

WPTP Primary Sedimentation Area Roof Structure

Contract Number C01398C20

Section 00600

Addendum Number 3

Prospective bidders are hereby notified that the bidding documents have been amended as hereinafter set forth:

Ref.	Section and Page or Drawing	Location and Description of Change
		VOLUME 1 OF 3
3.1	§00020 page 1 of 3	INVITATION TO BID DELETE: "Sealed Bid Time / Date: 1:30 p.m., December 3, 2020" REPLACE with: "Sealed Bid Time / Date: 1:30 p.m., December 15, 2020"
3.2	§00430	¶1.01.A DELETE and REPLACE with: "A. Within the time stated in the Notice of Selection, the Contractor shall file with King County Procurement and Payables (P&P) Section, Certificates of Insurance and Endorsements acceptable to the County meeting the requirements of the Contract (specific insurance coverage limits are set forth below). Thereafter, renewal Certificates of Insurance and Endorsements shall only be filed upon request by King County and within five (5) business days, unless otherwise specified. Coverage shall be maintained without interruption from the commencement of the Contractor's Work until Final Acceptance, or for such longer time as required by the Contract. Each policy obtained by Contractor shall be endorsed to provide County with 45 days (10 days for the non-payment of premium) notice of material changes by endorsement to or cancellation of such policy."
3.3	§00900	ESCROW BID DOCUMENTATION DELETE in its entirety and REPLACE with revised section attached to this addendum.
		VOLUME 2 OF 3
3.4	§02 84 00	PCB ABATEMENT DELETE in its entirety and REPLACE with revised section attached to this addendum.

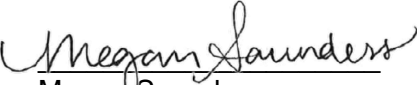
Attached To This Addendum:

- §00900, Escrow Bid Documentation, Addendum 3
- §02 84 00, PCB Abatement, Addendum 3

This Addendum shall be attached to and form a part of the Contract Documents. All bidders are reminded to acknowledge this Addendum on the Form of Bid.

Bidders are also reminded to review Clarification documents on the Solicitations Details page for responses to timely submitted questions.

11/20/2020


Megan Saunders
Contract Specialist

SECTION 00900
ESCROW BID DOCUMENTATION

PART 1: GENERAL

1.01 SUMMARY

- A. This Section specifies the requirements for submittal, preservation, access, and use of Bidder's/Contractor's Escrow Bid Documentation ("EBD"), as defined herein.
- B. The EBD provided by the Bidder(s) shall be specific enough that a third party could look at the EBD and determine the labor, material and equipment costs for each Contract Division and Specification Section within the Division. The EBD should also identify field and home office overhead and profit.
- C. The apparent low bidder shall execute the Escrow Bid Documentation Agreement attached herein and submit it no later than the meeting established to review the EBD as set forth in paragraph 1.03 F.

1.02 ESCROW BID DOCUMENTATION DEFINITION

- A. The term "EBD" means: Any and all writings, drafts, working papers, take off sheets, phone logs, computer printouts, charts, electronic data, spreadsheets, drawings, scope of work narratives or outlines, photographs, and any other documentation or data compilations which contain or reflect any and all information, data, and calculations compiled to, referred to, related to, and/or used to:
 - 1. estimate and/or prepare the bid;
 - 2. estimate productivity, types of equipment and materials, and manpower; and
 - 3. estimate, determine, evaluate, and/or compare equipment rates, labor rates, efficiency or productivity factors, and overhead and profit rates, and includes, but is not limited to, the following documents:
 - a. Proposals/quotations from subcontractors and suppliers with all backup documentation including the conditions and pricing;
 - b. Quantity takeoff documents including calculations;
 - c. Labor and equipment rates at the attendant development files;
 - d. Any and all survey notes or calculations and/or site visit notes or documents;
 - e. Assumptions or details used to develop the production rates assumed in the estimate and project schedule; and
 - f. Any and all manuals, books, and/or reference guides which were used in determining the bid for this Contract. If such manuals, books, and/or reference guides are standard in the industry, they may be included in the EBD by reference shall includes the title, edition, publication date, and author, or at the request of the County, the Bidder shall provide a link to the source website.
- B. If Bidders provide rolled up take off sheets or electronic data for any aspect of the EBD, Bidders must also provide the backup documentation supporting the rolled up take off sheets and electronic data.
- C. The Bidder(s) shall provide the EBD as defined in Paragraphs 1.01 and 1.02 for all subcontractors, suppliers, and materialmen.

- D. The term EBD does not include the Contract Documents (General Terms and Conditions, Requirements, Technical Specifications and Drawings) provided by King County for use by the Bidders in bidding on this Contract.
- E. Unsuccessful bidders shall not destroy, throw away or write over any EBD or any other documentation used in, referenced or referring to the Bidder's bid until the return of the Bidder's bid guaranty by King County.

1.03 DELIVERY OF BID DOCUMENTATION TO THE COUNTY

- A. Within four (4) business days after receiving a written request from the Contract Specialist, the apparent low Bidder shall upload the electronic EBD to a dedicated secure Microsoft SharePoint site.
- B. In order to request access to SharePoint site, please email the Contract Specialist and Alternate Contact Specialist with your name and email address of the person responsible for uploading and sharing the documentation. Bidders MUST have a Microsoft account to access SharePoint and the email address provided MUST be personally identifiable and not a group/machine account. Once Bidder access is requested, an email with the Terms of Use/User Agreement will be sent to the requested email. The Bidder must accept the Terms of Use/User Agreement; once accepted Bidder should receive an email from King County with the website Uniform Resource Locator (URL).
- C. At the County's option, the County may also request EBD from the second low Bidder or any other Bidder and such EBD shall be provided to the County within four (4) business days of such request.
- D. If a Bidder has submitted EBD pursuant to this Section, but does not become the Contractor, its EBD will be destroyed and the Contractor will be notified.
- E. EBD shall be submitted as follows:
 - 1. All EBD shall be provided in electronic Portable Document Format (PDF). Such EBD shall be stored on SharePoint and will remain in the possession of King County Procurement and Payables Section (P&P) in a secure electronic location for the duration of the Contract. Access to EBD shall be pursuant to the Escrow Bid Documentation Agreement attached herein.
 - 2. Bidders shall mark any of the pages of the EBD it considers PROPRIETARY or CONFIDENTIAL accordingly. Such information will be treated as such by King County; however, the County cannot insure that this information would not be subject to release pursuant to a public disclosure request. In the event the County receives a public disclosure request for such information, the County will immediately advise the Bidder(s) and will not release the marked documents for a period of not less than ten (10) days in order to give the Bidder(s) an opportunity to obtain a court order prohibiting the release of the information in response to the public disclosure request.
 - 3. If scans are provided, the writing on the pages shall be legible.
- F. Bidders shall include a statement by an individual authorized by the Bidder to execute bids and contracts, certifying under penalty of perjury that:
 - 1. all documentation used in preparing the bid and that which supports how the bid price was calculated has been provided to the County; and
 - 2. an attached index of each document with sufficient specificity and reference to the Contract Specification Section (including page number(s)) so that a comparison can be made between the index, the Contract Specification Section

numbers, and the EBD to ensure that all required EBD has been provided. The index shall also contain the bidder's name, contact person, phone number, and date of submittal.

- G. Prior to Intent to Award, the County and the apparent low Bidder shall meet virtually to review the EBD to determine whether the submitted EBD satisfies the requirements of this Section 00900.
- H. Documents listed in the index but not included in the electronic PDF file through error or oversight by the Bidder(s) shall be submitted to the County within two (2) business days after notification from the County that EBD is missing or within two (2) business days after the Bidder(s) becomes aware of the error or an explanation as to why the documentation does not exist.
- I. If the County determines that the EBD is illegible, not electronically accessible, or not submitted in accordance with this Section 00900, the Bidder(s) shall:
 - 1. Provide legible copies of the EBD;
 - 2. Supply the software necessary to access the EBD; and,
 - 3. Comply with the requirements of this Section within two (2) business days of the County's request.
- J. Failure to submit EBD within the times and format prescribed, failure to be cooperative with the County in providing the EBD, or destruction of Bid Documents is just reason for a Bidder to be found not responsible, and the County may reject the Bidder as not responsible.**

1.04 USE OF BID DOCUMENTATION

- A. Access to the EBD secure SharePoint site by King County shall be pursuant to the Escrow Bid Documentation Agreement attached herein.
- B. The Bidder(s)/Contractor agrees that the EBD shall contain all documentation used in preparing their bid. No other bid documentation concerning the Contractor's calculation of its bid shall be utilized by the Contractor during disputes and/or litigation of claims arising out of this Contract, unless otherwise approved by King County.
- C. The EBD may be reviewed and used by the County to determine the Contractor's bid concept, to evaluate the Contractor's breakdown of contract price, evaluate productivity and schedule, negotiate price adjustments under the Contract, evaluate Requests For Information, Requests For Change Order, Change Proposals, Claims, or for any other reason related to the Contract.
- D. The County may copy the portions of the EBD which pertain to the current issue (i.e., Claim, Request for Change Order, dispute, etc.), and may provide a working copy(s) to County personnel, agents, or consultants. The County, its agents, and consultants may maintain such working copies of the EBD. At the request of Project Representative, all copies of EBD will be returned to P&P or destroyed.
- E. If a Disputes Review Board ("DRB") or mediator is used to resolve disputed claims, the Board members and/or mediator shall have unrestricted use and access to the EBD for purposes of evaluating, understanding, resolving and settling disputes/claims. The DRB or mediator shall maintain submitted documents in a sealed file, marked "Confidential and Proprietary" and shall return such documents to P&P at the conclusion of the DRB or mediation process.

END OF SECTION

ESCROW BID DOCUMENTATION AGREEMENT

This Agreement is for the retention and use of Escrow Bid Documentation (“EBD”) submitted for King County @ContractTitle, Contract @No _____ by @Contractor to perform all Work associated with this Contract.

Pursuant to Contract Documents, King County and the Contractor agree to the following:

A. DURATION OF ESCROW FOR BID DOCUMENTATION

The EBD shall remain in escrow in an electronic secured location (EBD secure SharePoint site) under the control of King County during the life of the Contract and will be destroyed by King County, Procurement & Payables Section (P&P), thirty (30) days after whichever event occurs later: (1) the payment of Contract retainage, or (2) the issuance of Final Acceptance and resolution of all claims, disputes and/or litigation.

B. ACCESS TO ESCROW BID DOCUMENTATION

1. For purposes of protecting the EBD maintained within P&P, the County and the Contractor shall each designate a maximum of three (3) Authorized Representatives who may access the EBD maintained at P&P.

2. Authorized Representatives

For Contractor are:

1. _____
2. _____
3. _____

For King County are:

1. _____
2. _____
3. _____

3. The Contractor and/or the County may change the Authorized Representatives with written notice to P&P and a copy of the notice to the other party. Unless P&P receives a letter from one of the Contractor’s Authorized Representatives authorizing access to the County without the presence of a Contractor’s Authorized Representative, **the presence of both an Authorized Representative from the County and the Contractor shall be required to gain access to the EBD located at P&P.** At no time shall the Contractor have access to the EBD located on the EBD secure Sharepoint site without the presence of a County Authorized Representative.

C. REMEDIES FOR REFUSAL OR FAILURE TO PROVIDE OR ALLOW ACCESS TO BID DOCUMENTATION

If the Contractor fails or refuses to allow the County to access examine, copy, and/or maintain a copy of the Escrow Bid Documentation, the County and the Contractor agree that:

1. P&P shall provide access to the EBD to the County’s Authorized Representative(s) if the County provides a declaration and supporting documentation showing that:

- a. the County provided the Contractor with a minimum of 24-hour written notice of its intent to access and/or copy the EBD; and
- b. it has been more than two days (48 hours) since the County provided notice of its intent to access the Escrow Bid Documents and the Contractor has either failed to acknowledge notice of the County's request or is refusing to allow the County to access the EBD.

2. An employee from P&P shall be present when the County accesses the EBD to observe that nothing occurs in the process of accessing the EBD to affect the authenticity and integrity of the Escrow Bid Documents.

D. USE OF ESCROW BID DOCUMENTATION

The EBD may be used to determine the Contractor's bid concept; to evaluate the Contractor's breakdown of Contract Price; to negotiate price adjustments under the Contract; evaluate Requests For Information, Requests For Change Order, Change Proposals and Claims; or for any other reason related to or arising out of this Contract. Pursuant to the Contract, Section 00900, the County may copy the Escrow Bid Documents and utilize such copies. Paragraph B above does not apply each time the County or Contractor accesses their previously accessed working copies of the Escrow Bid Documentation.

The undersigned Parties hereby agrees that he/she will not copy or distribute any portion of the EBD Documents herein described to any person other than the authorized representative of the Bidder or a subcontractor of the Bidder on a "need to know" basis for purposes of performing claim activities and that he/she will require any such person to whom EBD Documents are disclosed to comply with the nondisclosure requirements of this Agreement.

The undersigned Parties also agree to enforce the security of the EBD documentation to any additional parties allowed access as indicated in paragraph B above.

SIGNED by authorized representatives of:

Contractor
 By: _____
 Name: _____
 Date: _____

King County
 By: _____
 Name: _____
 Date: _____

SECTION 02 84 00

PCB ABATEMENT

PART 1 GENERAL

1.01 SUMMARY

- A. This section applies to all work related to removal, handling, storage, transportation, and disposal of polychlorinated biphenyls (PCBs) and PCB-containing caulking and concrete.
- B. Contractor shall remove and dispose of PCB-containing caulking in areas scheduled for demolition or impact during the work including spot abatements, if necessary, to facilitate the work of all trades. Refer to the project drawings for location of PCB-containing caulking and associated contaminated concrete.
- C. Refer to the project drawings for location of PCBs and PCB-containing materials to be removed. The work includes the following:
 - 1. Removal, packaging, transporting, and disposal of PCB-containing caulking and PCB contaminated concrete (PCB Bulk Product Waste) as well as Cleanup debris:
 - a. When building materials such as caulking contain PCBs at concentrations greater than or equal to 50 parts per million (ppm) are identified at County facilities:
 - 1) The material is classified as PCB Bulk Product Waste upon removal per United States Environmental Protection Agency (EPA) regulations.
 - 2) Building materials “coated or serviced” with the PCB- containing building materials (e.g., concrete) are also classified as PCB Bulk Product Waste upon removal per the PCB Bulk Product Waste Reinterpretation Memo issued by EPA (October 2012).
 - 3) Wastes generated during cleanup activities after PCB Bulk Product Waste removal (e.g., cleaning materials, personal protective equipment, etc.) are classified as Cleanup Debris per EPA regulations. PCB-containing materials shall not be recycled or reused.
 - b. The Contractor shall make efforts to minimize waste included in the PCB Bulk Product waste stream to the extent practicable.
 - 2. Placement of all PCB contaminated equipment and PCB-contaminated materials generated as a result of work activities in County approved disposal containers with proper labels.
 - 3. Containerization of PCB Bulk Product Waste (i.e., caulking and concrete coated, serviced, or contaminated by the caulking) and Cleanup Debris in County approved containers. County approved containers may be roll-off boxes or drums, or other containers pre-approved by the County.
 - 4. Transportation of containerized PCB Bulk Product Waste, PCB clean-up debris, and PCB-contaminated materials to an approved permitted facility.
 - 5. Coordination with the County for waste identification, temporary waste storage, profiling, manifesting, facility acceptability, and shipments.
 - 6. The Contractor shall pay all necessary fees and obtain all necessary permits related to the removal, transportation, and disposal of all PCB bulk product waste, except as noted on contract drawings.

1.02 REFERENCED STANDARDS

- A. This Section incorporates by reference the latest revisions of the embedded standard referenced herein. In case of conflict between the requirements of this Section and those of a listed document, the requirements of this Section shall prevail.

Reference	Title
29 CFR 1926.1153	Respirable Crystalline Silica
40 CFR, Subchapter R	Toxic Substances Control Act (TSCA), Part 761 – Polychlorinated Biphenyls (PCBs)

40 CFR 260 thru 268	Resource Conservation and Recovery Act Regulations
40 CFR 311	Worker Protection
40 CFR 761	PCB Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions
49 CFR	Subtitles A and B - Transportation
RCRA	Resource Conservation Recovery Act
WAC 173-303	Dangerous Waste Regulations
WAC 173-350	Solid Waste Handling Standards
Washington State Department of Labor & Industries (L&I)	
Washington State Industrial Safety & Health Act (WISHA), WAC 296-800	Safety and Health Core Rules
Washington State regulations codified in the Washington Administrative Code governing hazardous materials work and waste management include but are not limited to:	
WAC 296-24	General Safety and Health Standards
WAC 296-62	General Occupational Health Standards
WAC 296-155	Safety Standards for Construction Work

- B. Refer to the following EPA guidance documents on the internet for information on PCB caulking and sealant removal:
1. Steps to Safe PCB Abatement Activities: <https://www.epa.gov/pcbs/steps-safe-pcb-abatement-activities>
 2. Summary of Tools and Methods for Caulk Removal: <https://www.epa.gov/pcbs/summary-tools-and-methods-caulk-removal>
 3. PCB Guidance Reinterpretation: <https://www.epa.gov/pcbs/polychlorinated-biphenyl-pcb-guidance-reinterpretation>
- C. All other applicable Federal, State, county and city standards codes

1.03 PCB INSPECTION, SAMPLING AND TESTING

- A. King County's PCB Inspection, Sampling and Testing program (the Inspection) has determined to the best of its ability that the proposed construction areas, under this Contract and the materials therein, do contain PCBs. PCBs were discovered in both the East and West Sedimentation Basins in the caulking located along the top edge of the Z-beams where they abut against the side of the concrete girders, and at the expansion joints between concrete girders.
- B. A copy of the report, prepared by DH Environmental, documenting the inspection, sampling and testing program and the findings and recommendations for removal and disposal of concrete framing components coated with lead paint is referenced in 01 13 00, Reference Material, as "PCB Evaluation-DH Environmental-09-28-2020".
- C. The findings of the Inspection determined that:
1. The caulking at the locations identified above contains PCBs at a concentration greater than 50 mg/kg, meaning the caulking is a PCB Bulk Waste Product as defined in 40 CFR 761.30.
 2. The concrete adjacent to the Z-beam beam to girder joint contained PCBs at distances of 3-inches and 6-inches from the caulking joint.
 3. The concrete adjacent to the caulking in the expansion joint contained PCBs at distances of 1-inch and 3 inches from the expansion joint.
 4. The concrete adjacent to the caulking is also considered a Bulk Waster Product..
 5. The caulking and concrete can be disposed at a RCRA Subtitle D landfill.

1.04 CONTRACTOR'S RESPONSIBILITIES

- A. The Contractor shall be responsible for the abatement and disposal of lead coated material from the concrete Z-beams and girders. Should suspect material not identified in this Section be encountered, immediately suspend all work that could disturb said material and notify the Project Representative who will implement the proper action. Do not proceed with work that could disturb the material until authorized by the Project Representative, in writing, to do so.
- B. Take the necessary precautions for compliance with Federal, State and Local regulations. The Contractor shall employ work methods that will not expose workers to levels of lead that will exceed the Permissible Exposure Level set by the Washington State Department of Labor and Industries.
- C. Submit an abatement and disposal plan for review by the Project Representative.
- D. Comply with Section 01 35 29.
- E. Fully inform workers of the presence of hazardous materials.

1.05 COUNTY'S RESPONSIBILITIES

- A. Upon notification by the Contractor of the existence of suspect material not identified in this Section, the Project Representative will have said material inspected and analyzed for the presence of lead, as required.
- B. If the results of the inspection and analysis confirm the presence of PCBs in the suspect material, the County will take the necessary actions for compliance with WAC 173-350. After compliance is obtained, the Project Representative will notify the Contractor in writing so that work under this Contract can proceed.
- C. If the results of the inspection and analysis confirm the presence of other dangerous, hazardous, or regulated substances in the suspect material, the County will take the necessary actions for compliance with State and Federal regulations. After compliance is obtained, the Project Representative will notify the Contractor in writing so that work under this Contract can proceed.
- D. If the results of the inspection and analysis confirm that the suspect material is free of asbestos, lead or other regulated substances, the Project Representative will notify the Contractor in writing so that work suspended can proceed.

1.06 SUBMITTALS

- A. Procedures: Section 01 33 00.
- B. Preconstruction Submittals: Provide a site-specific PCB Work Plan which demonstrates the methods by which removal, handling and disposal of PCB Bulk Product Waste will be performed, including associated clean-up debris. At a minimum the Work Plan shall include:
 - 1. Specific work practices and procedures for removal, handling, storage, and disposal of PCBs and PCB-containing materials.
 - 2. A complete list of all materials and equipment proposed for use in the work.
 - 3. The list shall include such items as protective clothing, respiratory protection, containers, sorbents, and solvents.
 - 4. Qualifications, certifications, training certificates, experience, and role of each individual performing or managing PCB removal work. At a minimum, site personnel working on the project shall have:
 - a. Lead in Construction Awareness Training in accordance with OSHA 29 CFR § 1926.62
 - b. 24-hour HAZWOPER Training in accordance with the regulatory requirements of 29 CFR 1910.120 (e)(8) and WAC 296-843.

- c. A site-specific training on PCB Awareness
 - d. Drivers hauling PCB Bulk Product Waste must have a DOT hazardous materials endorsement to their CDL.
5. Qualifications of the proposed testing laboratory (to perform analysis of air samples)
 6. Respirator fit testing records for personnel performing PCB removal work
 7. PCB Air Monitoring Program
 - a. The Air Monitoring Program shall include the proposed sampling plan, sampling procedures, and field quality control procedures of the firm conducting the air monitoring.
 8. Procedures for personnel and equipment cleanup and decontamination
 9. PCB Waste Management and Disposal Plan, including:
 - a. Waste minimization plan (for example, work plan to include procedures for minimizing amount of building material included in the PCB waste stream to the extent practicable).
 - b. Location of the designated PCB Waste Storage Area
 - c. Waste container management during the work
 - d. Procedures for transportation of PCB waste.
 - e. Proposed permitted facility that will accept materials designated as PCB Bulk Product Waste
- C. Construction Phase Submittals
1. Daily Work Records: Submit the following information to the Engineer daily. This information shall be submitted prior to the start of work on the next scheduled work shift.
 - a. Supervisor daily inspection report, including scope of work completed, engineering controls used, PCBs and PCB-containing materials, hours worked, and equipment and materials used.
 - b. Air and bulk sample data sheets and laboratory analytical results, including chain of custody
- D. Post-Construction Closeout Submittals
1. Project Overview: Provide a basic project summary identifying the scope and summarizing the work performed by the Contractor. Provide enough information to have a basic understanding of the project and include project and contact names and ID numbers; Contractor's company name; where, when, and what type of work was completed; and a discussion of significant problems encountered during the course of the work. The written summary shall include a description of all changes or modifications to the Contractor's Pre-Construction Work Plan.
 2. Certification: Provide written certification from the Contractor's Project Manager that the Contractor has fully inspected the work area and completed work in strict accordance with the Specifications.
 3. Air Monitoring: Submit documentation of all Contractor air monitoring results relative to regulatory compliance. Include copies of all air monitoring data sheets, chain-of-custody documentation, and analytical reports for sampling conducted at the site.
 4. Project Record Documents: Provide project records including documentation of all contract changes, and copies of work site entry log books, safety logs, sign-in sheets, and supervisor daily field reports. Provide copies of project meetings for pre-construction, construction period, and project closeout meetings.
 5. Submit copies of inspections or visits by regulatory agencies. Include copies of any citations or notices received by the Contractor from regulatory agencies during the course of the project.
 6. Disposal Shipping Documentation: Submit copies of all PCB Bulk Product Waste transportation and disposal manifests or bill of lading forms, including signed receipts from the County approved permitted disposal facilities. PCB-containing and PCB-contaminated building materials may not be recycled.
 7. Certificates of Disposal: Submit a certificate of disposal from permitted disposal facility for all shipments of PCB Bulk Product Waste

1.07 DEFINITIONS

- A. Leak or leaking means any instance in which a PCB Article, PCB Container, or PCB Equipment has any PCBs on any portion of its external surface.

- B. PCBs as used in this specification shall mean the same as PCBs, PCB Article, PCB Article Container, PCB Container, PCB Equipment, PCB Item, PCB Material, PCB-Contaminated Electrical Equipment, as defined in 40 CFR 761.
- C. Spill means both intentional and unintentional spills, leaks, and other uncontrolled discharges when the release results in any quantity of PCBs running off or about to run off the external surface of the equipment or other PCB source, as well as the contamination resulting from those releases.
- D. Cleanup Debris: Waste generated during PCB caulking removal activities.
- E. Examples of Cleanup Debris include: rags, wipes, mops, personal protection equipment (PPE), dust, and filters. Liquid materials and decontamination water shall be considered Cleanup Debris. All Cleanup Debris shall be considered contaminated with PCBs and shall be containerized in County approved containers on site.
- F. PCB(s): Polychlorinated Biphenyl(s). A class of organic compounds with chlorine atoms attached to biphenyl, a molecule composed of two benzene rings. PCBs are a class of industrial chemicals that were historically used as lubricants, heat-transfer fluids, insulators, and plasticizers.
- G. PCB Bulk Product Waste: Waste derived from manufactured products containing PCBs in a non-liquid state, at any concentration where the concentration at the time of designation for disposal was greater than or equal to 50 ppm PCBs. This definition includes PCB-containing caulking and PCB contaminated concrete no more than twelve inches to either side of the associated building material serviced by the original PCB products.
- H. PCB Waste Storage Area: The Engineer will identify a temporary storage facility located at the Project site that will be used to store PCB Bulk Product Waste and Cleanup Debris prior to Contractor transportation and disposal. The PCB Waste Storage Area shall be in compliance with 40 CFR 761.65.

1.08 COORDINATION

- A. The Contractor shall coordinate the removal of PCB Bulk Product Waste with the Project Representative to set up the disposal profile, confirm disposal facility acceptability and report any leaking equipment or spills. Only the Project Representative or a representative assigned by the Project Representative can sign the hazardous waste manifest or bill of lading for hazardous materials.

PART 2 PRODUCTS

2.01 MATERIAL AND EQUIPMENT FOR PCB BULK PRODUCT WASTE AND CLEANUP DEBRIS

- A. Containers
 - 1. All PCB Bulk Product and PCB material Waste and Cleanup Debris shall be placed in County approved containers. County approved containers will be roll-off boxes, DOT approved drums, or direct loaded into containers for direct shipping. Roll off boxes must have hard lids capable of closing to keep rainwater out of the box. Containers or trucks that are direct loaded must be covered prior to transport.
 - 2. The Contractor shall provide all containers for PCB Waste.
- B. Enclosure
 - 1. Enclosure materials shall be fire-retardant and conform to applicable local fire codes.
 - 2. The enclosures shall be constructed of materials such that when the enclosure is completed there is limited potential for impact damage to the enclosure and no potential for contaminant release.
 - 3. Wood framing used for enclosure shall be pressure treated and fire retardant and shall conform to Uniform Building Codes 23-4 and 23-5.

4. Polyethylene sheeting for enclosure walls shall be a minimum of 6-mil thick. For floors and all other uses, sheeting of at least 6-mil thickness shall be used in widths selected to minimize the frequency of joints. Polyethylene shall be fire retardant per UL Ratings and ASTM standards D- 2898-81 and D-3201-79.
5. Polyethylene sheeting utilized for worker decontamination enclosures shall be opaque white or black in color.
6. Tape: Tape shall be capable of sealing joints of adjacent sheets of polyethylene sheeting and for attachment of polyethylene sheeting to finished or unfinished surfaces of dissimilar materials and capable of adhering under dry or wet conditions. Minimum 2" wide tape must be used.
7. Other materials: The Contractor shall provide all other materials which may be required to construct and dismantle the decontamination area and the barriers that isolate the work area, and as required to complete the work as specified.

PART 3 EXECUTION

3.01 HEALTH AND SAFETY

- A. Comply with Section 01 35 29.

3.02 PCB BULK PRODUCT WASTE

- A. PCB Bulk Product Waste and building materials coated or serviced with PCB caulking as well as clean up debris:
 1. Inspections
 - a. Removal of PCB caulking and adjacent concrete shall not begin until the work area, containment systems, ventilation equipment and enclosures have been inspected and approved by the Engineer.
 - b. The Contractor's Supervisor shall perform daily inspections of the site and generate a written daily quality control report.
 2. Site Security
 - a. The work area is to be restricted only to authorized, trained, and protected personnel. These may include the Contractor's employees; employees of subcontractors; County employees and representatives; federal, state, and local inspectors; and other authorized or designated individuals.
 - b. The Contractor shall be responsible for site security during PCB- containing caulking and adjacent concrete removal operations.
 3. Preparation of Work Area
 - a. Prior to PCB caulking and adjacent concrete removal work, the Contractor shall establish and maintain an exclusion zone around the work area. The exclusion zone shall be delineated by "danger" barrier tape and signs.
 - b. Prior to PCB caulking and adjacent concrete removal work, the Contractor shall block storm drain catch basins in the vicinity of the work area with plastic or other approved means. The catch basins shall remain blocked during removal activities.
 - c. Construct a polyethylene enclosure that encompasses the work area and prevents the migration of dust and debris. The work area enclosure shall be constructed and maintained in accordance with the EPA guidance document "Steps to Safe PCB Abatement Activities" and 40 CFR Part 761. The enclosure shall remain in place until the visual clearance standards have been achieved in the removal area.
 - d. All electrical conduits, junction boxes and other electrical equipment in or adjacent to the work areas shall be protected from water. Wire in conduit that passes through the work area shall be assumed to be energized at all times. The Contractor is responsible for all electrical safety.
 - e. Before PCB caulking and adjacent concrete removal work begins, clean surfaces in the work area and implement engineering controls (e.g., use of water spray vacuums equipped with HEPA filters, etc.) to reduce airborne dust and help ensure acceptable clearance results. Preclean all fixed objects in the containment area using HEPA filtered vacuums and/or wet

cleaning techniques as appropriate. Any water generated during these procedures needs to be captured, retained, and properly disposed of.

B. Removal Procedures

1. Protective Clothing and Equipment

- a. At all times when PCB Bulk Product Waste or Cleanup Debris in any volume are not sealed in drums or containers, workers shall wear:
 - 1) Disposable non-porous, chemical-resistant (e.g., nitrile) gloves
 - 2) Disposable, whole body protective clothing that is impermeable to PCBs
 - 3) Half-face air purifying respirators (NIOSH-approved) equipped with combination organic vapor/P100 particulate filter cartridges
 - 4) Eye protection (e.g., safety glasses or protective goggles)
2. The Contractor shall provide protective clothing, eye protection, and respiratory protection as required for regulatory personnel who may monitor work activities within the work area.
3. The PCB work area shall be, at no time, left unattended after work procedures have been implemented, and shall be attended until all removed materials and incidentals have been sealed in approved containers. During procedures and at all times when PCB Bulk Product Waste and Cleanup Debris in any volume are not sealed in drums or containers, all personnel entering the work area must don protective clothing and equipment listed herein. Upon exiting the work area, all disposable protective clothing shall be placed in open-top drums, sealed, and removed from building property when other PCB Bulk Product Waste and Cleanup Debris.
4. Apply water while removing material to prevent fugitive dust. Do not allow excessive water to accumulate in the work area. Vent HEPA filter exhaust to the outside where appropriate. At a minimum, the use of a HEPA vacuum shall be part of each removal activity.
5. Aspiration of dust (i.e., vacuum equipped with a HEPA filter) at the source shall be utilized when cleaning residual caulking by mechanical methods.
6. Minimize waste to the extent practicable.
7. Capture and store wastewater generated during removal, mopping, wet cleaning, or misting. At no time shall liquids be allowed to escape the work area or discharged down any drain.
8. Place all PCB bulk Product Waste, including PCB caulking and associated concrete, and Cleanup Debris into County approved containers. Solid materials may be placed in the roll-off containers.
9. Containers shall not be overfilled and must be kept closed except when actively adding materials to the container.
10. The Contractor may move the County approved containers around the Project Site to accommodate different work areas; however, the containers must be stored in the designated temporary PCB Waste Storage Area while not in immediate use.

C. Cleanup

1. Cleanup of Work Area

- a. Upon completion of PCB caulking and adjacent concrete removal work, all tools and equipment used in the work shall be decontaminated and properly stored for reuse, or disposed of as cleanup debris.
- b. All exterior surfaces of PCB Bulk Product Waste and Cleanup Debris containers shall be thoroughly cleaned with a HEPA-filtered vacuum and wet wiping/mopping to ensure that they are free of dust and debris before leaving the work area.
- c. All interior surfaces of the work area enclosure shall be thoroughly cleaned by HEPA vacuuming and wet wiping prior to the visual clearance inspection by the County. Re-cleaning and inspection will continue until no visible suspect material remains.

D. Work Area Clearance

1. The County will perform a visual clearance inspection of each work area
2. Work area clearance is achieved when:
 - a. The work area has been thoroughly cleaned (i.e., HEPA-vacuumed and wet-wiped)
 - b. The work area has passed visual clearance

- c. All PCB Bulk Product Waste, PCB containing and Cleanup Debris have been removed from the area, containerized in County approved containers, and transported to a county approved disposal facility.

E. Disposal

1. The Contractor is responsible for soliciting a waste service provider and any cost negotiations regarding disposal.
2. The Contractor must notify the Project Representative and indicate which permitted facility will accept the PCB waste.
3. The characterization of the PCB material must be conducted prior to transportation off-site.
4. Alternative disposal methods or facilities must be approved by County Environmental Programs.
5. Waste profiles and manifests must be signed by a representative from the County or their authorized representative.
6. Invoices for disposal will be paid by the Contractor. However, the County will be listed as the generator of the waste on all profiles, manifests, or bills of lading.

END OF SECTION