re-submitted or revised after submission, but before the review is completed, will restart the submittal review timeline.

- B. Hazardous Material Control Plan. Submit one copy of the HMCP as an appendix to the SWPPP, and in accordance with the requirements for submitting the SWPPP.
- C. Spill Prevention, Control and Countermeasure Plan:
 - 1. When SPCC is required under Article 3.03, submit one signed copy of the SPCC to the Engineer of Record. Deliver this document to the Engineer of Record at least 14 calendar days before you plan to begin construction activity.
 - 2. The Engineer of Record will keep the SPCC as a record document and reserves the right to review it and require modifications.
- D. Storm Water Pollution Prevention Plan:
 - 1. Submit one signed copy of the SWPPP to the Engineer of Record for approval. Deliver this document to the Engineer of Record at least 14 calendar days before you plan to begin Construction Activity. Organize and bind the SWPPP documents for submittal according to the requirements of paragraph 3.01.B.
 - 2. Submit copies of the SWPPP to ADEC and to local governments when required according to CGP, Part 5.13.
 - 3. The Engineer of Record will review the SWPPP submittals within 14 calendar days after they are received. Submittals will be returned to the Contractor and marked as either requiring modification or as approved by the Engineer of Record.
- E. ADEC CGP:
 - 1. Obtain construction authorization for the Project under ADEC's CGP. APDES authorization and compliance for Contractor-furnished and commercial operator-furnished areas are the sole responsibility of the Operators.
 - 2. The Contractor and the Engineer of Record must sign and certify the approved SWPPP in accordance with the CGP requirements detailed in Appendix F, before the Contractor submits their NOI for the Project to ADEC. The certification statement cannot be amended or edited.
 - 3. Submit an NOI for the Project to ADEC. Submit one copy of the NOI to the Engineer of Record when the NOI is submitted to ADEC. The Developer will submit the Owner's NOI to ADEC. Allow adequate time for state processing of both NOI's, and for ADEC to list both NOIs as active status, before beginning Construction Activity.
- F. Ending CGP Coverage: Within 30 days after the Engineer of Record has determined you may end SWPPP activities for the Project, submit your NOT for the Project to ADEC and send a copy of the NOT to the Engineer of Record. Within 30 days of the Engineer of Record's determination, the Engineer of Record will submit the Owner's NOT to ADEC and will terminate the Developer's CGP coverage for the Project and send a copy to the Contractor.

1.06 PERSONNEL QUALIFICATIONS

- A. Include qualifications of the Superintendent, SWPPP Preparer, SWPPP Manager, and SWPPP Manager's Representatives in the SWPPP.
- B. The SWPPP Preparer must meet at least one of the following qualifications:
 - 1. Current certification as a Certified Professional in Erosion and Sediment Control (CPESC).

2. Current certification as Alaska Certified Erosion and Sediment Control Lead (AK-CESCL), and at least three years experience in erosion and sediment control (provide documentation including project names, project timelines, and work responsibilities demonstrating the experience requirement).
 3. Professional Engineer registered in the State of Alaska.
- C. The Superintendent must meet all the following qualifications:
1. Current certification as Alaska Certified Erosion and Sediment Control Lead (AK-CESCL).
 2. Duly authorized representative, as defined in the CGP, Appendix A.
- D. The SWPPP Manager and SWPPP Manager's Representative must hold current AK-CESCL certification.

1.07 SIGNATURE/CERTIFICATION REQUIREMENTS AND DELEGATIONS

- A. NOI and NOT: The NOI and NOT must be signed and certified by a responsible corporate officer, in accordance with CGP Appendix A, Section 1.12. Signature and certification authority for the NOI and NOT cannot be delegated.
- B. Delegation of Signature Authority for Other SWPPP Documents and Reports: Delegate signature and certification authority to the Superintendent, in accordance with CGP Appendix A, Section 1.12, for the SWPPP, SWPPP inspections, and other related CGP documents. Include a copy of the written delegation in the SWPPP. Delegation is not required if the Superintendent is a responsible corporate officer for Contractor, as defined in CGP Appendix A, Section 1.12. A sample Delegation of Authority Form can be found in the EPA SWPPP Template.

1.08 OPERATORS

- A. The Developer is not an operator for Contractor-furnished:
1. Material sites.
 2. Material processing sites.
 3. Disposal sites.
 4. Haul routes where deposition of erodible materials may result from material hauling activity.
 5. Staging areas.
 6. Equipment storage areas.
- B. The Contractor is an operator for the above-listed Contractor-furnished areas. Compliance with APDES and other applicable federal, state, and local requirements, and securing all necessary clearances, rights, and permits for these Contractor-furnished areas are the sole responsibility of the Contractor. Document the name of each operator and the locations of these areas in the Project SWPPP. The Developer reserves the right to inspect Contractor-furnished areas related to this Contract for compliance with APDES and other applicable federal, state and local requirements.
- C. The Developer is not an operator for commercial-operator-furnished:
1. Material sites.
 2. Material processing sites.
 3. Disposal sites.

4. Haul routes.
 5. Staging areas.
 6. Equipment storage areas.
- D. Compliance with APDES and other applicable federal, state, and local requirements, and securing all necessary clearances, rights, and permits for these commercial operator-furnished areas are the sole responsibility of the commercial operator. Document the name of each operator and the locations of these areas in the Project SWPPP.
- 1.09 RESPONSIBILITY AND AUTHORITY OF THE SUPERINTENDENT, SWPPP MANAGER, AND SWPPP MANAGER'S REPRESENTATIVE
- A. The Superintendent is responsible for the overall operation of the Project and all Contractor-furnished sites and facilities directly related to the Project. The Superintendent shall sign and certify the SWPPP, SWPPP inspection reports, and other SWPP related documents required under the CGP, except the NOI and NOT. The Superintendent may not delegate the task or responsibility of signing and certifying the SWPPP inspection reports, and other related SWPPP documents.
- B. The SWPPP Manager is responsible for work related to this section. The SWPPP Manager is responsible for the Contractor's compliance with the CGP, and to assure the Contractor's Construction Activity does not result in discharge of pollutants that exceed applicable water quality standards. The SWPPP Manager is responsible to perform SWPPP inspections, direct or oversee installation, maintenance, and removal of BMPs as detailed in the SWPPP or as directed by the Engineer of Record.
- C. The SWPPP Manager may assign the SWPPP Manager's Representative responsibility to perform SWPPP inspections, direct or oversee installation, maintenance, and removal of BMPs as detailed in the SWPPP or as directed by the Engineer of Record. The SWPPP Manager and the SWPPP Manager's Representative shall be knowledgeable in the requirements of this section, the SWPPP, CGP, BMPs, HMCP, SPCC, environmental permits and the environmental commitments. SWPPP inspections must be performed by either the SWPPP Manager or the SWPPP Manager's Representative.
- D. The Superintendent, SWPPP Manager, and the SWPPP Manager's Representative shall have the Contractor's complete authority to suspend construction activities that do not conform to the SWPPP or CGP.
- E. Coordinate with the Engineer of Record to confirm determinations of CGP noncompliance which may endanger health or the environment. Report CGP noncompliance which may endanger health or the environment to ADEC. Information must be provided orally within 24 hours from the time you become aware of the discharge. Submit written notice as described in Appendix A, Section 2.0 of the CGP.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Comply with the material requirements described in the Specifications.
- B. Use materials suitable to withstand hydraulic, wind, and soil forces, and to control erosion and trap sediments in accordance with the requirements of the CGP.

- C. Straw must be certified as free of noxious weed by the United States Department of Agriculture, Natural Resources Conservation Service, Local Soil and Water Conservative District, Alaska Weed Free Forage Certification Program. Hay may not be substituted for straw.
- D. Temporary seed must consist of annual rye grass or the specified temporary seed mixture.
- E. When a rain gauge is required under Article 3.04.D.6, use an Oregon Scientific RGR126 wireless rain gauge with temperature or approved equal.

PART 3 - EXECUTION

3.01 STORM WATER POLLUTION PREVENTION PLAN (SWPPP) REQUIREMENTS

- A. Develop the SWPPP and all associated documents, in accordance with the requirements of the CGP.
- B. Use the ESCP narrative as a starting point for designing the SWPPP. The approved SWPPP replaces the ESCP. Develop the SWPPP in accordance with EPA's Template.
 - 1. Compile the SWPPP in three-ring binders with tabbed and labeled dividers for each section and appendix included in EPA's Template. Incorporate applicable requirements of the project permits and environmental commitments into the SWPPP. See the ESCP narrative in Appendix B of the Project Specifications for information on consultation with the State Historic Preservation Officer and federal agencies for consideration of historic properties and endangered species. Make additional consultations as necessary for Contractor or commercial operator's specific activities which fall outside the Project limits, or which may result in changes to the Project footprint or timeline.
- C. It is preferable that the SWPPP Preparer visit the site before designing the SWPPP. It is required that the SWPPP Preparer visit the site before beginning construction activity. The findings of the visit must be incorporated into the draft SWPPP, or by amending the approved SWPPP, as appropriate. The SWPPP Preparer must visit the site accompanied by a representative of the Contractor and the Developer. Consider opportunities to adjust phasing to minimize potential for erosion. Consider appropriate selection, application, and sequencing of BMPs. Consider sequence of BMP installations in relation to progress schedule. Document the SWPPP Preparer's visit in the SWPPP. Include the date and the names of the personnel participating in the visit.
- D. The SWPPP must identify specific areas where potential erosion, sedimentation, or pollution may occur. The potential for wind erosion must be addressed. The potential for erosion at drainage structures must be addressed. Describe site-specific BMPs, source controls, sediment controls, discharge points, and a plan including schedule and implementation procedures for temporary and final stabilization. Describe all temporary and permanent stabilization measures. Include typical installation drawings for all BMPs that will be incorporated in the Project. Include the Contractor's progress schedule, and the schedule for stabilization and installation of other BMPs. Include a listing of equipment to be used for erosion and sediment control activities.
- E. The SWPPP must provide erosion and sediment control, in accordance with the CGP and this specification, for all land disturbances resulting from the Contractor and all Subcontractors activities during the course of the contract. The SWPPP must consider the activities of utility companies performing work on the Project. The SWPPP must describe the roles and responsibilities of the Contractor, subcontractors, and the Owner with regard to implementation of the SWPPP. The SWPPP must identify all operators for the Project,

- including utility companies performing Construction Activity within the Project, and identify the areas over which each operator has operational control.
- F. Designate a Superintendent, SWPPP Manager and SWPPP Manager's Representative and specify the line of authority for each. Provide 24-hour contact information for the Superintendent, SWPPP Manager, and for each SWPPP Manager's Representative. The Superintendent, SWPPP Manager and each SWPPP Manager's Representative must have 24-hour contact information for all Subcontractor SWPPP Coordinators.
 - G. Identify the SWPPP inspection schedule in the SWPPP.
 - H. The SWPPP is a dynamic document. Keep the SWPPP current by noting installation, modification, and removal of BMPs, and by using amendments, SWPPP amendment logs, inspection reports, corrective action logs, records of land disturbance and stabilization, and any other documents necessary to satisfy the requirements of the CGP and this specification.

3.02 HAZARDOUS MATERIAL CONTROL PLAN (HMCP) REQUIREMENTS

- A. Prepare the HMCP for prevention of pollution from storage, use, containment, cleanup, and disposal of all hazardous material, including petroleum products related to construction activities and equipment (see 40 CFR 117 and 302 for listing of hazardous materials).
- B. Compile Material Safety Data Sheets in one location and reference that location in the HMCP.
- C. List and give the location and estimated quantities of hazardous materials to be used or stored on the Project. Store hazardous materials in covered storage areas. Include secondary containment for all hazardous material storage areas.
- D. List the types and approximate quantities of response equipment and cleanup materials available on the Project. Include a list and location map of cleanup materials, at each different work site and readily available off site (materials sources, material processing sites, disposal sites, staging areas, etc).
- E. Designate a Spill Response Field Representative and identify the line of authority. Designate a Subcontractor Spill Response Coordinator. Provide 24-hour contact information for the Contractor's Spill Response Field Representative.
- F. The Contractor's Spill Response Field Representative must have 24-hour contact information for the Subcontractor Spill Response Coordinator.
- G. Identify the locations where storage, fueling and maintenance activities will take place, describe the maintenance activities, and list controls to prevent the accidental spillage of oil, petroleum products, and other hazardous materials.
- H. Detail procedures for containment and cleanup of hazardous substances. Detail a plan for the prevention, containment, cleanup, and disposal of soil and water contaminated by spills. Detail a plan for dealing with contaminated soil and water encountered during construction.
- I. Detail methods of disposing of waste petroleum products and other hazardous materials generated by the Project. Identify haul methods and final disposal areas. Assure final disposal areas are permitted for hazardous material disposal.
- J. Store spill response materials, appropriate to the hazards associated with that site, in sufficient quantity at each identified location.

- K. Include the HMCP as an appendix to the SWPPP.

3.03 SPILL PREVENTION, CONTROL AND COUNTERMEASURE PLAN (SPCC) REQUIREMENTS

- A. Prepare and implement an SPCC when required by 40 CFR 112; when both of the following conditions are present on the Project:
 - 1. Oil or petroleum products from a spill may reach navigable waters.
 - 2. Total above ground storage capacity for oil and any petroleum products is greater than 1,320 gallons (not including onboard tanks for fuel or hydraulic fluid used primarily to power the movement of a motor vehicle or ancillary onboard oil-filled operational equipment, and not including containers with a storage capacity of less than 55 gallons).
- B. Reference the SPCC in the SWPPP.

3.04 CONSTRUCTION REQUIREMENTS

- A. Comply with the SWPPP and the requirements of the CGP.
- B. Ensure all subcontractors and utility companies operating within the Project understand and comply with the SWPPP and the CGP.
- C. Train employees and subcontractors as necessary to make them aware of the BMPs and storm water protection procedures at the site.
- D. Starting Construction:
 - 1. Do not begin Construction Activity until the SWPPP has been approved by the Engineer of Record.
 - 2. Do not begin Construction Activity until authorized by the Developer's Representative.
 - 3. Do not begin Construction Activity until the Project NOI for the Developer and for the Contractor are both listed as Active Status on the ADEC website.
 - 4. Do not begin Construction Activity until the SWPPP preparer has visited the Project and the date of the visit and the persons conducting the visit have been documented in the SWPPP and the SWPPP has been developed or amended based on the findings of the visit.
 - 5. Post notices on the outside wall of the Contractor's project office, and at publicly accessible locations near the beginning and end of the Project. Protect postings from the weather and locate so the public can read them without obstructing construction activities (for example, at an existing pullout). Include the following information in each of the posted notices:
 - a. Copy of all NOIs related to this project.
 - b. Name and phone number of SWPPP Manager.
 - c. Location of the SWPPP available for public viewing.
 - 6. If the project is not within 20 miles of a National Weather Service gauge, install an outdoor rain gauge in an approved and readily accessible location on the Project.
 - 7. Install sediment controls in accordance with the SWPPP and SWPPP sequencing and phasing, and before beginning Construction Activity.
- E. During Construction:
 - 1. Comply with requirements of the HMCP and SPCC, and all state and federal regulations that pertain to the handling, storage, cleanup, and disposal of petroleum products or other

hazardous substances. Contain, clean up, and dispose of discharges of petroleum products and other hazardous materials. Place absorbent pads or other suitable containment under fill ports while fueling and under equipment during maintenance or repairs. Install secondary containment under all stationary equipment that contains petroleum products.

2. Comply with the requirements of 18 AAC 75 and AS 46, Oil and Hazardous Substances Pollution Control. Report petroleum product spills as required by federal, state and local law, and as described in the HMCP and SPCC.
3. Comply with the requirements of the SWPPP. Implement temporary and permanent erosion and sediment control measures identified in the SWPPP. Keep the SWPPP current. If storm water discharges threaten water quality, take immediate action. Comply with the requirements of 18 AAC 70 State of Alaska Water Quality Standards, AS 16.05.841 and 16.05.871 Protection of Fish and Game, 11 AAC 112 Alaska Coastal Management Program, Section 404 of the CWA, and all other applicable federal, state, and local statutes and regulations.
4. Coordinate with subcontractors and utility companies doing work in the project area so BMPs, and temporary and permanent stabilization are installed, maintained, and protected from damage.

F. Corrective Action and Maintenance of BMPs:

1. Maintain temporary and permanent erosion and sediment control measures in effective operating condition. Remove sediment and debris from sediment traps, silt fences, and sediment ponds before sediment or debris accumulates to 50 percent of the BMP's design capacity.
2. Implement corrective action:
 - a. If an incident of non-compliance with the SWPPP or CGP is identified.
 - b. If an inspection identifies the SWPPP or any part of the SWPPP is ineffective in preventing the discharge of pollutants that exceed applicable water quality standards.
 - c. If the Engineer of Record determines the SWPPP or any part of the SWPPP is ineffective in preventing the discharge of pollutants that exceed applicable water quality standards.
 - d. If any BMP is damaged, undercut, or unable to effectively perform the intended function.
 - e. If any BMP is at or exceeding 50 percent of its design storage capacity.
 - f. Whenever there is a change in conditions, design, construction, operation, or maintenance that could affect the discharge of pollutants in storm water leaving the Project.
3. Implement corrective actions as soon as possible, and before the next storm event whenever practicable. If implementation before the next storm event is impracticable, the situation must be documented in the SWPPP and alternative BMPs must be implemented as soon as possible.

G. Stabilization:

1. Stabilization may be accomplished using temporary or permanent measures. Initiate stabilization of disturbed areas, stockpiles, and of erodible aggregate layers so that all of the following conditions are satisfied:
 - a. As soon as practicable.

- b. As soon as necessary to avoid discharge of pollutants that exceeds applicable water quality standards.
 - c. As identified in the SWPPP schedule and/or phasing.
 - d. In accordance with stabilization schedule requirements of applicable project permits.
 - e. No later than 3 days in areas adjacent to stream as shown on the plans and 14 days after each cessation of land-disturbing activities in other areas.
 2. Land may be disturbed multiple times during a project. Coordinate work to minimize area of land disturbance as much as practicable. Do not disturb more area than you can stabilize in the time limits specified, and with the resources available.
 3. Temporary stabilization measures may include individual or a combination of measures including but not limited to vegetative cover, mulch, stabilizing emulsions, blankets, mats, soil binders, non-erodible cover, dust palliatives, or other approved methods.
 4. Apply temporary seeding uniformly at a usual rate of 1/2 pound per 1,000 square feet, but up to a maximum rate of 1-1/2 pounds per 1,000 square feet on steep slopes or highly erodible soils. Prepare the surface to be seeded to reduce erosion potential and to facilitate germination and growth of vegetative cover. Maintain seeded areas. Reseed areas where growth of temporary vegetative cover is inadequate to stabilize disturbed ground.
 5. Apply permanent seed in accordance with Division 32 Section "Turf and Grasses" at locations where permanent seed is indicated on the plans and land-disturbing activity is permanently ceased.
 6. When installing a culvert or other drainage structure where stream bypass is not used for construction, temporary or permanent stabilization may need to be installed concurrently or immediately after placing the culvert or drainage structure in order to comply with applicable project permits and to prevent discharge of pollutants that exceed applicable water quality standards. Install temporary or permanent stabilization:
 - a. At the culvert or drainage structure inlet and outlet.
 - b. In the area upstream and downstream of the culvert or drainage structure, that is disturbed in the process of installing the culvert, culvert end walls, culvert end sections, or drainage structure.
 7. Prevent project contaminates from entering all bodies of water (flowing and not flowing) on and off the project site, during all phases of construction (from "the effective date of the Notice to Proceed" to the issue of the "Letter of Final Acceptance") in conformance with the project requirements. Maintain project water quality as specified in the Plans and Specifications (including Special Provisions), including, but not limited to, construction/installation of drainage structures providing erosion, sediment and pollution control measures, including stabilization, at the drainage structure inlet and outlet and up/downstream from the structure.
- H. Ending SWPPP Activities and SWPPP Maintenance:
 1. The Engineer of Record will determine SWPPP activities have ended when all of the following requirements are met:
 - a. Land disturbing activities have ceased.
 - b. The Project site has achieved final stabilization.
 - c. Temporary BMPs have been removed.
 2. Submit NOT in accordance with paragraph 1.03.F.

I. Record Retention:

1. Transmit one copy of the final SWPPP, including all amendments and appendixes, to the Engineer of Record when the NOT's are filed.
2. Retain copies of the SWPPP, including documents listed under Article 3.05, SWPPP Documents, for at least three years after the date of NOT. If ADEC inspects the project, issues a Notice of Violation (NOV), or begins investigation for a potential NOV before the three-year retention period expires, retain the SWPPP and all records related to the SWPPP and CGP until ADEC has determined all issues related to the investigation are settled.

3.05 SWPPP DOCUMENTS

- A. Keep the approved SWPPP, HMCP, and SPCC at the on-site project office. If there is no on-site project office, keep the information in an office that is within 30 miles, by road, from the Project at a location suitable to the Developer.
- B. Maintain all SWPPP documents in binders in one common location. Include the following items in the SWPPP binders:
 1. NOI's (all applicable).
 2. Signature Delegation.
 3. Qualification Documentation of Key Personnel.
 4. Approved SWPPP.
 5. SWPPP Certification.
 6. HMCP.
 7. SPCC (when required).
 8. SWPPP Amendments.
 9. SWPPP Amendment Log.
 10. SWPPP Inspection Reports.
 11. SWPPP Corrective Action Log.
 12. SWPPP Grading and Stabilization Activities Log.
 13. SWPPP Daily Record of Rainfall Log.
 14. Lines of authority and contact information for Superintendent, SWPPP Manager, SWPPP Manager's Representative and Subcontractor SWPPP Coordinators.
 15. NOT's (all applicable).
 16. Any other records related to the SWPPP, SWPPP compliance, or CGP reporting requirements.
- C. The SWPPP and related documents maintained by the Contractor are the record documents for demonstrating compliance with the CGP. SWPPP documents transmitted to the Engineer of Record and/or the Developer under the requirements of this specification are informational and do not relieve the Contractor from responsibility to maintain complete records as required by the CGP and this specification.

3.06 SWPPP INSPECTIONS, AMENDMENTS, REPORTS, AND LOGS

- A. Perform inspections, prepare inspection reports, and prepare SWPPP amendments in compliance with the SWPPP and the CGP. Prepare SWPPP Corrective Action Log, SWPPP Amendment Log, SWPPP Grading and Stabilization Logs, and SWPPP Daily Record of Rainfall forms. SWPPP joint inspections must be performed by the Superintendent, SWPPP Manager, or the SWPPP Manager's Representative and the Engineer of Record.

- B. Before Starting Construction: Before beginning Construction Activity, conduct a Joint Inspection of the Project. Include the SWPPP Preparer in the inspection and consider any necessary revisions to the draft SWPPP, or if the SWPPP has already been approved, any necessary amendments to the SWPPP. Consider opportunities to adjust phasing to minimize potential for erosion. Consider appropriate selection, application, and sequencing of BMPs. Consider sequence of BMP installations in relation to progress schedule. Identify sediment controls that need to be installed prior to commencing other Construction Activity.
- C. During Construction:
 - 1. Conduct Joint Inspections on one of the following schedules:
 - a. At least once every seven days during construction.
 - b. At least once every 14 days during construction and within 24 hours of the end of a storm event that results in a discharge from the site.
 - 2. Indicate the inspection schedule in the SWPPP and conduct Joint Inspections in accordance with the selected schedule.
- D. Before Seasonal Suspension of Work: Conduct Joint Inspection before seasonal suspension of work to review condition and applicability of BMPs and SWPPP. Confirm SWPPP, temporary stabilization, and BMPs are installed and functioning in accordance with the requirements of Article 3.4, Construction Requirements.
- E. During Seasonal Suspension of Work:
 - 1. Conduct Joint Inspections in accordance with the inspection schedule indicated in the approved SWPPP. Inspection frequency during seasonal suspension of work may be reduced to at least one inspection every month if approved by the Engineer of Record and the revised inspection frequency is documented as an amendment to the SWPPP, and either of the following requirements is met:
 - a. The entire site is temporarily stabilized.
 - b. Runoff is unlikely due to winter conditions (e.g., the site is covered with snow or ice or the ground is frozen).
 - 2. The Engineer of Record may waive winter monthly inspection requirements until one month before thawing conditions are expected to result in a discharge, if all of the following requirements are met:
 - a. Below-freezing conditions are anticipated to continue for more than one month.
 - b. Land disturbance activities have been suspended.
 - c. Beginning and ending dates of the waiver period are documented as an amendment to the SWPPP.
 - 3. The Engineer of Record may waive requirements for updating the Grading and Stabilization Activities Log and Daily Record of Rainfall form during seasonal suspension of work. Resume collecting and recording weather data on the Daily Record of Rainfall form one month before thawing conditions are expected to result in a discharge. Resume recording land disturbance and stabilization activities on the Grading Activities Log when Construction Activity resumes.

- F. During Winter Work: Conduct Joint Inspections in accordance with the inspection schedule indicated in the approved SWPPP. Inspection frequency during winter work may be reduced to at least one inspection every month if all of the following requirements are met:
1. Runoff is unlikely due to winter conditions (e.g., the site is covered with snow or ice or the ground is frozen).
 2. Approval is obtained from the Engineer of Record.
 3. The revised inspection frequency is documented as an amendment to the SWPPP.
- G. Project Completion: Conduct Joint Inspection to ensure final stabilization is complete throughout the Project and all temporary BMPs are removed.
- H. Items and Areas to Inspect:
1. Inspect all items and areas covered under both the Developer's and the Contractor's Project NOI's and included in the SWPPP.
 2. When included in the SWPPP, inspect the following:
 - a. Disturbed areas that have not been finally stabilized.
 - b. Areas used for storage of erodible materials that are exposed to precipitation.
 - c. BMPs.
 - d. Perimeter sediment control and discharge locations.
 - e. Staging and equipment storage areas.
 3. Petroleum storage, handling and fueling sites.
 - a. Hazardous material storage sites.
 - b. Locations where vehicles or construction equipment enter or exit Project.
 - c. Material sources and disposal sites.
 - d. Discharge locations.
 4. Areas referenced in the Project SWPPP that are Contractor-furnished, or commercially furnished, and the Developer is not an operator, do not require Joint Inspection in accordance with this contract. For Contractor or commercial operator-furnished areas, the Contractor or commercial operator is solely responsible for inspecting and assuring compliance with all APDES requirements, and any other federal, state, local, or tribal permitting requirements.
- I. Inspection Reports:
1. Inspection Report Form shall contain the following information:
 - a. Inspection date, general information, type of inspection.
 - b. Names, titles and qualifications of personnel inspecting.
 - c. Weather information for the period since the last inspection, including storm events and any discharges that occurred during this period.
 - d. Current weather information and a description of any discharges currently occurring.
 - e. Location of discharges of sediment or other pollutants from the site.
 - f. Locations of BMPs where maintenance is necessary.
 - g. Locations of BMPs that failed to operate as designed or proved inadequate for a particular location.
 - h. Locations where additional BMPs are needed that did not exist at the time of inspection.

- i. Corrective action required including any changes to the SWPPP necessary and implementation dates.
 - j. Overall site issues.
 - k. Whether construction site is in compliance with SWPPP and the CGP.
 - l. Signatures and certifications by the SWPPP Superintendent and Owner's Representative.
 2. Submit an inspection form containing the above information to the Engineer of Record for approval as required in paragraph 1.03.D, Submittals.
 3. Complete all fields included on the inspection form.
 4. The Superintendent must sign and certify the inspection report on the day of the inspection, and must provide the report to the Engineer of Record the same day. The Engineer of Record will sign and certify the inspection report and will return the original to the Contractor within three working days.
- J. SWPPP Amendments and the SWPPP Amendment Log:
1. The Superintendent, SWPPP Manager, or SWPPP Manager's Representative are responsible for amending the SWPPP and shall initial all amendments to the SWPPP:
 - a. Whenever there is a change in design, construction operation, or maintenance at the construction site that has or could have significant effect on the discharge of pollutants that has not been previously addressed in the SWPPP.
 - b. If a Joint Inspection identifies the SWPPP or any portion of the SWPPP is ineffective in preventing the discharge of pollutants from the Project that exceed applicable water quality standards.
 - c. If the Engineer of Record or Contractor determines the SWPPP or any portion of the SWPPP is ineffective in preventing the discharge of pollutants from the Project that exceed applicable water quality standards.
 - d. Whenever an inspection identifies a problem that requires additional or modified BMPs.
 2. Amend the SWPPP narrative as soon as practicable after any change or modification, but in no case later than seven (7) calendar days following an inspection. Include the following information when documenting modifications to the SWPPP:
 - a. Date the action was completed.
 - b. Initials of person documenting the action.
 - c. Description of the action.
 3. Update the SWPPP drawings including date, location, action taken, and initials of the person recording the action for:
 - a. Installation of BMP.
 - b. Modification of BMP (including any changes to BMP typical installation details).
 - c. Removal of BMP.
 4. Give draft SWPPP Amendments to the Engineer of Record for review and approval.
 5. Use the EPA's SWPPP Template's Appendix G, SWPPP Amendment Log Form, to track all amendments to the SWPPP. The Superintendent, SWPPP Manager or SWPPP Manager's Representative shall initial all entries on this Form. Keep the SWPPP Amendment Log current and submit a copy to the Engineer of Record, including copies

of any documents amending the SWPPP, prior to performing each scheduled SWPPP inspection.

6. Include the current SWPPP Amendment Log as an appendix to the SWPPP.

K. Corrective Action:

1. Action required to restore effective function of BMP's or the SWPPP is corrective action and must be documented. Use the EPA's SWPPP Template's Appendix F, Corrective Action Log Form, to document corrective actions to the SWPPP and to BMPs. The Superintendent, SWPPP Manager, or SWPPP Manager's Representative shall initial all entries on this Form.
2. After each inspection report has been signed and certified, update the corrective action log to include all corrective actions noted on the inspection report.
3. After the corrective action has been accomplished, note the action taken and date and initial the entry.
4. Keep the corrective action log current and submit a copy to the Engineer of Record prior to performing each scheduled SWPPP inspection.
5. Keep the corrective action log as an appendix to the SWPPP.

L. Grading and Stabilization:

1. Use the EPA's SWPPP Template's Appendix I, Grading and Stabilization Activities Log Form, to record land disturbance and stabilization activities. The Superintendent, SWPPP Manager or SWPPP Manager's Representative shall initial all entries on this Form. Keep the grading and stabilization activities log current and submit a copy to the Engineer of Record prior to performing each scheduled SWPPP inspection.
2. Keep the grading and stabilization activities log as an appendix to the SWPPP.

- M. Daily Weather Records: Create a SWPPP Daily Record of Rainfall Form, to record weather conditions at the Project. The form shall have three columns, with the headers "Date," "Precipitation in Inches," and "Comments." Update the form daily, include the initials of the person recording each day's entry and submit a copy to the Engineer of Record prior to performing each scheduled SWPPP inspection. Include the daily record of rainfall form as an appendix to the SWPPP.

PART 4 - MEASUREMENT AND PAYMENT

4.01 MEASUREMENT

- A. Temporary Erosion and Pollution Control will not be measured since it is a lump sum item.

4.02 BASIS OF PAYMENT

- A. The lump sum price shall include administration of a SWPPP and HCMP and installation and maintenance of all temporary erosion, sedimentation, and pollution control measures under the original approved SWPPP and HMCP and required amendments.
- B. Temporary erosion and pollution control measures that are required at material sources, staging areas, or other Contractor-furnished sites are subsidiary.
- C. Contractor shall perform temporary erosion and pollution control measures that are required due to Contractor's negligence, carelessness, or failure to install permanent controls as a part

of the work as scheduled or ordered by the Engineer, or for Contractor's convenience, at his own expense.

- D. Permanent erosion and pollution control measures will be measured and paid for under other contract items, when shown on the bid schedule.

<u>Pay Item Number</u>	<u>Pay Item</u>	<u>Pay Unit</u>
310000-1	Temporary Erosion and Pollution Control	Lump Sum

END OF SECTION

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