



Date: April 24, 2019
To: All Plan Holders and Builder's Exchanges for the subject Project
CC: Steve Moore, P.E., General Manager, Ross Valley Sanitary District
From: Joshua Andresen, P.E.
Subject: Addendum No. 2 – Larkspur Excavation and Remediation Project

TO ALL PROSPECTIVE BIDDERS:

THIS ADDENDUM FORMS A PART OF THE CONTRACT DOCUMENTS AND MODIFIES THE ORIGINAL SPECIFICATIONS AND DRAWINGS AS NOTED HEREIN. BY SUBMISSION OF A PROPOSAL FOR THIS PROJECT, THE BIDDER IS ACKNOWLEDGING THAT THE BIDDER HAS CONFIRMED THAT THEY HAVE RECEIVED ALL ADDENDA ISSUED FOR THE PROJECT AND HAVE INCLUDED COSTS FOR SUCH IN THE PROPOSAL SUBMITTED AND SO ACKNOWLEDGED THE ADDENDA IN THE BID FORM.

It shall be the responsibility of the general (prime) contractor to inform any affected sub-contractors of the content of this Addendum.

CHANGES TO SPECIFICATIONS:

1. SECTION 00010 – NOTICE INVITING BIDS, Page 1, 3rd Paragraph, 1st Sentence. Change "mandatory" to "non-mandatory" to conform with Section 00100 (Page 3, 4th paragraph) which specifies that attendance is "non-mandatory".
2. SECTION 00010 – NOTICE INVITING BIDS, Page 2, 1ST BULLET, SHALL BE DELETED AND REPLACE WITH THE FOLLOWING TEXT:

"Demolition of the existing concrete drainage-related culvert and access portals. These small structures are in the footprint of 10- and 15-foot deep excavations and shall be removed by Contractor. The concrete pipe and material can be reused if possible, otherwise, cleaned of visible soil and debris by pressure washing and disposed as construction debris, and replaced in kind."

3. SECTION 00310 – BID SCHEDULE, SHALL BE DELETED AND REPLACED WITH THE ATTACHED BID SCHEDULE. A new alternative bid item No. 26 has been inserted.
4. SECTION 00420 CERTIFICATION OF BIDDER'S EXPERIENCE AND QUALIFICATIONS, ARTICLE 2, PROJECT EXPERIENCE, 1.0 EXCAVATION AND DISPOSAL, A., 1. - INSTALLATION CONTRACTOR, SHALL BE DELETED AND REPLACED WITH THE FOLLOWING TEXT:

"Minimum of three (3) successful projects of similar size completed in the last ten (10) years that demonstrates experience with excavation and disposal of chemically-impacted soils, where excavation depths for at least one (1) project exceeded 15 feet below ground surface and where shoring, sheeting, or other measures on three (3) projects were required to protect workers and nearby structures environments, hazardous and special wastes were characterized and appropriately transported and disposed, and work was conducted in limited access/restricted locations, that

indicate the Bidder's experience as a contractor."

5. SECTION 00440 – SITE VISIT AFFIDAVIT TO BE EXECUTED BY BIDDER, NOTARIZED AND SUBMITTED WITH BID.

The Site Visit Affidavit is not required to be submitted by Contractor, and is hereby removed from the documents and bid submittal requirements.

6. SECTION 00800 – SUPPLEMENTARY GENERAL CONDITIONS, ARTICLE 2.10 – TIME ALLOWED FOR COMPLETION, SHALL BE DELETED AND REPLACED WITH THE FOLLOWING TEXT:

"Completion of this project shall be completed within one hundred sixty-eight (168) consecutive calendar days. Final Completion of this project shall be completed within one hundred ninety-six (196) consecutive calendar days from notice to proceed. The number of calendar days is based on the assumed start date of 3 June 2019 and the established substantial completion date of 22 November 2019; and assumes Contractor shall prepare deliverables within timeframes allotted in the contract and receives Notice to Proceed on 31 May 2019. Substantial Completion shall be as specified in Section 00800 – Article 7, SUBSTANTIAL COMPLETION. All other work shall be completed as part of the total allowed project time frame with the additional days for Final Completion."

7. SECTION 02300 – EARTHWORK, PARAGRAPH 1.06 PART E, SHALL BE DELETED AND REPLACED WITH THE FOLLOWING TEXT:

"E. Import material shall conform to the California Department of Toxic Substances Control (DTSC) requirements date October 2001 Information Advisory Clean Imported Fill Material provided in information to bidders. Contractor shall collect representative discrete samples of Crushed Aggregate, Import Fill, and Top Soil materials from the supplier and submit the samples to a California-certified laboratory to composite before analyses. Engineer will reject any samples containing any non-naturally occurring chemical constituents or naturally occurring chemicals at levels above regulatory limits allowable for unrestricted (i.e. residential) land use, as identified by the DTSC (Table 5, Human-Exposure-Based Screening Numbers Developed to Aid Estimation of Cleanup Costs for Contaminated Soil, November 2004) and the San Francisco Bay Regional Water Quality Control Board (Tier 1 ESLs, The Environmental Screening Level Users Guide, January 2019), except for arsenic, which will be based on typical background concentration of 13 mg/kg. In accordance with the DTSC Fill Advisory (2001) and depending on the source of the materials, Engineer may require the following laboratory analyses for the composite samples:

1. volatile organic compounds (VOCs) using EPA Method 8260;
2. semi-volatile organic compounds (SVOCs) and polycyclic aromatic hydrocarbons (PAHs) using EPA Method 8270;
3. total petroleum hydrocarbons (TPH) quantified as gasoline (TPHg), diesel (TPHd), and motor oil (TPHmo) using EPA Method 8015M;
4. Title 22 metals using EPA Methods 6020 and 7471;
5. total cyanide using EPA Methods 9010B/9014;
6. organochlorine pesticides (OCPs) using EPA Method 8081A; and
7. polychlorobiphenyls (PCBs) (EPA Method 8082)."

8. SECTION 02300 – EARTHWORK, PARAGRAPH 2.01 PART E, SHALL BE AMENDED BY ADDING THE FOLLOWING TEXT TO THE END OF THE PARAGRAPH:

"The import fill shall be from a quarry and shall contain no rocks greater than 1" in diameter. Use of open-graded crushed stone (e.g., AASHTO No. 57 size aggregate, AASHTO No. 3 aggregate) shall only be used in areas and to thicknesses as recommended by the engineer where soft natural subgrade soils exist in the opinion of the engineer."

CHANGES TO ATTACHMENTS:

PRE-BID MEETING SUMMARY

A summary of the topics discussed at the 20 April 2019 pre-bid meeting is included as an attachment to this Addendum.

ATTACHMENT H – DISTRICT DECONTAMINATION DOCUMENT

As required by the USEPA Conditional Approval dated 15 March 2019, the Decontamination Plan submitted by Owner to the USEPA is hereby included in the Contract Documents as Attachment H

Joshua Andresen, P.E. C70354



24 April 2019

Date

Name of Bidder: _____

SECTION 00310

BID SCHEDULE

Total amount bid (the summation of bid items 1 through 25),

Base Bid for _____ dollars (amount in words)

\$ _____ (amount in \$).

Bid amount of each of the above Bid Items must be filled in and completed.

Bid items shall be as specified in the Contract Documents, Section 01275, **MEASUREMENT AND PAYMENT**.

Bid Form Schedule A Remedial Action Sanitary District No. 1 of Marin County K/J Project No. 1565036*04					
Item No.	Item Description	Quantity	Unit	Unit Price (\$)	Total Item Bid Price (\$)
1	Workplans, Permits and Submittals	1	LS		
2	Mobilization	1	LS		
3	Temporary Field Facilities	1	LS		
4	Site Preparation, Staging and Stockpile Area Construction	1	LS		
5	Development and Implement Environmental Controls and Health and Safety	1	LS		
6	Instrumentation and Monitoring	1	LS		
7	Remove and Replace Utilities	1	LS		
8	Temporary Fence Installation and Removal	1,000	LF		
9	Excavation	69,500	BCY		
10	Additional Excavation as Directed by Engineer	2,500	BCY		
11	Stockpiling and/or Loading Soil for Off-site Disposal	54,700	TON		
12	Stockpiling, Characterization, and Loading of Demolition Debris	10,000	TON		

Name of Bidder: _____

13	Excavation Support and Protection	1	LS		
14	Dewatering System Setup, Rental, and Take Down	1	LS		
15	Dewatering System Operation, Maintenance, Analytical, and Discharge	500,000	Gal- lon		
16	Non-Hazardous Waste Soil Transport and Disposal	54,700	TON		
17	Hazardous Waste (TSCA) Soil Transport and Disposal	1,600	TON		
18	Demolition Debris (Hazardous -TSCA) Transport and Disposal	1,000	TON		
19	Demolition Debris (Non-Hazardous) Transport and Disposal	9,000	TON		
20	Backfilling and Compaction of Excavated Soil for Reuse Material	44,900	TON		
21	Provide, Backfill, and Compact Import Fill	73,800	TON		
22	Provide and Place Top Soil	4,200	TON		
23	Site Restoration	6.5	Acre		
24	Decontamination and Demobilization	1	LS		

Sum of Total Estimated Prices _____
 (\$ _____) (use words) (figures)

Additive Bid Items					
Item No.	Item Description	Quantity	Unit	Unit Price (\$)	Total Item Bid Price (\$)
25	Transport and Disposal of non-RCRA California Hazardous Waste Soil	500	TON		
26	Controlled Low Strength Material Backfill	200	CY		
27	Allowance for Wet weather (dewatering, stabilization of backfill soils, etc.)	1	Allowance	\$150,000	\$150,000
28	Contingency for unforeseen	1	Allowance	\$500,000	\$500,000

Name of Bidder: _____

Quantities are not guaranteed. Final payment will be based on actual quantities.

- (a) Bidder agrees that the Work will be finally complete and ready for acceptance and final payment in accordance with Article 6 of the General Conditions on or before the dates or within the number of calendar days indicated in the Agreement.
- (b) Bidder accepts the provisions of the Agreement as to liquidated damages in the event of failure to complete the Work on time.
- (c) Bidder accepts the Limitation of Liability Clause contained in the Agreement.

The following documents are attached to and made a condition of this Bid:

- (a) Required Bid Security in the form of cashier's check or certified check
- (b) Designation of Equipment or Material Manufacturers
- (c) Security for Compensation Certificate
- (d) Bidder's References
- (e) Bidder's Qualifications
- (f) Subcontractor List
- (g) Equipment Rates
- (h) Labor Rates
- (i) Noncollusion Affidavit
- (j) Copy of Contractors License

***** END OF SECTION *****

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Kennedy/Jenks Consultants

Pre-Bid Meeting

Larkspur Excavation and Remediation
Larkspur Landing Former Wastewater Treatment Plan

17 April 2019, 10:00 am

SIGN-IN SHEET

<u>NAME (please print)</u>	<u>REPRESENTING</u>	<u>PHONE</u>	<u>E-MAIL</u>
Christine Wang	EREG	925 280 4529	christine.wang@erreg.com
Steven Hoelt	EREG	517-438-6755	steven-hoelt@erreg.com
Scott Klopf	Silverado Contractors	(510) 385-5745	scott@silveradocontractors.com
Ryan Strong	Ghilotti Bros	415-454-7011	ryans@ghilottibros.com
Mike Babost	ETIC	925-639-1267	mbabost@ETICeng.com
Tyson Appel	EREG, Inc	925 250 4056	tyson.appel@EREG, Inc
BRANDY THOMPSON	SMCI	208-210-6780	bthompson@smcira.com
Eric Rager	Innovative Construction Solutions	925-639-9318	Estimating@ICS INC, TV

Kennedy/Jenks Consultants

Pre-Bid Meeting

Larkspur Excavation and Remediation
Larkspur Landing Former Wastewater Treatment Plan

17 April 2019, 10:00 am

SIGN-IN SHEET

<u>NAME (please print)</u>	<u>REPRESENTING</u>	<u>PHONE</u>	<u>E-MAIL</u>
JOE SCHAUERHAMER	Great Lakes E&I	720-266-6080	joeschauerhamer@gkis.com
Ryan Harding	Eleven Engineering	707-978-0703	rharding@eleven-eng.com
KYLE JARMIZKI	ELEVEN ENGINEERING	415-982-0554	kjarmizki@eleven-eng.com

**Larkspur Excavation and Remediation
Larkspur Landing Former Wastewater Treatment Plan**

**Pre-bid Conference
Wednesday, April 17, 2019
10:00:00 a.m.**

2000 Larkspur Landing Circle, Larkspur, CA

Attendance:

Owner

Steve Moore - Ross Valley Sanitary District

Consultant

Josh Andresen - Kennedy/Jenks Consultants

Todd Miller - Kennedy/Jenks Consultants

Contractors

Christine Wang – ERRG

Steven Hoeft – ERRG

Tyson Appel – ERRG

Scott Klopf – Silverado Contractors

Ryan Strong – Ghilotti Bros., Inc.

Mike Babst – ETIC

Brandy Thompson – Sierra Mountain Construction, Inc.

Eric Rager – Innovative Construction Solutions, Inc.

Joe Schauerhamer – Great Lakes Environmental & Infrastructure x

Ryan Harding – Eleven Engineering

Kyle Jarmicki – Eleven Engineering

1. Introduction

- a. Sign-in Sheet (attached)
- b. Project Team Introduction
- c. Bid Document Procurement

2. Notice to Contractors (00010)

- a. Bid Opening: **Friday May 3, 2019 at 3:00 p.m.** – *an extension is extremely unlikely. Bid opening date set to accommodate time for District to select contractor and prepare for Board approval on 15 May (see below)*
- b. Guaranty Bond: 10% of Bid – *Bond, Certified Check, Cashier's Check, or Cash*
- c. Time allowed for providing agreements, forms, bonds and insurance: 10 Calendar Days from Award – *time is of the essence on this contract.*
- d. Anticipated Award: **Wednesday, May 15, 2019** - *at the District Board Meeting in Larkspur, CA*
- e. Anticipated NTP: No later than **Friday, May 31, 2019** – *all contract documents to be signed/executed in advance of NTP*
- f. *Section 00010 will be updated to indicate the pre-bid meeting is not mandatory*

3. Instruction to Bidders (00100)

- a. Bidder's Check List – *ensure submitted bids include the following:*
 - i. Bid Form (00300)
 - ii. Bid Schedule (00310)

- iii. Bid Guarantee Bond (00410) – *Check, Cashier’s Check, Cash or Bond*
- iv. Bidders Experience and Qualifications (00420)
- v. Designation of Subcontractors (00430)
- vi. Site Visit Affidavit (00440) – *this form will not be required as part of the bid, since the pre-bid meeting was not mandatory*
- vii. Non-collusion Affidavit (00480)
- viii. Affidavit of Safety Compliance (00490)
- b. Questions: Benny Rocha
Kennedy/Jenks Consultants
Email: BennyRocha@KennedyJenks.com
- c. Bid RFI cutoff: **By 5:00 p.m. on Friday, April 26, 2019**

4. Project Overview: Summary of Work

- a. Cleanup Application & Conditional Approval
 - i. Summary of Work – *Removal and stockpiling of clean overburden; excavation and disposal of TSCA waste; excavation and disposal of PCB-impacted soils; excavation, stockpiling, and disposal of demolition debris; backfilling with clean import materials; restore to original grade; replace infrastructure in kind; decontamination and demobilization.*
 - ii. Cultural Resources – *District will hire an archeologist to oversee the work, as needed, to comply with CEQA*
 - iii. Wetlands – *Contractor will secure the wetlands area and buffer zone with construction fencing – no equipment will be allowed to encroach into the buffer zone or wetlands.*
 - iv. Existing Structures (Stormwater, Retaining Wall) – *Contractor is responsible for protecting existing structures during work. Drawings of the existing soil nail wall and existing segmental retaining wall are provided as Appendix C to the Bid Documents. The specifications require shoring to protect these structures and monitoring to ensure they do not move. Historical geotechnical reports have been provided to aid contractor in planning for appropriate stabilization and protection measures.*
- b. Disposal Characterization
 - i. Impacted Soils – :
 - 1. *Characterization for disposal – Contractor responsible for identifying the appropriate disposal facility and characterizing soils per the requirements of the disposal facility for proper disposal. Engineer will provide available analytical data for the Contractor’s use. Data is ~2 years old and landfill may require additional data to be collected by the Contractor. Engineer will verify proposed landfills comply with applicable regulations.*
 - 2. *Majority of soil is expected to be characterized as non-hazardous with a relatively small quantity of TSCA hazardous as reflected in the bid schedule quantities.*
 - ii. Demolition Debris – *Defined in the specs. It is the crushed concrete material from the former wastewater treatment plant. Contractor*

responsible for segregating and stockpiling demolition debris so Engineer can characterize the material. Contractor will then dispose of the material in accordance with its proper characterization and in accordance with state and federal regulations. Engineer will require up to 10 days to test and validate the laboratory results for each demolition debris stockpile (See Drawing C03, Note 4).

- iii. Clean soils - Soil designated as "soil for reuse" on the drawings shall be segregated, stockpiled as needed, and reused for backfill onsite.*
- c. Environmental Controls and Monitoring*
 - i. Dust – Contractor's dust control monitoring shall be described in the TEP and will include meteorological monitoring, visual monitoring, implementing actions to minimize airborne dust, and protecting worker health and safety. Engineer shall provide real-time perimeter air monitoring devices and monitor devices per requirements of USEPA. The action level for perimeter air monitoring is 50ug/m³. Once stockpiles are created, application of water for dust control is prohibited by EPA. Covering is required per specifications.*
 - ii. Stormwater*
- d. Transportation – Contractor is responsible for transportation of all materials to and from the site, as well as safety of the materials in transit.*
- e. Traffic Control – Contractor shall comply with City of Larkspur requirements for traffic controls to and from the site.*
- f. Safety – Safety is critical. Contractor will be held to the highest standards for site safety.*
- g. Permitting*
 - i. Grading permit – District has applied for and grading permit through the City of Larkspur Public Works Department. Contractor will be kept apprised of the status of the permit.*
 - ii. SWPPP – Contractor is responsible for preparing and certifying the SWPPP*
- h. Equipment Decontamination – The alternative decontamination plan submitted to USEPA will be provided as an addendum to the Bid Documents. Contractor shall include in its TEP a decontamination plan that meets the standards of the attached alternative decontamination plan. Contractor shall conduct a decontamination pilot test to demonstrate that the decontamination efforts will meet the requirements of the Plan. The results of the pilot test will be provided to and approved by USEPA, prior to decontaminating equipment for removal from the site. Contractor shall be responsible for containing, collecting, analytical testing, characterization, and disposal of water generated during decontamination of equipment. Solids collected in the decontamination area will be disposed with excavated soils.*
- i. CEQA Mitigation Measures – CEQA mitigation measure are provided in Appendix D of the Bid Documents.*
 - i. Dust – USEPA limit of 50 µg/m³ measure at the property boundary*

- ii. Noise
- iii. Traffic – *Transportation of impacted soils off-site and import of clean backfill will be limited to 40 vehicle round trips per day*
- iv. Wetlands – *maintain the identified buffer*
- v. Historical Artifacts/Archeological
- j. Contractor’s Technical Execution Plan – *Contractor shall submit its TEP to Engineer for review within 14 calendar days of contract authorization. Engineer will review and provide comments to TEP prior to contractor starting site activities.*
 - i. Site Preparation/Operations Plan (staging, traffic, fences, access/egress)
 - ii. Excavation Plan
 - iii. Dust Control Plan
 - iv. Shoring/Stabilization
 - v. Decontamination Plan
 - vi. Waste Characterization/Disposal Plan
 - vii. Traffic Control Plan

5. General Requirements (00700)

- a. Order of Precedence
- b. Bonds (Performance / Payment)
- c. Roles and Responsibilities
 - i. Contractor
 - ii. Construction Manager – *Kennedy/Jenks Consultants will be the Construction Manager for the project*
 - iii. Engineer/Design Consultant – *Kennedy/Jenks Consultants is the “Design Consultant” or “Engineer” referred to in the contract documents*
- d. Health and Safety
- e. Change Orders – *Change orders and changes in conditions must be identified early and brought to the attention of the construction manager immediately. Request for change order for activities that previously occurred will likely not be approved.*
- f. Contract Time / Delays
 - i. Estimated Start Date: June 3, 2019
 - ii. Estimated Duration: 25 Weeks (June 3 - November 22)
- g. Liquidated Damages - *\$8,000 per day, every day that the project is not substantially complete.*
- h. Differing Site Conditions – *The Contractor shall notify the Construction Manager at the time a differing site condition is recognized or is believed to exist. Differing site conditions may require USEPA involvement, which can extend the time for managing the change.*
- i. Payment
 - i. Measurement and Payment (001275)
 - ii. Retention 5% (00700)

6. Supplementary General Considerations (00800)

- a. Insurance Requirements
 - i. Commercial General Liability (\$5M/\$10M)
 - ii. Automobile (\$5M)
 - iii. Workers' Compensation (\$1M)
 - iv. Excess Umbrella Liability (\$5M)
 - v. Contractor's Pollution (\$1M/\$2M)
- b. Substantial Completion – *“Substantially Complete” refers to the excavation and backfilling activities being complete; the site being returned to grade (or close to original grade); and contractor has identified and is working on punch-list items. If impacted soils remain on-site, contractor will be responsible for maintaining stockpiles in accordance with the contract documents, the USEPA Conditional Approval, and the SWPPP, at contractor's cost, until the stockpiled material is removed from the site.*

7. Project Schedule / Work Constraints

Work schedule will be in compliance with City of Larkspur work hours

8. Measurements & Payment

- a. Quantity Estimates vs. Actual – *Contractor will be paid for actual quantities not estimated. Estimated quantities on the Bid Schedule are not guaranteed. Contractor is encouraged to minimize the work on-site to reduce the time to complete the project.*
- b. Bid Items
 - i. Instrumentation & Monitoring
 - ii. Utilities
 - iii. Excavation, Stockpiling, Transportation & Disposal
 - iv. Additional Excavation
 - v. Excavation Dewatering – Fluid Use and Disposal - *Contractor is responsible for analytical testing, characterization, potential treatment, disposal and/or reuse of water generated from excavation dewatering.*
 - vi. Backfill and Compaction

9. Additional Considerations

- a. Escrow Agreement (00630)
- b. Reclaimed water available from District – *Recycled water is available from District's treatment plant located less than 10 minutes from the site. District will work with contractor to minimize costs for using recycled water.*
- c. Project Coordination (01310)
 - i. Pre-construction meeting – *will include District, Kennedy/Jenks Consultants, Contractor, and USEPA*
 - ii. Daily Construction Reports
 - iii. Weekly progress meetings
- d. Moving District's Stockpiled Materials

10. Addenda

- a. Supplemental Geotechnical Data Report – *To be issued as an addendum*

- b. Pre-Bid Meeting Sign-in Sheet and Meeting Notes – *To be issued as and addendum*
- c. Future addenda and responses to RFIs – *To be uploaded to Districts website. Contractors with emails on file with the District will be notified when addenda are uploaded to the website.*

11. Site Walk

- a. Contractor Parking Area
- b. Retaining Wall
- c. Wetlands
- d. Construction Entrance/Exit
- e. Vehicle Haul Route

12. Questions and Answers

15 April 2019

Ms. Carmen D. Santos
PCB Coordinator
Land Division
United States Environmental Protection Agency
75 Hawthorne Street
San Francisco, California 94105

Subject: Application for Alternative Decontamination Procedures in accordance with
40 CFR 761.79(H)(2)
Ross Valley Sanitary District Former Wastewater Treatment Plant
2000 Larkspur Landing Circle, Larkspur, California
KJ 1565036*01

Dear Ms. Santos:

In accordance with the provisions of 40 CFR 761.79(h)(2), Kennedy/Jenks Consultants, Inc. (Kennedy Jenks), on behalf of Ross Valley Sanitary District (District) is requesting approval of an alternative decontamination procedure for subcontractor heavy equipment that will be used in the remediation of polychlorinated biphenyl (PCB)-impacted soil at 2000 Larkspur Landing Circle, in Larkspur, California (Site). The remediation work will be completed in accordance with an approved 40 CFR 761.61(c) risk-based application currently under review by the U.S. Environmental Protection Agency - Region 9, Toxic Substances Control Act (TSCA) program office in San Francisco, California (USEPA).

On 27 February 2018, Kennedy Jenks submitted the *Revised Updated Application for Remediation of Polychlorinated Biphenyls, Former Wastewater Treatment Plant, Larkspur, California*, (Revised Application) dated 27 February 2018, on behalf of the District to USEPA for review. The application was prepared in accordance with the requirements of 40 CFR 761.61(c) for remediation of PCB-impacted soils existing beneath the Site. On 15 March 2019, the District and Kennedy Jenks received comments to the application from USEPA addressing, among other aspects, the proposed decontamination procedures.

As proposed in the Revised Application the proposed decontamination process called for:

- An initial manual removal of accumulated soils from the excavator/end loader bucket and treads/tracks (to the extent practicable), followed by
- A thorough high pressure/steam wash on a dedicated temporary decontamination area designed to capture the wash water for confirmation sampling and proper disposal, followed by
- Wipe sampling of those parts of the equipment most likely to contact impacted soils (e.g., excavation/loading apparatus and tracks) in accordance with the requirements of 40 CFR 761.123 to confirm satisfactory decontamination.

In the 15 March 2019 USEPA comments, this approach was identified as insufficient under the provisions of 40 CFR 761.79(c)(2) and rejected. The comments indicated that any proposed method not consistent with those specifically allowed under 40 CFR 761.79(c)(2) would be considered an alternative method, requiring approval in advance from the Regional Administrator pursuant to 40 CFR 761.79(h)(2). In accordance with the 24 July 2018 comments, Kennedy Jenks is proposing the following alternative method for decontaminating equipment used as part of the Site remediation activities.

The Kennedy Jenks' approach deviates from the traditional methods of decontamination used primarily in its selection of an environmentally-friendly, aqueous-based detergent combined with high temperature/high pressure washing in lieu of a hydrocarbon-based solvent, some percentage of which evaporates and some of which must be disposed as hazardous waste regardless of PCB concentration. Kennedy Jenks believes its alternative decontamination method is technically appropriate given the material (soils containing PCBs at relatively low concentrations of <10 ppm), the medium [dry soil less likely to adhere to other material (e.g., steel loader bucket) versus an oily or sludge-like material that adheres to other materials it contacts and it often difficult to remove without solvents], and the conditions (dry soil above the water table in an arid climate currently overlain by several feet of clean material). Furthermore, the alternative approach being proposed is consistent with the philosophy of USEPA's "Principles for Greener Cleanups," primarily by reducing the use of non-renewable resources and eliminating the use of energy that would otherwise be consumed in the hazardous waste transport, treatment, and disposal processes.

The revised equipment decontamination process, which we believe is consistent with and meets the intent and requirements of 40 CFR 761.79(h), will now feature the following sequential steps upon successful completion of impacted soil removal activities:

1. Prior to removal of the last planned truckload of impacted soil, excavation equipment will be mobilized to a temporary decontamination pad for final manual removal of accumulated soils from the excavator/end loader bucket and tracks (to the extent practicable).
2. The decontamination pad will be designed to capture soil and wash water for confirmation sampling and proper disposal.
3. Equipment will be thoroughly washed with high pressure water/steam using a non-phosphate (e.g., Alconox) detergent, removing any remaining dust/soils to a visual clean standard.
4. Equipment will then be thoroughly washed with high pressure/steam using tap water to remove any remaining detergent.
5. Equipment will then be allowed to air dry.
6. Contractor will conduct a visual inspection of the equipment and decontamination areas to identify soil and water that may have accumulated during the remedial activities and decontamination procedures. Contractor will manually remove the accumulated soils from and transfer the soil to the truck for disposal.

Ms. Carmen D. Santos
United States Environmental Protection Agency
15 April 2019
Page 3

7. Contractor will remove wash water and transfer to appropriate storage containers for staging and sampling. Disposal of wash water will be based on analytical results and will be in accordance with applicable state and federal regulations.

The Contractor will test the above procedures shortly after implementing site remediation activities. Approximately 1 week after initiating excavation of subsurface soils, the Contractor will stop work and decontaminate the excavator, following steps 1 through 5 above. Contractor will then collect three individual wipe samples from those parts of the equipment most likely to have contacted impacted soils (e.g., excavation/loading apparatus, tracks, and undercarriage of equipment) following the requirements of 40 CFR 761.123. Wipe samples will be submitted to a certified laboratory under appropriate chain-of-custody and analyzed for PCBs.

Result will be submitted to USEPA for review. Wipe sample results indicating a concentration of less than 10 $\mu\text{g}/100\text{ cm}^2$ will confirm the proposed alternative decontamination procedures are satisfactory and will be implemented at the end of the project, prior to the equipment being released from the Site. Should sample results indicating the decontamination procedures were not satisfactory, the Contractor will decontaminate the equipment a second time and re-test. The District will arrange a meeting with USEPA to discuss alternative decontamination procedures should the above steps yield unacceptable results.

In review of our request, we respectfully ask that you consider the technical merits of this industry-proven approach, as well as its use of more environmentally-friendly aqueous-based detergents and reduced waste generation, consistent with USEPA Greener Cleanup Best Management Practices.

If you have questions regarding the above responses or attached information, or need any further information or clarification, please contact me at 925-953-1530.

Very truly yours,

Kennedy/Jenks Consultants, Inc.



Todd Miller
Principal Geologist

cc: Steve Moore, Ross Valley Sanitary District
Keith Takata, Takata Environmental LLC
Don Sobelman, Downey Brand LLP