

SECTION 531

CONTAMINATED GROUNDWATER MANAGEMENT

I. GENERAL

1.1 DESCRIPTION OF WORK

The Contractor shall furnish all labor, supervision, material (except as herein provided), tools, equipment, supplies, and services; and, shall perform all Work necessary for the management of Contaminated Groundwater. Contaminated groundwater is effluent discharge from construction dewatering activities that is impacted with contaminants of concern and require special handling in accordance with applicable federal and state regulations. The Contractor is responsible for ensuring that all contaminated water discharged from dewatering operations complies with all applicable permit requirements, including the Locality's MS4 permit. The Contractor must notify the Locality and Owner, of any discharge of contaminated groundwater in an amount equal to, or in excess of, a reportable quantity established under either 40 CFR Part 110, 40 CFR Part 117 or 40 CFR Part 302, that occurs during a 24-hour period into or upon surface waters; or may reasonably be expected to enter surface waters, immediately upon discovery of the discharge.

1.2 SUBMITTALS

Submittals shall be made by the Contractor in accordance with the procedures set forth in Section 105 - Control of Work, and as described below.

- A. Contaminated Groundwater Management Plan** - Submit a Contaminated Groundwater Management Plan within 30 days of the Notice to Proceed, and prior to construction commencement. This plan shall include:
 1. Summary of information regarding the location and nature of known or suspected groundwater contamination from studies provided by the Owner.
 2. Summary of permits required for the discharge and plan for securing such permits.
 3. Proposed methods and procedures for Contaminated Groundwater management generated from construction dewatering activities including treatment equipment required.
 4. Sampling, monitoring and reporting requirements and plans.
- B. Proposed Protection Measures** - Submit informational report, including drawings, indicating the measures proposed for worker protection from Contaminated Groundwater in accordance with applicable federal and state regulations.
- C. Discharge Permit Submittals:** Provide all Contaminated Groundwater discharge permits, correspondence and submittals related to the Virginia Pollutant Discharge Elimination System (VPDES) permit compliance to include Discharge Monitor Reports (DMRs), and reporting for compliance with the applicable Owner's General Permit or Hampton Roads Sanitation District's (HRSD) Industrial Waste Water Permit, as appropriate.

1.3 QUALITY ASSURANCE

- A. Regulatory Requirements: Review the requirements of all permits issued for Contaminated Groundwater discharge. Comply with governing Environmental Protection Agency (EPA), state and HRSD regulations in regard to discharging Contaminated Groundwater before beginning construction.
- B. Contaminated Groundwater Management Conference: Conduct a Contaminated Groundwater discharge conference at project site. Review methods and procedures related to Contaminated Groundwater management including, but not limited to, the following:
 1. Review and discuss the Contaminated Groundwater Management Plan including duties of Contaminated Groundwater management coordinator responsible for this task.
 2. Review plan for documenting volume of effluent generated.
 3. Review procedures for encountering, treating, sampling and discharging of known or suspect contaminated effluent.

II. EXECUTION

2.1 GROUNDWATER MANAGEMENT PROTOCOLS

- A. Comply with applicable Contract document terms, regulations, approvals, and permit conditions regarding dewatering. Measures to direct discharge to Owner facilities, HRSD, or state waters under a VPDES or MS4 permit shall be explored and implemented as appropriate.
- B. Employ best management practices as required by Virginia Erosion and Sediment Control Law including use of control measures, such as sediment basins and dewatering structures, per Virginia Department of Environmental Quality (VDEQ) and local regulations; the more stringent requirements shall apply.
- C. Monitor dewatering discharge to ensure compliance with regulations and permits. Sample if required by permitting agency and adjust control measures accordingly.

2.2 PLAN IMPLEMENTATION

- A. General: Implement approved Contaminated Groundwater Management Plan.
- B. Training: Train workers, subcontractors, and suppliers on proper Contaminated Groundwater management procedures, as appropriate for the Work.

2.3 PROCEDURE

- A. The Contractor shall dewater only the minimum volume of groundwater as necessary to construct the proposed improvement.
- B. Apply for and secure all permits required to discharge Contaminated Groundwater. Contractor shall be the Permittee for all required permits to discharge Contaminated Groundwater, and will be solely responsible for compliance with all provisions of the applicable permit(s). The Owner will periodically monitor compliance. Any contaminated discharge, as defined by VDEQ, HRSD, or the Owner shall be immediately reported to the Owner, DEQ and HRSD, as appropriate, based

on the receiving location of the discharge.

- C. Dewatering discharge shall be monitored to ensure compliance with regulations and permits. Sample in accordance with EPA and permit requirements and adjust control measures accordingly.
- D. Discharge as per regulations and applicable permits.
- E. If during construction activities, the Contractor detects a petroleum odor or other evidence of groundwater contamination (e.g. staining, turbidity, etc.) in an area of unknown contamination, then the Contractor shall immediately call the Owner to report the suspected Contaminated Groundwater. All work should be temporarily stopped in this area of suspect contamination until additional guidance is provided by the Owner regarding the handling and treatment of such materials.
- F. Contractor shall not discharge any Contaminated Groundwater except as authorized and specified by applicable permits.

III. MEASUREMENT FOR PAYMENT

Information regarding the location and nature of known or suspected groundwater contamination from previous studies is provided to assist the Contractor in calculating the quantity and cost for managing Contaminated Groundwater during construction dewatering activities. Therefore, costs associated with the proper management of Contaminated Groundwater shall be considered incidental to other items of Work unless otherwise specified on the Bid form.

End of Section