

FIFTH AMENDMENT TO AGREEMENT

THIS FIFTH AMENDMENT TO AGREEMENT (Amendment) made and entered into as of this _____ day of _____, 2025, amends the Consultant Services Agreement entered into between the CITY OF FRESNO, a California municipal corporation (hereinafter referred to as CITY), and CDM Smith, Inc., a Massachusetts Corporation (hereinafter referred to as Consultant).

RECITALS

WHEREAS, the CITY and CONSULTANT entered into a Consultant Services Agreement on February 1, 2022 (Agreement), to provide professional consulting services for Environmental Groundwater Remedial Action and Regrading Design for the Fresno Sanitary Landfill Superfund Site for a total fee of \$429,850; and

WHEREAS, the CITY and CONSULTANT entered into a First Amendment to the Agreement on December 20, 2022 (First Amendment) to expand the scope of services and increase monetary consideration in the amount of \$230,600, for a revised total contract value of \$660,450; and

WHEREAS, the CITY and CONSULTANT entered into a Second Amendment to the Agreement on March 31, 2023 (Second Amendment) to expand the scope of services and increase monetary consideration in the amount of \$85,200, for a revised total contract value of \$745,650; and

WHEREAS, the CITY and CONSULTANT entered into a Third Amendment to the Agreement on October 27, 2023 (Third Amendment) to expand the scope of services and increase monetary consideration in the amount of \$644,753, for a revised total contract value of \$1,390,403; and

WHEREAS, the CITY and CONSULTANT entered into a Fourth Amendment to the Agreement on November 6, 2024 (Fourth Amendment) to expand the scope of services and increase monetary consideration in the amount of \$526,490 for a revised total contract value of \$1,916,893; and

WHEREAS, ongoing services have become necessary at the Fresno Sanitary Landfill Superfund Site; and

WHEREAS, the CITY and CONSULTANT now desire to enter into this Fifth Amendment to expand the scope of services, increase monetary consideration in the amount of \$383,798, for a revised total contract value of \$2,300,691, and extend the term of the Agreement from June 30, 2025 to January 31, 2026 to complete the expanded scope of services; and

WHEREAS, with entry into this Amendment, CONSULTANT agrees that it has no claim, demands, or disputes against the CITY.

AGREEMENT

NOW, THEREFORE, the CITY and the CONSULTANT agree that the aforesaid Agreement be amended as follows:

1. The recitals to this Amendment are incorporated and made a part of this Amendment.

2. The Agreement is extended to January 31, 2026.

3. Exhibit A of the Agreement is amended to expand the scope of services as indicated in Exhibit A, attached hereto, and incorporated herein by reference.

4. Consultant's sole compensation for satisfactory performance of all services required or rendered pursuant to this Agreement shall be a total fee of Two Million, Three Hundred Thousand and Six Hundred Ninety One Dollars (\$2,300,691). Such fee includes all expenses incurred by CONSULTANT in performance of the services."

5. Except as otherwise provided herein, the Agreement entered into by City and Consultant, dated February 1, 2022 remains in full force and effect.

[SIGNATURES FOLLOW ON THE NEXT PAGE]

IN WITNESS WHEREOF, the CITY and the CONSULTANT have executed this Third Amendment at Fresno, California, the day, and year first above written.

CITY OF FRESNO,
a California municipal corporation

By: _____
Nicholas D. Mascia, PE, TE, PTOE
Assistant City Manager Public Works,
Utilities, and Capital Projects

APPROVED AS TO FORM:
ANDREW JANZ
City Attorney

By: Angela M. Karst 7/30/2025
Angela M. Karst Date
Senior Deputy City Attorney

ATTEST:
TODD STERMER, MMC
City Clerk

By: _____
Deputy Date

CDM Smith, Inc., a Massachusetts
corporation

Signed by:
By: Servando Molina 7/30/2025
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Name: Servando Molina

Title: Senior Vice President
(If corporation or LLC., Board Chair,
Pres. or Vice Pres.)

Signed by:
By: Paul Milligan 7/30/2025
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Name: Paul Milligan

Title: Secretary
(If corporation or LLC., CFO.,
Treasurer, Secretary or Assistant
Secretary)

REVIEWED BY:

Signed by:
Sarah J. Lambeth 7/29/2025
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Sarah J. Lambeth
Senior Management Analyst
Capital Projects Department

Exhibit A

SCOPE OF SERVICES

**Consultant Services Agreement between City of Fresno (“City”)
And CDM Smith Inc. (“Consultant”)
Fresno Sanitary Landfill Groundwater and Landfill Remediation Services**

Fresno Sanitary Landfill

Scope of Work and Budget for July 2025 through January 2026.

Introduction

Provided below are descriptions of work tasks to be performed by CDM Smith Inc. (Consultant) on behalf of the City of Fresno (City) as part of ongoing operations at the Fresno Sanitary Landfill Superfund Site (“FSL” or “Site”). Ongoing activities are being performed as part of Operable Unit No. 1 (OU-1 – landfill control system operations, maintenance, and reporting) and OU-2 (groundwater remediation system operations, maintenance, and reporting). The ultimate objective of the continued work is to achieve formal regulatory closure of the FSL Superfund Site. The U.S. Environmental Protection Agency (EPA) is the lead regulatory agency on the FSL project.

This scope of work presented below describes work to be performed through January 2026. The description also outlines supplemental activities during the past City fiscal year that arose from requirements from the EPA and unanticipated complications in landfill operations. The Consultant is currently performing work for the City under Amendments No. 1, No. 2, No. 3, and No. 4 to the existing agreement (dated February 1, 2022). Amendment No. 1 reflected 2023 work activities to support the monitoring program, system operations assistance, and ongoing reporting required for the FSL and the ongoing groundwater remediation. Amendment No. 2 covered work activities for planning and implementation of the second round of the vapor intrusion (VI) investigation, which was performed in March 2023. Amendment No. 3 included planning and field work for Round 3 of VI investigation activities, quarterly groundwater sampling activities starting in October 2023, and bid period and construction period services in support of the Landfill Regrading Design #1. Amendment No. 4 included supplemental budget to address scope changes associated with the groundwater model recalibration and Groundwater Quality/Control Assessment Report (Groundwater Assessment Report), surface emissions monitoring (SEM), additional Landfill Regrading Design #1 plans and specifications, groundwater sampling events through June 2025, monitoring assistance costs, additional support for responses to EPA comments, and soil gas field investigation and report costs.

This Amendment No. 5 includes scope and budget for the following new and supplemental activities:

- PFAS Work Plan - During the December 2024 technical information exchange (TIE) meeting, EPA indicated that they would like PFAS sampling included in the groundwater sampling event in October 2025. (Under Task 1.)

- Work Plan for Sounding LFG Extraction Wells - During the December 2024 TIE meeting, EPA requested submittal of a brief work plan identifying the landfill gas LFG extraction wells to be sounded and describing procedures for well sounding. (Under Task 1.)
- Additional funding for completion of the Groundwater Assessment Report and Groundwater Model Recalibration. (Under Task 2.)
- Round 4 VI Investigation – Continue the VI investigation sampling program that was initiated in 2022. Next steps for this sampling program include preparation of a work plan addendum for VI Round 4 field work in discussions with the City and EPA. (Under Task 4.)
- Support Activities for EPA's 2025 Five Year Review of FSL – EPA will be conducting their Five Year review of FSL in 2025. CDM Smith started providing support to the City for this activity starting in February 2025. (Under Task 5.)
- Routine OU-1 and OU-2 support activities (e.g., quarterly project reports, SEM reports, meetings with the City and EPA, responses to EPA comments, etc.) and project management for extension of the contract through January 2026.

These scope of work activities are a continuation of work performed under the existing contract with the City (dated 2022) and under Amendment No. 1 (for work performed in 2023), Amendment No. 2 (for the Spring 2023 VI investigation), Amendment No. 3 (for the June 2024 VI investigation and October 2023 - October 2024 groundwater monitoring), and Amendment No. 4 (supplemental activities through June 2025). Work described below is defined in terms of the project tasks listed below:

- Task 1 – Performance Monitoring Program
- Task 2 – Remedial Action Systems Operations Assistance
- Task 3 – Site Delisting Discussions (no work is planned under Task 3 through 2026)
- Task 4 – Site Investigation Activities (OU-1)
- Task 5 – Project Management/Project Meetings
- Task 6 –Landfill Regrading/Landfill Control Systems Repair – Design Services (OU-1) - (no additional work is planned under Task 6 during 2025 through 2026)

Table A-1 consists of a summary of the estimated costs for this scope of work. The total cost for this supplemental work is \$383,798 to be conducted through the period of performance extended through January 2026.

Task 1 – Performance Monitoring Program (OU-2)

Objectives

- Perform groundwater monitoring activities for the annual performance monitoring program, including 2025 (Q3-July, and Q4- October) and 2026 (Q1-January) as part of the Groundwater Remedial Action at the FSL.
- Monitor and evaluate performance of groundwater remediation.
- Document the performance monitoring activities and laboratory analytical results in an annual report (July 31, 2025) and an interim data transmittal (January 31, 2026) to EPA.
- Provide draft resident notification summaries of quarterly groundwater results for two residences for City distribution to residents.
- Prepare responses to review comments from EPA (and other State regulatory agencies).

Activities

- **Groundwater Monitoring Activities** - The Groundwater Monitoring Program at the FSL has been ongoing for many years. The City requested that Consultant perform groundwater monitoring activities (quarterly, semi-annual, and annual monitoring events). Consultant has enlisted a subcontractor to assist with sampling services. Task activities will include coordinating with analytical laboratories (e.g., analyses to be performed, numbers and types of sampling containers, delivery of sampling containers to the Site), and sample collection from the groundwater monitoring wells, groundwater extraction wells, residential water supply wells, and the groundwater treatment plant (GTP) influent and effluent sampling ports. Consultant will coordinate with the City in the ongoing implementation of this program.

Field activities to be performed, laboratory analysis, and regulatory agency reporting are described below:

- *Field Activities.* CDM Smith will perform groundwater monitoring, utilizing Blaine Tech Services, Inc (Blaine Tech), with assistance from City staff. For budgeting, one site visit by a CDM Smith staff member is assumed for oversight assistance during one of the quarterly events. The plan for sampling and analysis (**Table 4-1** of the *Spring 2024 Annual Performance Monitoring Program Report*) defines the sampling schedule, number of samples and analytical methods for these quarterly sampling events. Blaine Tech will additionally perform wellhead maintenance at the monitoring wells which will include re-tapping well lids and replacing bolts and well lid gaskets.
- *Schedule.* Monitoring events will be performed during 2025 (July and October), and during 2026 (January). Listing of the sampling locations are defined in Table 4-1 of the *Annual Performance Monitoring Program Report* (July 2024 submittal to EPA).
- *Laboratory Analysis.* Analysis of water samples will be performed by two laboratories, including Fresno Wastewater Management Division Analytical Laboratory (WMD; analysis for inorganic compounds) and BSK Associates Engineers & Laboratories (BSK) under direct bill contract with the City (analysis for volatile organic compounds).

- *Reporting.* On an annual basis, CDM Smith will prepare two deliverables associated with the Groundwater Monitoring Program, including the Annual Performance Monitoring Program Report (July 2025) and the Interim Data Transmittal (January 2026). CDM Smith will also prepare quarterly draft analytical reporting letters for residential wells for City distribution to the sampled residential well owners. These deliverables are described below (under ***Deliverables***).
 - *Coordinate with Laboratories.* Identify and work to resolve issues that arise regarding laboratory analytical results (e.g., corrections to sample login names, apparent mislabeling between sample locations, investigate what appears to be anomalous analytical data, etc.).
- **Environmental Database** – Maintain the environmental database, including upload of analytical data upon receipt from the analytical laboratory following each quarterly sampling round. Database management will include performing data queries and preparing data summary tables that will be included in the interim data transmittal (electronic transmittal) and the annual performance monitoring program report (electronic transmittal) to the EPA.
 - **Responses to Regulatory Agency Review Comments (RTCs)** – EPA and the State regulatory agencies typically submit review comments on a range of project submittals. This task will involve preparing RTCs (electronic submittals) for technical deliverables scheduled for submittal to EPA including the OU-1 Annual Report, OU-2 Interim Data Transmittal, OU-2 Annual Performance Monitoring Program Report, quarterly landfill progress reports and quarterly SEM reports.
 - **OU-2 Operations Assistance** – CDM Smith provides miscellaneous support activities to assist the City in the operations and maintenance of the groundwater monitoring wells, groundwater extraction wells, residential water supply wells, and the groundwater treatment plant (GTP). Under this subtask, Consultant staff can assist City staff in optimizing operations of the groundwater collection and treatment system (including extraction pump operations, GTP operations, and monitoring of instrumentation and controls). Consultant staff also are available to respond to requests for assistance from the City to address GTP operational problems or to respond to questions regarding technical or regulatory issues or to develop an estimate of future costs associated with GTP operations under various operational scenarios. Consultant staff will also be available to review and evaluate analytical data from supplemental samples collected from the groundwater monitoring wells or the GTP. The Consultant will document use of this funding in the monthly progress reports accompanying the monthly invoices.

In the past year, support activities under this subtask have included:

- Discussions with the City and County about the incorrect construction of private wells at 2429 North Avenue and 3165 Hughes Avenue.

- An evaluation of the packed tower aerator (PTA) evaluation and preparation of a technical memorandum following a groundwater exceedance during the July 2024 groundwater sampling event.
- Research in preparation of a PFAS Sampling work Plan. During the December 2024 TIE meeting, EPA indicated that they would like PFAS sampling included in the groundwater sampling event in October 2025. They requested that a PFAS work plan be developed and discussed with them before implementation. Support activities for developing this document will be tracked under this subtask.

It is assumed that this as-needed task is limited to 50 hours through January 2026.

Assumptions

- Consultant will utilize a subcontractor (Blaine Tech) to assist in the groundwater monitoring rounds (July and October 2025; and January 2026).
- City staff will assist in several groundwater monitoring activities, including:
 - Assist in locating on-site and off-site groundwater monitoring well locations, as requested.
 - Coordinate with off-site property owners to allow access to groundwater monitoring wells and residential water supply wells included in the monitoring program.
- City staff will be responsible for ensuring access agreements are in-place for off-site monitoring wells and residential wells.
- Analysis of organic constituents is currently being performed by BSK Associates Engineers & Laboratories (BSK) in Fresno, CA under direct bill contract with the City.
- Analysis of inorganic constituents is currently being performed by the City of Fresno Wastewater Management Division Analytical Laboratory (WMD) in Fresno, CA, under direct bill arrangements with the City.

Deliverables

1. **OU-2 Annual Performance Monitoring Program Report (*Annual Deliverable*)** – The Annual Report will cover the July and October 2024 and the January and April 2025 groundwater monitoring events. A draft document will be submitted to City staff for review. Consultant will incorporate revisions from City staff and prepare final report for submittal to EPA. The Annual Report will be submitted to EPA in July 2025. Work activities for the Annual Report will include the following elements:
 - Compilation of quarterly monitoring data (field and analytical laboratory data) and GTP operational data.
 - Preparation of data summary tables and graphics. Data summary tables will include groundwater extraction well operational data, groundwater treatment unit performance monitoring data, volatile organic compound (VOC) mass removal, groundwater level

measurements, head differential measurements (well clusters), VOC analytical data, inorganic constituent data, and quality control data. Graphics will include groundwater elevation contours for 2 of the quarterly monitoring events, VOC Isoconcentration contours in the B- and C-aquifers for one quarterly monitoring event, and VOC concentration trend plots.

- Based on the Long-Term Monitoring Optimization Plan (Plan; CDM Smith 2007), Consultant will perform an evaluation of the groundwater monitoring wells included in the monitoring program and will propose changes to the monitoring program in accordance with the criteria defined in the Plan. This evaluation will be completed following the April groundwater monitoring event. The results of this evaluation will be documented in the July Annual Report.

2. **OU-2 Interim Data Transmittal (*Annual Deliverable*)** – The Interim Data Transmittal will consist of data summary tables and figures for the July and October 2025 groundwater monitoring events. The Interim Data Transmittal will be submitted directly to EPA via email in January 2026.
3. **Analytical Reporting Letters for Residential Wells (*Quarterly Deliverables*)** – These letters will be drafted in Microsoft Word and emailed to the City for placement on City letterhead and distribution to two of the sampled residential well owners.
4. **PFAS Work Plan (*One-Time Deliverable*)** – A draft document will be submitted to City staff for review. Consultant will incorporate revisions from City staff and prepare the final work plan for submittal to EPA.
5. **RTCs to Regulatory Agency Review Comments (*Periodic Deliverables*)** – Draft RTCs will be submitted to the City for review. RTCs will be revised based on review comments from the City and submitted to EPA.

Task 2 – Remedial Action Systems Operations Assistance (OU-1)

Objectives

- Support the City's high-quality performance of the landfill environmental control systems, including the landfill cover, landfill gas (LFG) control, and stormwater management systems.
- Assist City staff in the ongoing operations, monitoring, and maintenance of the groundwater remediation system and the landfill control systems at the FSL.

Activities

Under this task, Consultant will assist the City in ongoing operations and maintenance activities associated with the groundwater treatment system and the landfill control systems. This task will consist of on-site and office activities necessary to maintain effective operation of the groundwater collection and treatment system, the LFG control system, and the function of the final landfill cover/stormwater management systems. This task includes the following activities:

- **Operable Unit 1 Annual Report (*Annual Activity*)** – Consultant will prepare a report, which is intended to document operations and maintenance activities associated with the landfill

(LFG) control elements, including the landfill cover, stormwater management, and LFG control systems. The OU-1 Annual Report, to be submitted to EPA in February 2026, will address operations during the prior year. Although this deliverable date is after the period of performance (which ends in January 2026), work on this report is conducted throughout the period of performance as data from field monitoring are received. The OU-1 Annual Report will consist of the following elements:

- Summary of LFG flare operating data. This summary would include a listing of the LFG flare downtimes, including downtimes resulting in operation of the GTP in LFG flare bypass mode.
 - Compilation of perimeter LFG monitoring probe data.
 - Assessment of the condition of the landfill cover system and the stormwater management system. The assessment would rely on information generated during inspections (described below) of the landfill cover and stormwater management system performed by Consultant and/or City staff. Of particular importance is the inspection scheduled early fall, prior to onset of rainy weather.
 - Overview of maintenance activities performed on the landfill control systems and description of repairs or equipment replacements.
- **OU-1 Operations Assistance** – This subtask will be used for the Consultant to assist the City with landfill-related operations activities that cannot specifically be identified at this time. Example activities that were conducted under this subtask in the past year are:
- Consultation on LFG flare adjustments to maintain methane concentrations for flare operations.
 - Support activities associated with the June 2024 and February 2025 perimeter probe exceedances.
 - Preparation of a leak repair technical memorandum requested by EPA in the November 2024 TIE meeting
 - Consultation regarding blower failure that started in December 2024.
 - Preparation of the blower failure and vandalism technical memorandums requested by EPA in the January 2025 TIE meeting.

The Consultant will document use of this funding in the monthly progress reports accompanying the monthly invoices. For budgeting purposes, this task is estimated at 50 labor hours.

- **Landfill Inspection and Maintenance Assistance** – Activities to be performed under this subtask will be focused on assisting the City in planning and performing landfill inspection and maintenance activities.

- Annual Landfill Inspection (Annual Activity) – The annual landfill inspection will be performed during the Fall of 2025. At the request of the City, additional inspections may be performed by CDM Smith following heavy precipitation events that could impact landfill control systems function. However, City staff are responsible for conducting the monthly and wet weather (considered to be October through March) inspections and completing the inspection forms that will be attached to the quarterly progress reports for submittal to EPA.
- A description of landfill inspection activities/procedures is provided below:
 - Focus of the inspections will be on the landfill control system elements, including landfill cover system, surface water management system, and LFG control system.
 - Highlight the need for performing routine maintenance activities related to the landfill control systems.
 - Highlight the need for performing corrective action activities to address damage, inoperable conditions, or failure of the landfill control systems. The descriptions will be specific to each of the landfill control system elements.
 - Prepare a report to document the inspection and to describe maintenance, repair, and corrective actions.
 - Identify landfill regrading needs identified as part of the landfill inspections.
- Due to the extensive subsidence on the landfill, the City has not been completing monthly inspection forms in 2024 and 2025. After construction of Design #1 (anticipated to be complete by third quarter of 2025 (Q3 2025), CDM Smith will assist the City in developing updated inspection forms to be used during monthly inspections. The draft inspection forms will be submitted to the City for review and comment before finalization and implementation.
- **Annual Evaluation of Extraction Well Performance (*Annual Activity*)** – Consultant will perform an evaluation of the performance of each extraction well on an annual basis. Performance factors to be considered during the performance evaluation will include specific capacity (pumping rate per foot of drawdown) and changes in pumping rate and drawdown over time, with comparison to historical data. The last report submitted in February 2024 covered operations up through the First Quarter 2023. With pump motor replacements at PW-6B2 (December 2023) and PW-1C (June 2024), an evaluation of the extraction well system performance was not needed in 2024. The next extraction well performance assessment is anticipated to be submitted in Q3 2025. Per City direction, no additional extraction well performance assessment has been assumed for 2026 during the period of performance of this scope of work.
- **New Well Evaluations (*Periodic Activity*)** – Consultant will perform groundwater modeling evaluations of proposed new water supply wells (agricultural and residential) in the vicinity of the FSL. The purpose of the new well evaluations is to assess the potential for impact to the existing groundwater remediation system at the FSL from operation of proposed new wells. Under the current arrangement, the County of Fresno, Department of Public Health, Environmental Health Division (Fresno County) notifies the City when a permit application

for a new or replacement water supply well is submitted in a location within the Well Assessment Zone. Based on groundwater modeling results, Consultant will either recommend that the well not be installed or recommend design modifications for the proposed well (e.g., depth of well, depth of annular seal, and length of screen zone). Per City direction, it is assumed that no evaluation will be performed for the duration of the period of performance. This task is dependent on whether well permit requests within the well assessment zone are submitted to the County. Support for currently identified issues regarding the incorrect construction of residential wells at 2429 North Avenue and 3165 Hughes Avenue will be provided under Task 1 OU-2 Operations Assistance subtask.

- **Groundwater Assessment Report** – Based on discussions during a series of OU-2 Phase 3 Remedial Action Performance Evaluation technical meetings with EPA (starting August 23, 2023), EPA requested that the City submit a Groundwater Assessment Report (formerly technical memorandum) that would provide an evaluation of the performance of the remedial action using a groundwater model calibrated with the groundwater sampling data collected since implementation of the remedy. The EPA also requested an updated conceptual site model to be included in the report. This work commenced with the City's approval in December 2023, with efforts on this new activity tracked as an as-needed task that was partially funded through Addendum No. 3 and Addendum No. 4.

An update on the modeling and Groundwater Assessment Report was presented to the EPA during the January 2025 TIE meeting and a summary of the final draft was presented to the City in an April 2, 2025 meeting. Per City direction, it is assumed that no revisions of this report will be prepared during the period of performance of this scope of work.

- **Groundwater Modeling** – Based on discussions during TIE meetings with EPA and the April 2025 submittal of the Groundwater Assessment Report, we anticipate that groundwater modeling will be required to address questions from EPA. Per City direction it has been assumed that no groundwater modeling will be required during the period of performance of this scope of work..

Assumptions

- With monthly requests from Consultant, City staff will provide Consultant with information listed below in a timely manner. The requested information constitutes critical information for reporting to EPA (e.g., Quarterly Progress Reports, OU-2 Annual Performance Monitoring Report, OU-1 Annual Report).
 - Downloads of the SCADA system in Excel with operations data for the groundwater remediation system (data from extraction well operations and groundwater treatment plant operations) and for the landfill gas (LFG) flare system (LFG flare operations). Consultant will compile these data and make necessary assumptions and calculations for filling data gaps.
 - Weekly maintenance summaries for the groundwater remediation system and the LFG flare.
- The budget includes additional funding for groundwater modeling and report preparation for the completion of the Groundwater Assessment Report submitted in April 2025.

Deliverables

1. **OU-1 Annual Report (*Annual Deliverable*)** - A draft report will be submitted to the City for review. The report will be revised based on review comments from the City and finalized for submittal to EPA. One OU-1 Annual Report will be prepared under this scope of work, with a planned submittal date of February 2026. Although this deliverable date is after the period of performance (which ends in January 2026), work on this report is conducted throughout the period of performance as data from field monitoring are received.
2. **Annual Extraction Well Performance Evaluation Technical Memorandum (*Annual Deliverable*)** - The technical memorandum, which will document the performance evaluation on each of the groundwater extraction wells, will be submitted to the City. This technical memorandum is not intended as a formal submittal to EPA. For budgeting purposes, it has been assumed that no Extraction Well Performance Evaluation will be prepared under this scope of work in 2026.
3. **New Well Evaluations (*Periodic Deliverables*)** - At the conclusion of each new well evaluation that is performed, a letter to the City will be prepared for submittal to the City which documents groundwater modeling results and provides well construction recommendations. This deliverable is only required if the County receives new well requests within the Well Assessment Zone during the contract period. For budgeting purposes, it has been assumed that no new well evaluations will be required during the period of performance of this scope of work.

Task 3 – Superfund Site Delisting Pathway – Planning and Implementation

No Task 3 services will be performed during 2025 or 2026.

Task 4 – Site Investigation Programs

The two subtasks included under Task 4 are briefly described below.

- Subtask 4.1 – Soil Gas Sampling Program (Round 4). During 2021, EPA directed the City to perform soil gas sampling from selected LFG perimeter monitoring probes (located along the perimeter of the landfill). Three rounds of vapor intrusion (VI) sampling have been conducted: Round 1 (Fall 2022) and Round 2 (Spring 2023), as defined in the VI Investigation Work Plan (approved by EPA in October 2022) and Round 3 (Summer 2024) as defined in the VI Investigation Work Plan Addendum (September 2023). Based on the October 2024 VI Evaluation Report reporting on the Round 3 results, additional VI sampling (Round 4) is recommended. EPA is expected to direct the City to plan and implement additional soil gas investigation beyond the perimeter monitoring probe locations to the north and to the south near the South Detention Basin to assess the potential risk to local residents along Jensen Avenue (north of the landfill) or along North Avenue (south of the landfill).
- Subtask 4.2 – Landfill Surface Emissions Monitoring (SEM). Consultant prepared the SEM Work Plan in October 2022, and the City started performing SEM in May 2023. It is assumed that SEM monitoring and reporting will be required quarterly. Consultant will assist the City

in preparing quarterly reports summarizing SEM activities and presenting the results of the emissions monitoring. City staff are responsible for performing the SEM on a quarterly basis.

Subtask 4.1 – Soil Gas Sampling Program (Round 4)

Objectives

- Plan the Round 4 of VI sampling to assess the risk to human health from migrating LFG at locations near the landfill consistent with air sample collection performed during Rounds 1, 2, and 3.

Activities

- Prepare a VI Investigation Work Plan Addendum 2 for Round 4 VI sampling defining the remedial action objectives and sampling plan, as well as detailing revisions to previously established soil gas sample probe installation and soil gas sample collection procedures and laboratory analytical methods.

Assumptions

- The level of effort for the Round 4 VI investigation cannot be estimated at this time. VI Work Plan Addendum 2 needs to be completed and negotiated with EPA before the scope for the Round 4 field investigation can be finalized. It is assumed that a budget adjustment will be required following discussions with EPA and finalization of VI Work Plan Addendum 2 to fund the field activities agreed upon with the EPA in VI Work Plan Addendum 2.
- The budget includes additional funding for completion of the Round 3 investigation report that was submitted in 2024.
- EPA will have one round of review comments in response to the VI Work Plan and the Evaluation Report. These comments will include a compilation of comments from the State regulatory agencies.
- Technical calls/meetings with EPA. Consultant will participate in a call (during a routine monthly TIE meeting call) with EPA to discuss responses to EPA review comments on the VI Work Plan Addendum 2, under the meeting subtask in Task 5. Formal written responses to EPA comments (RTCs) on the VI Work Plan Addendum 2 will be prepared under Task 1.

Deliverables

- **Vapor Intrusion Work Plan Addendum 2 (*One-Time deliverable*)**. A draft work plan addendum will be submitted to the City for review. The work plan will be revised based on review comments from the City and finalized for submittal to EPA.

Subtask 4.2 – Landfill Surface Emissions Testing

Objective

- Prepare quarterly report to EPA documenting the field activities and presenting the results of the emissions testing.

Activities

Federal guidelines allow a reduction in frequency of SEM to annual monitoring if methane is not detected above 500 ppm for three consecutive quarters. However, based on past SEM results

and landfill operations incidents, we are assuming that quarterly SEM monitoring will continue to be performed and reported at FSL. Consultant will prepare quarterly reports for the period April 2025 through December 2025 (Q2, Q3, and Q4 2025). The objectives of the technical memorandum are to document the SEM program activities and to present the monitoring data. Each technical memorandum will be submitted to EPA, following draft document submittal to City staff for review and Consultant incorporation of revisions from City staff. Currently, City staff are contracting RES Environmental through the City's contract with Tetra Tech to perform the SEM on a quarterly basis. It is uncertain whether the City intends to have RES continue to provide this service for them. City staff are responsible for providing the quarterly SEM data to CDM Smith.

Assumptions

- City staff (or their designated subconsultant) will perform quarterly field methane SEM activities. The City will provide the monitoring data to CDM Smith following each quarterly monitoring event.

Deliverables

- **SEM Technical Memorandum (*Periodic Deliverables*)** – A technical memorandum will be prepared to document each quarterly monitoring event. It is expected that three SEM technical memoranda will be prepared (Q2, Q3, and Q4 2025). Since quarterly reports are being prepared, an annual report is no longer needed.

Task 5 –Project Management/Project Meetings

Objectives

- Meet project scope, schedule, and budget requirements.
- Maintain effective communication with the City, EPA, and other regulatory agency staff on key project issues.

Activities

The activities described below are to be performed through January 2026.

- Perform routine project management activities, which will include staff oversight, budget management, invoicing, monthly progress reporting, and coordination with the City on budget and scope of work development.
- Prepare schedule updates, as needed.
- Participate in project meetings and project conference calls, including prepare meeting presentation materials and other handouts responding to EPA requests.
- Prepare quarterly project progress reports providing status updates regarding remedial actions implemented at the FSL. Consultant will submit draft quarterly project progress reports to the City.
- Prepare contracting documents for multiple subcontractors.

- Interact with EPA in preparation for and during implementation of field activities.
- Interact with EPA in support of their preparation of EPA's 2025 Five Year Review of FSL and provide documentation and interview questionnaires, as requested. CDM Smith project manager and senior technical consultant participated in an onsite meeting with EPA on February 20, 2025.

Assumptions

- The City will finalize the quarterly project reports with transmittal of the project progress reports to EPA.
- The budget reflects participation in one monthly project conference call with EPA through January 2026. In addition, there will be one project status meeting at the FSL Site during 2025.

Deliverables

1. **Monthly invoices and monthly email progress reports (*Periodic Deliverables*)** – submitted to the City documenting Consultant work performed.
2. **Presentation materials and handouts (*As-needed Deliverables*)** - responding to EPA requests for periodic project meetings or teleconferences.
3. **Quarterly project progress reports (*Periodic Deliverables*)** - prepared during 2025 (July, and October), and 2026 (January) for City submittal to EPA.

Task 6 – Landfill Regrading/Landfill Control Systems Repair – Design Services (OU-1)

The City began implementation of a Landfill Regrading Program to address differential settlement that has occurred on the landfill. The Landfill Regrading Program was developed as two design projects described below:

- **Landfill Regrading Design #1** – The Design #1 (Subtask 6.1) addresses settlement along the eastern side slopes, eastern perimeter drainage channel and eastern access road and included upgrades of the LFG control system. Construction of Design #1 is anticipated to be complete by 2025 Quarter 3. No additional activities are assumed for Design #1 in this amendment.
- **Landfill Regrading Design #2** – Design #2 (Subtask 6.2) addresses settlement of the remaining portions of the FSL, including the southern, northern, and western side slopes and the top deck of the landfill. No additional activities are assumed for Design #2 in this scope and budget for 2025 through January 2026.

Schedule

The scope of work and budget presented above reflects project duration from July 2025 through January 2026. All deliverables will be electronic deliverables; no print copies will be produced. The schedule for project deliverables is provided below:

Annual and or Periodic Deliverables

1. Landfill Quarterly Progress Reports (Q2, Q3, and Q4 2025) – **July and October 2025; and January 2026**
2. SEM Quarterly Reports (Q2, Q3, and Q4 2025; and Q1 2026) – **July and October 2025; and January 2026**
3. OU-2 Regulatory Interim Data Transmittal – **January 31, 2026**
4. OU-2 Annual Performance Monitoring Program Report – **July 31, 2025**
5. Responses to Comments from EPA on technical deliverables – **As needed**
6. Monthly invoices and progress reports

One-time Deliverables

1. PFAS Work Plan – **To be determined based on EPA discussions**
2. Vapor Intrusion Investigation Work Plan Addendum 2 – **To be determined based on EPA discussions**

The cost for the work described above is \$383,798. A cost breakdown is shown on Table 1 – Proposed Adjustment for Amendment #5, Revision 2 (July 2025), Groundwater and Landfill Remediation Services, Fresno Sanitary Landfill (OU-1 and OU-2). This estimate constitutes the budget for services during July 2025 through January 2026.

Table 1**Groundwater and Landfill Remediation Services - Amendment #5, Revision 2****Estimated Budget for Year July 2025 through January 2026****Fresno Sanitary Landfill (Operable Unit-1 and Operable Unit-2)**

Task Description		Labor \$	ODCs \$	Ops \$	Total \$
Task 1	Performance Monitoring Program	\$95,189	\$630	\$40,129	\$135,948
	GW Monitoring Activities	\$4,689	\$0	\$38,218	\$44,818
	OU-2 Operations Assistance	\$15,000	\$0	\$0	\$15,000
	Monitoring Assistance	\$0	\$0	\$0	\$0
	Environmental Database Management	\$0	\$0	\$0	\$0
	Responses to Comments	\$21,500	\$0	\$0	\$21,500
	OU-2 Annual Report (submittal date: July)	\$45,500	\$600	\$0	\$46,130
	OU-2 Regulatory Data Transfer (submittal date: January)	\$8,500	\$0	\$0	\$8,500
Task 2	Remedial Action Systems Operations Assistance	\$131,707	\$1,785	\$0	\$133,492
	Annual Evaluation of Extraction Well Performance	\$0	\$0	\$0	\$0
	OU-1 Annual Report (February 2025)	\$16,390	\$200	\$0	\$16,600
	New Water Supply Well Evaluations	\$0	\$0	\$0	\$0
	As-Needed Activities Groundwater Assessment Report	\$25,722	\$0	\$0	\$25,722
	OU-1 Operations Assistance	\$15,000	\$700	\$0	\$15,735
	Landfill Inspection and Maintenance Assistance	\$4,000	\$800	\$0	\$4,840
	Groundwater Modeling	\$70,600	\$0	\$0	\$70,600
	SEM Report (remaining reports will be under Task 4.2)	-\$5	\$0	\$0	-\$5
Task 3	Superfund Site Delisting Pathway -- Planning	\$0	\$0	\$0	\$0
Task 4	Site Investigation Programs	\$38,572	\$0	\$0	\$38,572
Subtask 4.1	Soil Gas Sampling Program (Round 4)				
	Soil Gas Investigation - Work Plan	\$12,000	\$0	\$0	\$12,000
	Pre-field Planning Activities	\$0	\$0	\$0	\$0
	Soil Gas Investigation - Field Activities	\$0	\$0	\$0	\$0
	Soil Gas Investigation - Report of Findings	\$13,072	\$0	\$0	\$13,072
Subtask 4.2	SEM Program				
	SEM Consulting	\$0	\$0	\$0	\$0
	SEM Reporting	\$13,500	\$0	\$0	\$13,500
Task 5	Project Management/Project Meetings	\$88,625	\$2,100	\$0	\$90,725
	Project Management	\$32,900	\$2,000	\$0	\$35,000
	Project Meetings	\$15,225	\$0	\$0	\$15,225
	Quarterly Progress Reports	\$28,000	\$0	\$0	\$28,000
	2025 Five Year Review	\$12,500	\$0	\$0	\$12,500
Task 6	Landfill Regrading/Control Systems Repair Design	-\$15,464	\$525	\$0	-\$14,939
Subtask 6.1	Design #1				
	Pre-Construction Services	-\$4,155	\$0	\$0	-\$4,155
	Bid Period Services	-\$14,273	\$0	\$0	-\$14,273
	Construction Period Services	\$0	\$0	\$0	\$0
	East OPCC (for 100% design)	-\$11	\$0	\$0	-\$11
	East Field Visits	\$2,975	\$500	\$0	\$3,500
	East Reporting (construction completion report for EPA)	\$0	\$0	\$0	\$0
Subtask 6.2	Design #2				
	Design Planning	\$0	\$0	\$0	\$0
	Design PM	\$0	\$0	\$0	\$0
	Regrading - Basis of Design Report	\$0	\$0	\$0	\$0
	60% Design	\$0	\$0	\$0	\$0
	90% Design	\$0	\$0	\$0	\$0
	100% Design	\$0	\$0	\$0	\$0
	Specifications	\$0	\$0	\$0	\$0
	OPCC (for 90% and 100% designs)	\$0	\$0	\$0	\$0
	Field Visits	\$0	\$0	\$0	\$0
TOTALS		\$338,629	\$5,040	\$40,129	\$383,798

Notes:

1. CDM Smith will complete the tasks listed in the table on a time and materials basis, not to exceed a total of **\$383,798**.

2. Labor costs will be billed at actual salary rates times a 3.05 multiplier.

3. 'Other Direct Costs' (ODCs) and 'Outside Professional' (OPs) charges will be billed with a 5% mark-up.

COMPENSATION

CDM Smith, Inc., will complete the Fifth Amendment scope of Services for a total fee not to exceed the values below:

Fifth Amendment Compensation

Task 1 – Performance Monitoring	\$135,948.00
Task 2 – Remedial Action Systems Operations Assistance	\$133,492.00
Task 3 – Site Delisting Discussions	\$0.00
Task 4 – Site Investigation Activities (OU-1)	\$38,572.00
Task 5 – Project Management/Project Meetings	\$90,725.00
Task 6 – Landfill Regrading Design Services	\$-14,939.00
TOTAL PROFESSIONAL SERVICES FEE	\$383,798.00

Fourth Amendment

Task 1 – Performance Monitoring	\$146,500.00
Task 2 – Remedial Action Systems Operations Assistance	\$190,690.00
Task 3 – Site Delisting Discussions	\$0.00
Task 4 – Site Investigation Activities (OU-1)	\$76,800.00
Task 5 – Project Management/Project Meetings	\$65,000.00
Task 6 – Landfill Regrading Design Services	\$47,500.00
TOTAL PROFESSIONAL SERVICES FEE	\$526,490.00

Third Amendment

Task 1 – Performance Monitoring	\$286,747.00
Task 2 – Remedial Action Systems Operations Assistance	\$79,940.00
Task 3 – Site Delisting Discussions	\$0.00
Task 4 – Site Investigation Activities (OU-1)	\$121,400.00
Task 5 – Project Management/Project Meetings	\$95,446.00
Task 6 – Landfill Regrading Design Services	\$61,220.00
TOTAL PROFESSIONAL SERVICES FEE	\$644,753.00

Second Amendment

Task 1 – Performance Monitoring	\$0.00
Task 2 – Remedial Action Systems Operations Assistance	\$0.00
Task 3 – Site Delisting Discussions	\$0.00
Task 4 – Site Investigation Activities (OU-1)	\$75,200.00
Task 5 – Project Management/Project Meetings	\$10,000.00
Task 6 – Landfill Regrading Design Services	\$0.00
TOTAL PROFESSIONAL SERVICES FEE	\$85,200

Original Contract Amount

TOTAL AMENDED CONTRACT AMOUNT: \$2,300,691.00

Completion of Services

January 31, 2026