REGION 9
SAN FRANCISCO, CA 94105

August 7, 2025

Sent via Electronic Mail

Rear Admiral M.F. Williams
Commander, Navy Region Hawai'i
850 Ticonderoga St., Ste. 110
Joint Base Pearl Harbor Hickam, HI 96860-5101

Re: EPA Response Under 40 CFR 761.61(a) of PCB Cleanup Plan for Soils and Concrete at Red Hill Bulk Fuel Storage Facility

Dear Rear Admiral Williams:
Thank you for working with the U.S. Environmental Protection Agency, Region 9 (EPA) to address the cleanup and disposal of polychlorinated biphenyls (PCBs) located at the Red Hill Bulk Fuel Storage Facility (Facility), Honolulu, Hawaii under the Toxics Substances Control Act (TSCA) and its implementing regulations at 40 CFR Part 761. EPA has received and reviewed the "30-Day notification letter to perform self-implemented cleanup of PCB impacted soil, Red Hill Bulk Fuel Storage Facility, Joint Base-Peral Harbor-Hickam, Oahu, Hawaii" (761.61(a) Notification) submitted by V2X, Inc. (V2X) on behalf of the Navy Closure Task Force, Naval Facilities Engineering Systems Command Hawaii (Navy). The 761.61(a) Notification outlines V2X's plan for excavation and offsite disposal of bulk PCB remediation waste (e.g., soils containing PCBs) at the Site as well as post-remediation verification sampling. The 761.61(a) Notification dated June was conveyed as an enclosure in Navy's July 10, 2025 letter, which EPA received on July 11, 2025.

The Navy's 761.61(a) Notification does not meet the requirements under 761.61(a) and EPA seeks further information from Navy as outlined in Attachment 1. The 761.61(a) Notification includes data collected in a manner that is inconsistent with the requirements of 761.61(a). The Navy may choose to either 1.) address the attached comments and submit the existing data to EPA as a 761.61(c) application for EPA approval before starting the PCB cleanup or 2.) collect data consistent with the requirements of 761.61(a) and submit a notification of self-implementing cleanup to EPA that complies with the regulatory requirements. The sampling and analysis requirements of 761.61(a) are fully prescriptive and do not include the multi-incremental sampling methodologies presented by the Navy in the current submittal.

Background
The Facility is an underground bulk fuel storage facility that can hold up to 250-million gallons of fuel and supports US military operations in the Pacific. The Facility is undergoing closure and cleanup after fuel releases in 2021 contaminated drinking water. Navy plans to construct a granular activated carbon water treatment facility (WTF) to remediate the impacted drinking water well, Red Hill Shaft. In the 761.61(a) Notification, the Navy proposes to remove bulk PCB remediation wastes from the project area and dispose offsite as part of the WTF construction. The project area is at least 30,000 square feet (an exact area was not provided).

Soils from the project area were sampled in June, October and November 2024 for waste characterization purposes in accordance with Hawaii Hazard Evaluation and Emergency Response Technical Guidance Manual

(TGM). The project area was subdivided into 8 equivalently spaced decision units (DUs) and soils were sampled using multi-incremental sampling methodology (IMS). Samples were collected from zero to three feet below ground surface (bgs) and sampled for total petroleum hydrocarbons (TPH), volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons (PAHs), pesticides, metals and PCBs. Results indicated soils contain elevated concentrations of VOCs, metals, pesticides, and PCBs.

Total PCBs >50 milligrams per kilogram (mg/kg) were detected in soils up to 1.5 feet bgs. The maximum concentration of total PCBs detected was 249 mg/kg. Two PCB Aroclors, Aroclor 1254 and Aroclor 1260, were the predominant PCBs Aroclors detected. In the 761.61(a) Notification, Navy proposes to excavate up to 3 feet bgs from DU03, DU04 and DU05 and dispose of an estimated volume of 2,300 cubic yards of PCB contaminated soils at Chemical Waste Management RCRA permitted landfilling in Arlington, Oregon. The Navy proposes a cleanup level of 1 mg/kg for unrestricted use and post-cleanup verification sampling.

Next Steps

EPA seeks further information from Navy as outlined in Attachment 1. The Navy shall submit either a revised 761.61(a) Notification that complies with the regulations or submit a 761.61(c) application for EPA pre-approval. If the Navy chooses to proceed with a 761.61(c) application, EPA is available to coordinate on the specifics on what should be included in the application. Most of the comments in Attachment 1 are intended to serve as a guide for the Navy if it chooses to pursue a 761.61(c) cleanup; however, should the Navy choose to pursue the self-implementing option in 761.61(a), all aspects of the 761.61(a) regulatory language must be followed without exception.

Lead, VOCs, pesticides and petroleum hydrocarbons are additional contaminants of concern. This letter pertains solely to PCBs as regulated under 40 CFR 761.61. Navy shall coordinate with EPA and Hawaii Department of Health (HDOH) as the state regulatory program separately for the characterization and cleanup of additional contaminants of concern.

EPA appreciates the opportunity to assist the Navy with this PCB cleanup. If you have any questions, please contact Nicole Palazzolo at (415) 972-3045 or palazzolo.nicole@epa.gov.

Sincerely,

/s/

Tonya Russi
Red Hill Project Coordinator
EPA Region 9

Attachment 1 – EPA Comments

Electronic cc:
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Attachment 1 - EPA Comments
30-Day notification letter to perform self-implemented cleanup of PCB impacted soil
Red Hill Bulk Fuel Storage Facility,
Joint Base-Pearl Harbor-Hickam, Oahu, Hawaii
Dated July 10, 2025

General Comments

1. **Toxic Substances Control Act (TSCA) Authority:** The cover letter for the 761.61(a) Notification was addressed to HDOH. EPA received a copy of the transmittal. EPA is the implementing agency for PCB cleanups under 40 CFR 761.61. The TSCA PCB regulations are not delegated to state or local agencies. Going forward, please direct all communications related to PCBs under TSCA to the EPA Red Hill team and copy HDOH for awareness.
2. **The Navy's Decision between 761.61(a) and 761.61(c):** The 761.61(a) Notification does not meet the requirements under 761.61(a) as it includes data collected in a manner that is inconsistent with the requirements of 761.61(a). The Navy may choose to either 1.) address the comments herein and submit the existing data to EPA as a 761.61(c) application for EPA approval before starting the PCB cleanup or 2.) collect data consistent with the requirements of 761.61(a) and submit a notification of self-implementing cleanup to EPA that complies with the regulatory requirements. The sampling and analysis requirements of 761.61(a) are fully prescriptive and do not include the multi-incremental sampling methodologies presented by the Navy in the 761.61(a) Notification. The comments below are intended to either highlight inconsistencies between the Navy's submittal and the requirements of a self-implementing cleanup option or to clarify the information EPA needs to substantiate the issuance of a risk-based cleanup or disposal approval. EPA welcomes the opportunity to assist the Navy in meeting the requirements of whichever option they choose.
    a. **761.61(a) Option:** Any future self-implementing cleanup notification submitted under 761.61(a) must contain enough information to substantiate that the exact procedures required by the regulation were followed without exception. Please see 40 CFR 761.61(a)(4) through 40 761.61(a)(9) for requirements of the cleanup. Please see 40 CFR 761.61(a)(2) and 40 CFR 761 Subpart N for information on site characterization requirements.
    b. **761.61(c) Option:** A risk-based cleanup and disposal approval issued under 40 CFR 761.61(c) is the only allowable means by which a person can receive authorization to sample, extract, analyze, cleanup, or dispose of PCB remediation waste in a manner other than explicitly prescribed in 761.61(a) or (b).
3. **Existing Concrete Pad:** The 761.61(a) Notification lacks details on whether the existing concrete pad (pad) will be removed as part of the PCB cleanup. The pad underlies DU01, DU02, and DU03 and is estimated to be at least 4,000 square feet (an estimated footprint was not provided). Excavation activities are planned up to 3 feet bgs in DU03 and it is unclear if the pad will be removed (or partially removed) as part of this cleanup. Additionally, only one triplicate concrete chip sample was collected from the surface of the pad and no PCBs were detected. The Navy's submittal indicated that the Navy has no record of historical operations in this area, but also indicated that the suspected source of PCB contamination was operations related to the concrete slab. Given the lack of information on the origins of the concrete pad, historical use, and age of the PCB release, it is reasonable to expect that PCB contamination may be present in the concrete and soils underneath. The Navy's submittal indicates that a single triplicate sample was collected for the entire pad. Further characterization of the pad is needed. If the Navy plans to remove the pad, soils beneath the pad should also be characterized for PCBs.
4. **PCB extraction methods, extract cleanup methods, and reporting of PCBs:** The Navy must include in the 761.61(a) Notification the methods for extraction of PCBs, and to clean up the sample

extracts before analysis. The Navy must report all analytical results for PCBs on a dry weight basis consistent with 40 CFR 761.1(b)(4)(i). If PCBs are not reported in that manner, EPA will consider the reported PCB analytical results as biased low. The 761.61(a) Notification includes no indication that PCB results were reported on dry weight basis. The laboratory reports include no moisture content test results for each of the PCB samples. The laboratory needed to remove a portion of soil from each multi-incremental sample to test the soil for moisture content. EPA Method 3546, the extraction method the laboratory used for PCBs, includes the method to test for moisture content and the formula to report the PCB analytical results as dry weight. Such reporting of PCBs in solid samples on a dry weight basis is required in 40 CFR 761.1(b)(4)(i). With reference to the PCB results, please explain what the laboratory means by "sample was dried prior to analysis." If the laboratory did not test each multi-incremental sample for moisture content, EPA considers all PCB results as biased low.

5. **PCB concentration for disposal:** The disposal of bulk PCB remediation waste and other solid materials sampled and extracted for PCBs must be based on the as-found PCB concentration, defined in 40 CFR 761.3. The 761.61(a) Notification mentions that excavated soils will be profiled for disposal following the requirements of the disposal site. As required in 40 CFR 761.61, cleanup and disposal decisions for bulk PCB remediation waste are based on the as-found PCB concentration. The as-found PCB concentration is the PCB concentration resulting from the extraction and analysis of samples collected in situ and not diluted by disturbance or mixing of soils (including excavation). For disposal purposes only, Navy may treat all bulk PCB remediation wastes as at or above 50 mg/kg and dispose at a hazardous waste landfill or a TSCA landfill in lieu of further characterization as allowed under 40 CFR 761(a)(5)(i)(B)(2)(i)).
6. **Site Restoration:** The 761.61(a) Notification lacks specific details on restoration activities after the PCB cleanup activities. No details were provided on whether clean fill be brought to the site and where that fill would be sourced from or if a new concrete pad be immediately poured. Please, provide this information. The final disposition and use of the site is relevant to the EPA if the Navy chooses to pursue a 761.61(c) Cleanup Approval because such an approval requires EPA to make a risk-based finding based on actual site conditions and use.
7. **Figures:** It is not clear from the Navy's submittal where the proposed project area is located in relation to the broader facility and adjacent infrastructure or areas of operation. Provide a figure showing the location of the project area in relation to its surroundings and the Facility. Such information is needed to substantiate either a risk-based decision on PCB cleanup (if the Navy chooses to pursue a 761.61(c) approval) or the appropriateness of the 761.61(a) self-implementing cleanup (based on the regulatory exclusions that apply to such cleanups).
8. **Schedule:** The 761.61(a) Notification includes a schedule for various activities. Please revise that schedule to reflect temporary storage of PCB waste limitations.
9. **Dust Monitoring:** The 761.61(a) Notification includes no discussion on dust monitoring during PCB cleanup activities. EPA strongly recommends that real-time dust monitoring and mitigation measures be implemented as necessary and that these procedures be included in a revised 761.61(a) Notification. For further information, please see the *Fugitive Dust Control as TSCA PCB Cleanup Sites* guidance published by EPA in November 2024.
10. **Endangered Species Act:** EPA recommends Navy evaluate whether the proposed PCB cleanup may affect critical habitat or effect any of the nine threatened, endangered or proposed threatened species.

Specific Comments

1. **Building Debris:** Section 2.1 of the 761.61(a) Notification indicates building debris was present across the project area. Please provide further details of building materials encountered during the soil sampling and proximate locations.
2. **Characterization Workplan:** Section 2.2 of the 761.61(a) Notification indicates the IMS soil sampling was completed in accordance with the project-specific workplan. Please provide EPA with a copy of the workplan. Such information should cover the investigations in June 2024, October and November 2024. If the Navy chooses to pursue a 761.61(c) cleanup approval, this information is directly relevant. EPA must evaluate the sample collection and analysis methods in order to substantiate their technical adequacy. This information would become part of the basis of a finding of no unreasonable risk, if appropriate.
3. **Onsite and offsite storage of bulk PCB remediation waste at or above 50 mg/kg:** Section 3.3 of the 761.61(a) Notification indicates the Navy plans to store bulk PCB remediation waste onsite before transport to "a commercial cargo ship loading yard for storage pending loading on to cargo ships for transoceanic transport to the US mainland." The storage of bulk PCB remediation waste at or above 50 mg/kg is subject to the storage requirements in 40 CFR 761.65. The state of Hawaii regulates PCBs at that concentration as a state hazardous waste. Any person storing or disposing of PCBs is also responsible for determining and complying with all other applicable Federal, State, and local laws and regulations.

   Please explain if the "commercial cargo ship loading yard" has any permits from the HDOH under RCRA that allows the operator of the yard to also store PCBs at or above 50 mg/kg. The Navy should consult with HDOH on this matter and specifically with reference to the storage requirements in 40 CFR 761.65(b)(2). EPA is also looking further into this matter.

   Compliance with all aspects of the PCB regulations is required. The PCB regulations govern the storage of bulk PCB waste. As such, provide information to EPA:
   - Provide the proposed timeframe for storing bulk PCB remediation wastes onsite at the Navy's cleanup site inclusive of the project area
   - Provide the proposed timeframe that PCBs were be storage at the commercial ship loading yard before the waste is loaded on to ship(s) for transoceanic transport to Oregon.
   - Please provide the location of the commercial cargo ship loading yard and the distance from the project area to that location.

   Regarding onsite storage of bulk PCB remediation waste, the Navy can store bulk PCB remediation waste at or above 50 mg/kg in containers at the cleanup site for 180 days from the first date of waste generation if the Navy follows all applicable storage requirements in 40 CFR 761.65(c)(9) as well as other applicable provisions in that section. The Navy must define and identify in a figure to scale the cleanup site consistent with the definition of that term in 40 CFR 761.3. The onsite temporary storage area for bulk PCB remediation waste must be within the cleanup site or site of waste generation consistent with 40 CFR 761.65(c)(9).

   In addition, the Navy must follow the PCB storage requirements in 40 CFR 761.40(a)(1) and (a)(10) covering marking of the containers holding bulk PCB remediation waste and marking of the temporary storage area, respectively. The Navy should also meet the requirements in 40 CFR 761.65(c)(6) covering US Department of Transportation containers for containerization of PCB waste.

Bulk PCB Remediation Waste below 50 mg/kg

Please explain if the Navy will generate bulk PCB remediation waste below 50 mg/kg during the PCB cleanup. If the Navy will generate such waste, explain if it will be temporarily stored at the cleanup site, provide the temporary storage timeframe, and provide the disposal method. Also, please explain how bulk PCB remediation wastes below 50mg/kg will be segregated from wastes above 50mg/kg and how they will be managed.

4. **Storage of PCB waste other than bulk PCB remediation waste:** Please explain if the Navy plans to temporarily store decontamination and cleanup waste at the cleanup site including the temporary storage timeframe.
5. **Transportation of PCB waste and disposal at a US mainland facility:** Section 3.3 of the 761.61(a) Notification indicates Navy intends to dispose PCB wastes their proposed US mainland disposal facility, Chemical Waste Management, Arlington, Oregon. Each transporter that will transport PCB waste on behalf of the Navy within the state of Hawaii, via ship from Hawaii to the port in Portland, Oregon, and via truck from the port in Portland, Oregon to the disposal facility in Arlington, Oregon must submit to EPA HQ the Notification of PCB Activity Form, EPA Form 7710-53. The Navy can access that form together with instructions at https://www.epa.gov/pcbs/notifications-polychlorinated-biphenyl-activities

   The Navy and its transporter are responsible for verifying Chemical Waste Management, Arlington, Oregon, has a permit under RCRA from the state of Oregon or an approval from EPA Region 10 under 40 CFR 761.75 that clearly allows that facility to accept bulk PCB remediation waste at or above 50 mg/kg and other PCB waste such as decontamination waste. Disposal of the bulk PCB remediation waste at or above 50 mg/kg must be consistent with 40 CFR 761.61(a)(5)(i)(B)(2)(iii) and (B)(2)(iv). Disposal of bulk PCB remediation waste below 50 mg/kg must be consistent with 40 CFR 761.61(a)(5)(i)(B)(2)(ii) and (B)(2)(iv).
6. **Cleanup Waste:** The Navy must follow the requirements in 40 CFR 761.61(a)(5)(v) for disposal of cleanup waste as defined in that provision. Examples of cleanup waste include personal protective equipment used during PCB characterization and/or sampling and/or cleanup activities, and rags used during those activities.
7. **Post-Cleanup Verification Sampling:** Section 3.5 of the 761.61(a) Notification includes details about post-cleanup verification sampling and that either discrete or composite samples will be collected on a 25 sq ft grid to verify that the cleanup level of total PCBs below 1 mg/kg has been achieved.

   Individual Discrete vs Composite Samples The plan should clarify whether the Navy will extract and analyze individual discrete verification samples for PCBs, or if the Navy will composite the discrete samples before extraction and analysis for PCBs. 40 CFR 761.289(b)(1) gives that flexibility. However, the Navy should describe whether it will prepare composite samples for extraction and analysis.

   Sample Size

   The Navy references the sample size in 40 CFR 761.286 as 20 milliliters. However, that provision says "…collect at least 20 milliliters of waste, or a portion of sufficient weight for the chemical analyst…" Therefore, given the language in the EPA extraction methods, the Navy should collect discrete samples of about 30 to 40 grams. That sample size will ensure the analytical laboratory will be able to collect a portion of soil from the sample for moisture testing and a portion for extraction. The laboratory must use the moisture testing results for each sample to calculate the PCB analytical results for each sample as dry weight.

Sidewall and Excavation bottom samples

Please clarify whether sidewall or excavation bottom samples, or both will be collected.

Recommendation for Cleanup Verification Following Multi-Incremental Sampling

If the Navy chooses to work under 40 CFR 761.61(c), we recommend the Navy collect cleanup verification samples following the multi-incremental sampling methodology in the TGM. EPA will consider approval of that approach for cleanup verification sampling under a 40 CFR 761.61(c) application. The latest revision of Sections 3 and 4 of the TGM covering multi-incremental sampling is dated July 2023. Section 3.6.1 of the TGM states that "a minimum of 75 increments per sample is recommended for cases where the contaminant is present as small nuggets or chips. Examples include polychlorinated biphenyls (PCBs) derived from construction debris or waste oil, fragments of lead-based paint and fragments of lead related to munitions. A default minimum of 50 increments per sample is recommended for the investigation of soil where the nature of the contamination is uncertain."

If the Navy chooses to work under 40 CFR 761.61(c), we strongly recommend the Navy subdivide each DU-03, DU-04, and DU-05 into two DUs, collect 75 increments from each DU, collect triplicates from two DUs, and include the statistics to evaluate the triplicate data. We are making this recommendation given the Navy has not identified the source of PCBs. Therefore, the Navy appears to have no information as to whether the PCB releases in the project area are from one single point source of contamination or multiple point sources of contamination. Refer to 40 CFR 761.289(b)(1)(i) and (b)(1)(ii). The sizes of DU-03, DU-04, and DU-05 are 5,186 sq ft, 5,412 sq ft, and 6,239 sq ft, respectively.

Further, we are recommending the Navy follow the multi-incremental sampling approach for verification of the PCB cleanup for consistency with the HDOH requirements for sampling. We recommend the Navy follow Section 3, Site Investigation Design and Implementation: Overview, and Section 4, Site Investigation Design and Implementation: Appendices, dated July 2023, found in the June 2024 interim final TGM for PCB cleanup verification sampling. We recommend the tools described in the TGM for sampling soils following the multi-incremental sampling approach or similar tools be used for that sampling activity. The increments must be collected in-situ and not from material excavated from the DU using a mini excavator.

Note that if the Navy instead chooses to pursue the self-implementing cleanup option, the cleanup verification requirements are found in 40 CFR 761.61(a)(6). 40 CFR 761 Subparts O and P provide greater detail on porous and non-porous surfaces respectively.

8. **Decontamination:** The 761.61(a) Notification includes no information about the Navy's activities involving decontamination of movable equipment contaminated by PCBs, tools, and sampling equipment. The Navy must decontaminate such items following applicable decontamination procedures in 40 CFR 761.79. The Navy must also follow the requirements in 40 CFR 761.79(e), limitation of exposure and releases, and 40 CFR 761.79(f), sampling and recordkeeping. Further, the Navy must follow the requirements in 40 CFR 761.79(g) for disposal of decontamination waste inclusive of water containing PCBs above 0.5 micrograms/Liter. Additionally, Navy may consider an alternative decontamination plan, which requires advanced written EPA approval, under 40 CFR 761.79(h).
9. **Certification Statement:** Section 4 of the 761.61(a) Notification included an unsigned certification statement. Consistent with the PCB regulations, the Navy must sign and date the certification as the owner of the property. V2X or any other Navy consultants that will conduct the PCB cleanup must

also sign and date the certification as the cleanup party. The certification statement shall be revised to read as follows and shall be signed and dated in the revised document:

a. Under civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (18 USC 1001 and 15 USC 2615), I certify that the information contained in or accompanying this document is true, accurate, and complete. As to the identified section(s) of this document for which I cannot personally verify truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true, accurate, and complete.
b. All sampling plans, sample collection procedures, sample preparation procedures, extraction procedures, and instrumental/chemical analysis procedures used to assess or characterize the PCB contamination at the cleanup site, are on file at the location designated in the certificate and are available for EPA inspection.

10. **Marking of PCBs, additional notifications, manifesting, site security**: The 761.61(a) Notification lacks details on these items as required under 40 CFR 761. The 761.61(a) Notification shall be revised to include details on the following:
    a. Description of PCB markings that will be carried out in accordance with 40 CFR 761.40 and 40 CFR 761.45
    b. Description of PCB waste activity notification, manifesting, and manifest/disposal recordkeeping that will be carried out in accordance with 40 CFR 761 Subpart K
    c. EPA recommends that a description of site security including posting of adequate warning signs be included in the cleanup plan to ensure unauthorized persons do not access the project area
11. **Cleanup Completion Report**: The 761.61(a) Notification lacks details on reporting. EPA requires a cleanup completion report to document completed activities. Please clarify how reporting, including reporting of verification sampling, will be done.
    a. Records must be kept for actions taken under 40 CFR 761(a)(3)(Notifications), (a)(4)(Cleanup levels), and (a)(5)(Site cleanup) in accordance with 40 CFR 761.125(c)(9) as required in 40 CFR 761.61(a)(9)
    b. The cleanup completion report should include a description of PCB sampling, cleanup, and disposal activities that were completed consistent with the cleanup plan and approval, including waste manifests
    c. If necessary and depending on site circumstances, EPA may recommend additional information to be included in the cleanup completion report.