For this Scope of Work, HRP Associates, Inc. (HRP) understands that our firm will be responsible to provide continuous operation of the treatment system associated with the Stanton Cleaners (the Site). To accomplish this goal the scope of work has been broken up into several tasks as summarized below, and include system operations and maintenance and monitoring, system expansion and optimization, and reporting. All activities below were budgeted to be completed in the state fiscal years of 2020 and 2021.

**Task 1 – Preliminary Activities:** Costs were included for the preparation of 2.11s including accompanying documentation. This task includes the following actions.

* File Review by the Project Manager;
* A trip by the Project Manager, Contract Manager, and a Senior Technician to the Site on March 17, 2020 for a site visit with the current remedial contractor. It should be noted the Department was not able to send a representative due to travel restrictions put in place in response to COVID-19;
* Phone calls with HRP and the DEC Project Manager to discuss the planning and scoping tasks for project;
* Development of Schedule 2.11’s and Work Assignment Packages;
* Development of Site Specific HASP, FAP and QAPP;
* Regular Progress Updates;
* Historical File Review; and
* Procurement of subcontractors for services not provided by standby subcontractors.

**Task 2 – Site Management Plan:** This task consists of updates to the Site Management Plan (SMP). HRP will review the SMP and update it as necessary to ensure the SMP reflects current and anticipated future site conditions following expansion of the system to include two new horizontal soil vapor extraction (HSVE) lines. Additionally, HRP will review proscribed institutional controls (ICs) and engineering controls (ECs) at the site to ensure they are protective of human health and the environment. All revisions to the SMP will be completed in accordance with DER 10 Section 6.2.

**Task 3- Treatment System Operations and Maintenance (O&M):** In general, this task will include the following components as defined in the WA Issuance/NTP document.

* Inspections and Oversight
* Site Maintenance
* Treatment System O&M
* Leachate Collection Facility
* Contract Development and Management
* O&M Reporting and Documentation

To ensure the continued, effective operation of the onsite Soil Vapor Extraction (SVE) system and Groundwater Extraction and Treatment (GWE&T) System HRP will perform the following O&M Activities:

* Monthly fire/safety inspection and corrective actions, including a corrective actions work plan to bring the site into compliance with local fire codes;
* Monthly treatment system inspection and preventive maintenance;
* Monthly screening of SVE system with PID;
* Monthly gauging of 16 monitor wells for water level;
* Monthly tracking of quantity and volume at leachate collection facility;
* Monthly reporting on results of inspections, corrective actions; and
* Quarterly O&M report submittals.

Additionally under this task HRP will perform an installation of two HSVE lines under and adjacent to the vacant Stanton Cleaners Building. This work will be performed in accordance with an approved work plan prepared by the previous site consultant. For the purposes of this estimate, HRP has assumed that our firm would be responsible for contracting with the horizontal/directional drilling subcontractor.

**Task 4- Monitoring and Reporting:** To ensure the selected remedy is effective HRP will perform the following monitoring and reporting tasks:

* Monthly sampling and laboratory analysis of GWE&T system influent and effluent. Samples will be analyzed for VOCs via EPA Method 8260;
* Quarterly sampling of SVE system influent and effluent. Samples will be analyzed for VOCs via EPA method TO-15;
* Annually sampling the system discharge point to the city sewer. Samples will be analyzed for SPEDES Equivalency Parameters;
* Every fifth quarter the groundwater monitoring well network will be sampled. Samples will be analyzed for VOCs via EPA Method 8260;
* Indoor air monitoring of affected buildings near the Stanton Cleaners Property, with interventions, if necessary;
* All samples will be submitted to the Department’s requested laboratory Test America, Inc., a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP) certified laboratory; and
* Each monitoring event will be documented and summarized in the quarterly O&M reports.

**Task 5- Periodic Review (PR) and Report (PRR):** The PR and PRR for the site will be completed on an annual basis. The PRR will include the IC/EC certification forms and will summarize all site activities and data for the review period. The PR and PRR will be completed in accordance with DER 10 Section 6.3.

**Task 6- Remedial Systems Optimization:** HRP will complete a Remedial Systems Optimization Plan. The plan will be completed after the new lines of the HSVE system are installed and operational. The Remedial System Optimization study will include a review of current and historical O&M data and will include recommendations to increase the effectiveness and efficiency of the SVE and GWE&T Systems. This may include both minor recommendations (changes in system operations to enhance recovery or balance recovery rates), to advanced modeling of the system and hydraulic influence to ascertain if additional upgrades would benefit the comprehensive groundwater cleanup at the site.

**Schedule:** This WA will be performed according to the following time frames:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Work Element  Task 1 - Preliminary Activities  Notice to Proceed 2.11s  Submit Work Assignment Package  Budget Approval  Task 2- Site Management Plan  Task 3 - Treatment System Operations and Maintenance (O&M)  Task 4 - Monitoring and Reporting  Task 5- Periodic Review (PR) and Report (PRR)    Task 6- Remedial Systems Optimization | | Calendar Days From NTP  0-21  21  21-60  30-730  30-730  30-730  30-730  30-730 | | Est. Latest Start Date  3/3/2020  3/24/2020  5/2/2020  4/2/2020  4/2/2020  4/2/2020  4/2/2020  4/2/2020 |
|  |  | |  | |