STATEMENT OF WORK

I. Purpose

The purpose of this Statement of Work ("SOW") is to describe the general content of the Work the City and County of Denver ("Respondent") has agreed to perform pursuant to the Administrative Settlement Agreement and Order on Consent for Removal Action ("Agreement").

The Work entails design and implementation of the "environmental components" of a stormwater drainage feature to be constructed through a portion of Operable Unit 2 of the VB/I70 Superfund site. The stormwater drainage feature is part of a larger project that is intended to reduce flooding in the Montclair Drainage Basin area and address stormwater management needs associated with projects being developed by Regional Transportation District (RTD), Colorado Department of Transportation (CDOT), and Respondent.

The "environmental components" to be addressed by this Removal Action consist of: 1) management and handling of waste material encountered during construction of the stormwater drainage feature; 2) management and, if necessary treatment and/or disposal, of dewatering liquid during construction; and 3) design and construction of an impermeable barrier system to prevent any contaminants remaining within the boundaries of the stormwater drainage feature from adversely impacting stormwater retained within and conveyed by the stormwater drainage feature, as well as prevent stormwater infiltration into contaminated media remaining beneath or surrounding the feature.

The Respondent shall also define and implement environmental protection measures needed to protect human health, groundwater, surface water, air, and soils from potential impairment caused by construction of the stormwater drainage feature. This shall include: 1) preparation and implementation of a Removal Action Work Plan (RAWP) containing a Sampling and Analysis Plan (SAP), a Quality Assurance Project Plan (QAPP), a Materials Management Plan (MMP), a Health and Safety Plan (HASP), and Progress Reporting procedures; 2) a pre-Final inspection; and 3) preparation of a Construction Closeout Report. In addition, if requested by EPA, Respondent shall assist EPA with community relations. Details of these activities are discussed below.

II. Work to Be Performed

This SOW describes the activities that shall be completed to reduce risk to human health and the environment at the Site. The Work to be performed consists of:

1. Management of Waste Material

Construction of the stormwater drainage feature will require the excavation and handling of a substantial volume of soil and solid waste material. Investigations have identified lead and arsenic in soils and subsurface soil as contaminants of concern for OU2. Additionally, municipal wastes were landfilled in this area and investigations have identified volatile organic compounds (VOCs), polynuclear aromatic hydrocarbons

(PAHs), and potentially friable asbestos associated with those materials. Together, these contaminated soils and solid waste are the "waste material" that will need to be removed. It is expected that concentrations of most contaminants of concern in the waste material will be sufficiently low such that most of the material may be managed as a RCRA non-hazardous solid waste. Respondent is planning to dispose all RCRA non-hazardous material, including material containing friable asbestos, at the Denver Arapahoe Disposal Site (DADS) under disposal certificates issued by landfill operator. Respondent will manage RCRA hazardous material as hazardous waste and will treat and/or dispose of such material at a RCRA-licensed Subtitle C treatment, storage, or disposal facility (TSDF). Criteria and protocols for management and disposal of all material in the Materials Management Plan.

2. Management of Contaminated Groundwater

Historic groundwater sampling has detected VOCs and metals above Colorado Basic Standards for Groundwater and Surface Water. As necessary, groundwater collected during construction dewatering will be treated prior to release to a receiving stream or transported offsite for treatment and disposal. Criteria and protocols for collection, treatment, and disposition of these liquids, as well as any other liquid that comes in contact with the waste material, including washout and decontamination liquids, in the Materials Management Plan.

3. Barrier System Beneath the Stormwater Channel

Under any portion(s) of the stormwater drainage feature to be constructed as an open channel, Respondent shall design and construct a barrier system, including an impermeable liner, to prevent contact between the remaining contaminated media (i.e., waste material and contaminated groundwater left in place), and stormwater conveyed by the stormwater drainage feature . As appropriate, the barrier system shall also include foundation material beneath the liner and protective material above the liner to ensure liner stability and protection. Respondent shall also design the system to account for historical groundwater flow patterns beneath and adjacent to the liner.

Respondent shall submit the following design documents related to the barrier system for EPA and CDPHE review:

a. **Draft (50 percent) Design.** This submittal shall include the following:

- Design Criteria
- Results of additional field sampling and pre-design work
- Draft plans, drawings, and sketches
- Draft specifications
- Project delivery strategy
- Draft construction schedule

- Draft construction cost estimate

b. **Pre-Final (95 percent) Design.** This submittal shall refine and detail the Draft Design, with revisions addressing comments from EPA and CDPHE. Respondent shall include value engineering assessments. The submittal shall represent the best efforts at a complete design and include drawings, specifications, general conditions, a Basis of Design memorandum, an updated schedule, and an updated cost estimate.

c. **Final Design.** This submittal shall include the complete and final barrier system design. All of the items required for the Draft design submittal, as well as modifications resulting from review of the Draft and Pre-Final design shall be included. Drawings, specifications, and general conditions shall be ready for procurement and implementation.

Respondent shall submit two copies of each design package to EPA and CDPHE for review and comment, and respond to comments in a letter format.

4. Removal Action Work Plan (RAWP)

a. The RAWP shall describe the removal activities to be performed. The RAWP shall discuss:

- Site background;
- Project organization;
- Site characterization;
- Scope of removal action activities to include discussion of:
  - Staging area,
  - Mobilization plan,
  - Site preparation,
  - Excavation of waste material,
  - Treatment of waste material, if necessary, prior to disposal,
  - Disposal procedures,
  - Management of groundwater during removal activities,
  - Stormwater management during removal activities,
  - Dust control measures,
  - Personnel and equipment monitoring and decontamination procedures, and
  - Other activities required to implement the removal action;
- Institutional controls;
- Anticipated community relations activities;
- Schedule of project deliverables with associated submittal dates and proposed construction schedule.

b. Supporting deliverables to the RAWP shall include the following:

- Sampling and Analysis Plan (SAP) - The SAP shall be submitted in accordance with the National Contingency Plan (NCP), Section 300.415(b)(4)(ii) for removal actions. The SAP shall consist of two parts:

  - A Field Sampling Plan (FSP), which describes the number, type, and location of samples and the type of analyses; and

  - A Quality Assurance Project Plan (QAPP), which describes policy, organization, and functional activities and the data quality objectives and measures necessary to achieve adequate quality for use in planning and documenting the removal action.

- Materials Management Plan (MMP) -- Respondent shall submit an MMP describing: 1) the testing, management and disposal requirements for waste material; 2) requirements for management and treatment of and groundwater captured during construction dewatering operations; and 3) management of liquids and solids from design investigations, groundwater sampling, and equipment decontamination.

- Site Health and Safety Plan (HASP) -A Site HASP shall be developed in accordance with OSHA Standard 29 CFR Part 1910 and Part 1926.

- Monthly Project Reporting. Monthly reports required pursuant to Section V of the Agreement shall contain most of the information specified in Superfund Removal Procedures, Removal Response Reporting: POLREP and OSC Reports (EPA, 1994). The monthly report shall include the following sections: Section I - Heading, Section II - Background, Section III - Site Information, Section IV - Response Information, and Section V - Disposition of Wastes. Section I shall include date of report, site name, author of report, recipient of report, and number of report. Section II shall include site number, response authority, CERCLIS number, NPL status, Action Memorandum date, actual start date, demobilization date, and completion date. Section III shall include incident category (e.g., time critical, fund-lead, etc.), description of site, description of threat, and removal site investigation results. Section IV shall include description of contamination, cleanup standards, actions to date, and planned actions. Finally, Section V shall include a description of the waste, treatment process required prior to disposal, volume of treated waste, temporary storage, and final disposition of the waste. The template included as an appendix to this SOW shall be used for the monthly reports.

Implementation of the RAWP

Respondent shall implement the RAWP in accordance with the removal action activities and work schedule presented in the RAWP. Responsibilities for implementing the supporting documents shall be as follows:

c. SAP and QAPP: Respondent shall implement these Plans directly.
d. MPP and HASP: Respondent shall inspect the site activities for compliance with these Plans.
e. Monthly Project Reporting: Respondent shall prepare the reports directly.

5. Pre-Final Inspection

Upon or near completion of the removal action, and before the submittal of the construction completion report, a pre-final inspection by EPA and CDPHE shall be arranged by the Respondent. Respondent shall document any "punch-list" items resulting from the inspection and work to address all punch-list items to the satisfaction of EPA, in consultation with CDPHE.

6. Construction Completion Report

Respondent shall prepare a Construction Completion Report that shall include the following chapters:

Section 1. Introduction: Include a brief description of the location, size, environmental setting, and operational history of the site. Describe the operations and waste management practices that contributed to contamination of the site. Describe the major findings and results of site investigation activities.

Section 2. Operable Unit Background: Summarize requirements specified in the ROD, ESD, and TCRA Memorandum for OU2. Include information on the cleanup goals, institutional controls, monitoring requirements, and other parameters applicable to the design, construction, operation, and performance of the removal action.

Section 3. Construction Activities: Provide a step-by-step summary description of the activities undertaken to construct and implement the remedy (e.g., mobilization and site preparatory work; construction of the treatment system; associated site work, such as fencing and surface water collection and control; system operation and monitoring; and sampling activities).

Section 4. Chronology of Events: Include significant milestones and dates, such as, design submittal and approval; ROD amendments or ESDs; mobilization

and construction of the remedy; significant operational events such as treatment system/application start-up, monitoring and sampling events, system modifications, operational down time, variances or non-compliance situations, and final shut-down or cessation of operations; final sampling and confirmation-of- performance results; required inspections; demobilization; and completion or startup of post- construction operation & maintenance activities.

Section 5. Performance Standards and Construction Quality Control: Describe the overall performance of the technology in terms of comparison to cleanup goals. For treatment remedies, identify the quantity of material treated, the strategy used for collecting and analyzing samples, and the overall results from the sampling and analysis effort.

Section 6. Final Inspection and Certifications: Report the results of the various inspections to include the pre-Final inspection, and identify noted deficiencies. If implemented, summarize details of the institutional controls (e.g., the type of institutional control, who will maintain the control, who will enforce the control).

Section 7. Summary of Project Costs: Provide the actual final costs and applicable year for the project. If actual costs are not available, provide estimated costs.

Section 8. Observations and Lessons Learned: Provide site-specific observations and lessons learned from the project, highlighting successes and problems encountered and how resolved.

Section 9. Operable Unit Contact Information: Provide contact information (names, addresses, phone numbers, and contract/reference data) for the major design and remediation contractors, EPA oversight contractors, and the respective RPM and project managers for EPA, the State, and the PRPs, as applicable.

Appendix A. Cost and Performance Summary

Supplemental Appendices. Place for maps, schematics, references.

7. Community Relations

Respondent shall assist EPA, if requested, in performing the community relations activities specified in Section 300.415(n) of the NCP.

References

EPA, 1994 (June). Superfund Removal Procedures, Removal Response Reporting: POL.REP and OSC Reports. Office of Solid Waste and Emergency Response (OSWER) Directive 9360-3-03, United States Environmental Protection Agency, Washington, D.C. 20460

PROGRESS REPORT template
Vasquez Boulevard and Interstate-70 Superfund Site Operable Unit -2

I. HEADING

Date:	*(File each report by the tenth day of each month until demobilization completed)*
Site Name:	Vasquez Boulevard / Intersate-70 Operable Unit-2
From:	XYZ Consultants
To:	Dania Zinner, USEPA Region 8, Oversight Manager
Progress Report No.:	*(sequential numbered series of reports for ease in retrieval)*

II. BACKGROUND

Site No.:	###
Response Authority:	CERCLA CERCLIS No: CO###
NPL Status:	Listed
Action Memo:	TBD *(use date of final action memo authorizing this removal to be provided by USEPA)*
Start Date:	TBD *(use effective date of Agreement governing this response action/to be provided by USEPA)*
Demobe Date:	TBD (use *forecast date until demobe occurs then use that effective date)*
Completion Date:	TBD *(use forecast date for delivery of final closeout report)*

III. SITE INFORMATION

A. Incident Category

Time Critical, Private-funded response.

B. Site Description

1. Site Location [below is an example of a typical description]

The Vasquez Boulevard and Interstate 70 (VB/I-70) Superfund Site is an approximately four square mile area located in the north-central portion of Denver, Colorado near the intersections of Interstate 70 and Interstate 25. OU2 consists primarily of the southern portion of the Denver Coliseum property (that portion of the Coliseum property located south of Interstate 70, which is owned by the Respondent), the Forney Transportation Museum property along Brighton Boulevard, the Pepsi Bottling Company property along Brighton Boulevard, and various other commercial properties located along Brighton Boulevard. The

2016-010025-0001086

Removal Action involves primarily of the southern portion of Denver Coliseum parking lot and Globeville Landing Park, both of which are owned by the City and County of Denver (CCoD).

2. Description of Threat

Arsenic and lead (but particularly lead) have been identified at the Site as the contaminants of concern (COCs). Arsenic and lead are hazardous substances, as defined by Section 101 (14) of CERCLA. The threats posed by this Site include dermal absorption; inhalation of contaminated dust; and the inadvertent ingestion of contaminated soil and surface water.

C. Remedial Investigation Results

Arsenic and lead were detected at levels greater than background and in some locations at concentrations greater than those consider acceptable for commercial/industrial land uses.

IV. PHYSICAL PROGRESS INFORMATION FOR THE RESPONSE

USEPA Region 8 has authorized contaminated soil and waste removal and installation of containment measures in those portions of the site where stormwater diversion structures are anticipated to be installed under a "time-critical" Removal Action memorandum.

A. Contamination:

Soil contaminated with lead and arsenic is present in both surface and subsurface soil. Solid waste is present in the subsurface beneath portions of the Denver Coliseum parking lot.

B. Cleanup Levels:

The action levels established for the Site are 800 milligrams/kilograms (mg/kg) for lead and 70 mg/kg for arsenic based on commercial land use as the reasonably anticipated land use for the site.

C. Removal Actions to Date:

(Here describe what has been accomplished since commencing the environmental remediation activities or since the last report)

D. Planned Removal Actions for Next Month:

(Here describe what you plan to accomplish by the next report)

E. Key I ssues and Proposed Resolutions

(Describe any technical or regulatory compliance issues ·impacting your plans)

V. DISPOSITION OF WASTES

As of this date, a total of *("reported quantity')* tons/cubic yards of soil/waste has been disposed at the Denver Arapahoe Disposal Site.