Attachment A: Notice of Deficiency ("NOD")

Clean Harbors Los Angeles ("CHLA")
Toxic Substances Control Act ("TSCA")
Application for Polychlorinated Biphenyl ("PCB") Storage ("Application")

Submitted December 16, 2010

Clean Harbors Los Angeles
5756 Alba Street
Vernon, CA 90058

EPA ID: CAD 050806850

This Attachment describes deficiencies identified by the U.S. Environmental Protection Agency Region 9 ("EPA") in the TSCA Application submitted by CHLA to EPA. CHLA must update the Application to correct these deficiencies before an Approval decision can be made by EPA on the Application.

General Comments

1. Description of Approved PCB Operations – Section 1, Introduction

Please provide a description of the PCB Operations (i.e. container consolidation, draining transformers, PCB ballast processing, liquid waste processing, etc.) at the beginning of the revised application. Any unspecified operations cannot be considered in the TSCA Approval review process, and thus will be prohibited.

2. Personnel Qualifications, Management – Section 2

40 C.F.R. § 761.65(d)(2)(i) requires that "[t]he applicant, its principals, and its key employees responsible for the establishment or operation of the commercial storage facility are qualified to engage in the business of commercial storage of PCB waste." Since the previous Application was submitted, key employees have changed. Please update this section, and include as part of the revised application the resumes of facility management personnel. Also provide any information concerning any past State or Federal environmental violations involving the same business or another business with which these employees were affiliated, in accordance with 40 C.F.R. §§ 761.65(d)(2)(ii)-(v).

3. Personnel Qualifications, Workers – Section 2

Please provide information concerning the technical qualifications and experience of the employees responsible for handling PCBs and other wastes in accordance with 40 C.F.R. § 761.65(d)(2)(i) and 40 C.F.R. § 761.65(d)(3)(iii).

4. Notification of the Public – Information not in Application

Please provide a summary of the public outreach carried out by Clean Harbors as part of the requirements for Pre-application for the RCRA Renewal Permit, outlined in 40 C.F.R. §§ 124.31-33. Identify if PCBs operations were announced, when and where a public meeting was held, how many people attended, and any comments received from the community.

Facility Design

5. Flood Map – Sections 3.3.1.5 and 3.3.2.5

Please provide a flood map depicting the 100-year flood water elevation to show that the facility is safely located in accordance with 40 C.F.R. § 761.65(b)(1)(v).

6. Unclear Figure for Containment Bay E – Sec. 4.1.5, Table 4-1 and Sec. 9, Drawing P003-CC-107

The description of Containment Bay E in the New Container Storage Pad as a "square structure 20 feet long x 20 feet wide" does not match the figure provided in Drawing P003-CC-107, in which Bay E is depicted as an approximately 10 ft. x 20 ft area. Please reconcile this discrepancy, and specify in the revised figure which areas are approved to contain PCBs, the extent of the bermed area for secondary containment, and the location of any doors or points of entry to the enclosed Bay E.

7. Information on Sealed Expansion Joints – Sections 3.3.1.3 and 3.3.2.3

Please provide information on the sealed expansion joints referenced in Section 3, including material specifications, and the maintenance procedure for checking its integrity. If such a procedure does not exist, please create one.

8. Information on Epoxy Coating – Sections 3.3.1.4 and 3.3.2.4

Please provide information on the epoxy coating on the secondary containment surfaces referenced in Section 3, including what type of epoxy was applied, when it was applied, and how it is maintained. Also specify if this epoxy coating has also been applied to the Sump and Trench Areas.

9. Secondary Containment Requirements – Sections 3.3.1 and Table 4-1

In the Container Storage Warehouse, RCRA and TSCA permitted wastes share a secondary containment area in the westernmost bay (the area formerly referred to as Containment Bay 1). In Table 4-1, the required Secondary Containment Volume of that bay is shown to be calculated as the sum of 10% of the maximum RCRA volume and

25% of the maximum PCB volume, per the separate RCRA and TSCA requirements. This calculation however, must be revised.

If an accident, such as an earthquake or fire, were to cause the waste in the drums to spill and mix in the containment area, the entire volume of waste would become TSCA waste. In this scenario, the 25% minimum secondary containment requirement as specified under 40 C.F.R. § 761.65(b)(1)(ii) would then apply to all the waste. This necessitates the creation of two separate capacity restrictions:

1. The cap on TSCA waste in Container Storage Warehouse Bays DW-3 and DW-6 will be based on layout restrictions pertaining to adequate (3 foot) aisle space required to carry out routine inspections of containers.

2. The combined RCRA and TSCA waste volume in storage in the containment bay will at no time exceed greater than 4x the volume in secondary containment. The calculation for secondary containment must account for volume displacement from: the bermed incompatible storage room, internal berms/curbs dividing bays, space taken up by containers, and any other potential object within that area that might displace volume.

The maximum capacity of 240 55-gallon drums of RCRA waste would still apply as a third capacity requirement in this area, as will any other requirements as stipulated under the RCRA permit.

Please update the application to acknowledge these requirements by providing figures for both the Container Storage Warehouse and the New Container Storage Pad that clearly highlight a primary containment barrier, the secondary containment berms, and a hypothetical layout of waste within the containment bays at full capacity. The layout of waste in each bay must demonstrate a minimum of 3 feet of aisle space. This is necessary for routine inspection of containers and equipment. In the revised application, please provide all calculations used to estimate containment volumes, and describe the assumptions that were made in calculating displacement of containment space due to internal curbs and containers.

10. Estimate of Maximum Quantity of PCBs – Missing from Application

While the maximum capacity for PCB waste is specified, please also provide an *estimate* for the maximum quantity of PCB waste that will be handled at any one time at the facility, as required in 40 C.F.R. § 761.65(d)(3)(vi). Show that this quantity is less than the maximum capacity for the facility in accordance with 40 C.F.R. § 761.65(d)(2)(ii).

11. Certification of Facility Design Standards – Section 3.2, Page 4

Section 3.2 of the Application provides a certification that the "facility is in compliance with the Facility Design Standards specified in 40 C.F.R. § 761.65(b)." Please also

certify that CHLA is in compliance with 40 C.F.R. § 761.65(c)(7) in accordance with the requirement set forth in 40 C.F.R. § 761.65(d)(2)(iii).

Facility Operations

12. Transformer Draining Operations – Section 4.1.1

While this section of the Application states that "consolidation and bulking" are the only two forms of treatment that take place at the facility, the draining of transformers and other electrical equipment would also constitute “Treatment.”

Please describe whether or not electrical equipment draining operations take place at the facility. If so, please provide the standard operating procedure for these operations, and outline all equipment involved, any decontamination procedures associated with that equipment, where these operations take place, where the draining equipment is stored, and where the waste oil is placed.

13. PCB Concentration Determinations – Section 12, III., A. Pre-Acceptance

PCB concentrations must be determined for incoming waste in accordance with 40 C.F.R. § 761.2. Please describe CHLA’s PCB profiling procedure in cases where one is not already provided by the customer. Include the criteria for determining when the manifest record information is insufficient and when additional laboratory sampling is deemed necessary.

14. Laboratory/Sample Room SOP – Missing from Application

Please provide the standard operating procedures for onsite laboratory sampling. Include information regarding the rationale for sampling, where samples are stored and for how long, how sampling waste is disposed of, and any other additional measures taken to prevent the migration of PCBs to non-TSCA approved areas at the facility. Ensure that all PCB container and area labeling requirements are also being met in the laboratory, in accordance with 40 C.F.R. §§ 761.40(a)(1) and (a)(10), 40 C.F.R. § 761.45, and 40 C.F.R. § 761.65(c)(8).

15. Container Requirements – Missing from Application

Please either provide a description of the drums and containers used for storage PCB wastes and demonstrate that the specifications are in accordance with the requirements in 40 C.F.R. §§ 761.65(c)(6) and (c)(7)(i), or incorporate by reference these requirements. If containers larger than those specified in 40 C.F.R. § 761.65(c)(6) are used, a Spill Prevention Control and Countermeasures Plan (SPCC) must be provided with the revised application in accordance with 40 C.F.R. § 761.65(c)(7)(ii).

16. Date of Removal from Service – Section 12 (Appendix E): PCB SOP, P.14

The table titled 'Surcharges' in this section seems to indicate that the 'Elapsed Time from Date-of-Removal-from-Service to Received Date at Disposer' may be greater than 1 year. This is incorrect as 40 C.F.R. § 761.65(a)(1) states that "PCB waste shall be disposed of as required by subpart D of this part within 1-year from the date it was determined to be PCB waste and the decision was made to dispose of it. This date is the date of removal from service for disposal and the point at which the 1-year time frame for disposal begins." Please ensure that the facility will operate in accordance with 40 C.F.R. §§ 761.65(a)(1) and (2).

17. Temporary Storage Areas – Missing from Application

Please provide information on temporary PCB storage areas, staging areas, and loading/unloading operations. Specifically, please include information on where wastes are handled outside of the storage areas, and if there are differences in procedure for handling different types of PCB Items. Demonstrate that these activities will follow the 30 day time limit and marking requirements specified in 40 C.F.R. § 761.65(c)(1).

18. Storage Area Labels – Section 12 (Appendix E): PCB SOP, P.4, #4

The PCB Warning Placard must be the large M_L label (as shown in 40 C.F.R. § 761.45), in accordance with 761.65(c)(3). Please update this section to reflect this requirement.

19. Storage Area Equipment Decontamination – Section 12 (Appendix E): PCB SOP, P.4, #9

After the first sentence ending in "until properly decontaminated", please include the following text: "in accordance with the requirements set forth in § 761.79". This text is specified in 40 C.F.R. § 761.65(c)(4).

20. Missing Inspection Plan – Section 12 (Appendix E): PCB SOP, P.4, #10

The Inspection Plan referenced in this section cannot be located. Regular inspections of containers and equipment, both in temporary and regular storage areas, must be conducted to check for leaks and spills to ensure that the requirements in 40 C.F.R. §§ 761.65(c)(2) and (c)(5) are being met. Sumps and trenches must also be inspected. Please provide this plan in the revised application.

21. Missing TSCA Contingency Plan – Section 12 (Appendix E): PCB SOP, P.5, #11(a)

The TSCA Contingency Plan referenced in this section of the Application cannot be located. To ensure that the facility will not pose an unreasonable risk of injury to health or the environment through, please provide this Contingency Plan in the updated application. Also include a list of emergency response contacts and coordinated

emergency service organizations. The Contingency Plan submitted as a part of the Part B RCRA Application for Renewal, as outlined in 40 C.F.R. §264.52 (including but not limited to a Spill Prevention Control and Countermeasures (SPCC) plan) may be submitted in its place, but must still provide a description of how PCBs specifically will be handled.

22. Spill Cleanup Procedure - Section 12 (Appendix E): PCB SOP, P.5, #11(b)

In this section regarding PCB spills, please add the following information, per 40 C.F.R. § 761.65(c)(5), in the revised application:

1. All spilled or leaked materials shall be immediately cleaned up and the materials and residues containing PCBs shall be disposed of in accordance with 40 C.F.R. § 761.61
2. Records of inspections, maintenance, cleanup and disposal must be maintained in accordance with 40 C.F.R. §§ 761.180(a) and (b).

Please also provide information on cleanup procedures in the trench and sumps areas when a spill has occurred.

23. PCB Item Management – Missing in Application

Please acknowledge in the revised application that all PCB Items will be marked with the "removed from service for disposal" date, in accordance with 40 C.F.R. § 761.65(c)(8)

24. PCB Disposal Requirements – Section 12 (Appendix E): PCB SOP, P. 2

In the revised application, please describe how the disposal requirements (where the waste will be shipped) for different types of PCB waste will be conducted in accordance with the requirements set forth in 40 C.F.R. § 761.60. Please also acknowledge the requirement that PCB Capacitors with concentrations ≥500 ppm, drained or not drained, cannot be disposed of in a chemical waste landfill unless EPA has published a notice in the Federal Register that those landfills are available for such disposal, in accordance with the requirement in 40 C.F.R. § 761.60(b)(2).

Records Management

Note: An informal summary of the records management requirements has been attached to this NOD in Attachment B for purposes of the Annual Record, Annual Document Log, Annual Report, and Manifest requirements.

25. Records Sorting: Annual Record, Annual Document Log, and Annual Report – Section 12 (Appendix E): PCB SOP, P.5, Section IV

Please sort the Records mentioned in this section of the application into the following categories – the Annual Record, the Annual Document Log, and the Annual Report – in accordance with 40 C.F.R. §§ 761.180(b)(1)-(b)(3). Please also include a description of each type of record, the length of time each record will be kept, where it will be kept, and if (and when) each record will be submitted to EPA.

26. Records Associated with Receiving Waste – Section 12 (Appendix E): PCB SOP, P.3 (Section III.C.1)

Please describe in detail the recordkeeping procedures associated with receiving waste at CHLA. These procedures must be in accordance with the manifest requirements for storage facilities receiving waste, outlined in the following TSCA sections: 40 C.F.R. §§ 761.208 - 761.211. Within those sections, the following paragraphs would specifically apply to the receiving of waste: 40 C.F.R. § 761.208(c), § 761.209(c), §§ 761.210(a) and (b), and §§ 761.211(a)-(c).

27. Records Associated with Shipping Out Waste – Missing in Application

Please describe in detail the record keeping procedures associated with the shipping out of waste for disposal from CHLA. In accordance with 40 C.F.R. § 761.180(b)(4) and § 761.208(c)(3), "The owner or operator of the commercial storage or disposal facility shall comply with the manifest requirements that apply to generators of PCB waste." As such, CHLA must demonstrate that these recordkeeping procedures are in accordance with the manifest requirements for both generators and storage facilities when shipping out wastes, outlined in the following TSCA sections: §§ 761.207 - 761.209, and § 761.215. Within those sections, the following paragraphs would specifically apply to the shipping out of waste: 40 C.F.R. § 761.207(a), § 761.208(a), § 761.209(a), and §§ 761.215(b), (d) and (e).

28. Manifest and PCB Continuation Sheet – Section 12 (Appendix E): PCB SOP, P. 15

The sample PCB Continuation Sheet provided in Section 12, Appendix E of the Application is outdated. The correct forms for the Manifest and Continuation Sheet are Form 8700-22 and Form 8700-22A, respectively. Please specify where the manifest records will be obtained, in accordance with 40 C.F.R. §§ 761.207(b)-(h). More information on new manifest standards can be found in the FEDERAL REGISTER RULE publication, Vol. 70, No. 42 March 4, 2005 pp. 10776-10825.

29. Manifest Copies – Missing in Application

In the revised application, please acknowledge that enough copies of the manifests will be distributed in accordance with 40 C.F.R. § 761.207(i) and § 761.208(a)(3).

Closure, Closure Cost and Financial Assurance

30. RCRA and TSCA Closure Plans – Sections 4 and 10

In Section 10 (Appendix C) of the Application, the RCRA Closure Plan and Cost Estimate are provided. In that Section, the third paragraph in 9.2.4 states:

> "*Although a separate PCB Closure Plan exists under TSCA, all closure activities scheduled for the Los Angeles Facility will be conducted pursuant to the RCRA Closure Plan, if USEPA agrees, and the cost for closing these areas under the PCB closure plan is added to the RCRA Closure Cost Estimate for the purpose of determining the amount of financial assurance for closure to acquire*."

However, in Section 7 of the Application, the 5th paragraph states:

> *"It should be noted that the cost to close the entire existing facility is not the sum of the cost to close the RCRA permitted area and the PCB permitted area."*

The discrepancy in these statements is clarified in the subsequent description which attempts to incorporate the TSCA Closure Costs in the RCRA Closure Cost Estimates by "double counting" inventory wastes. For PCB storage Bays DW-3 and DW-6 in the Container Storage Warehouse, approximately $10,000 dollars in excess decontamination cost and $57,000 in excess disposal and transportation cost were added to the RCRA closure cost estimate by counting the maximum inventory waste in those bays twice.

However, EPA cannot accept either the existing RCRA Closure Plan or the RCRA Closure Cost Estimate and associated Financial Assurance Mechanism (FAM) as sufficient to cover the TSCA Closure and TSCA Closure Costs for the following reasons:

1. **Insufficient Details on Closure for TSCA Units.** For RCRA and TSCA Closure plans to be combined under the provision in 40 C.F.R. § 761.65(e)(3), a determination must first be made by EPA that the RCRA Closure Plan is "substantially equivalent to closure plans required under paragraphs (d) through (g) of (40 C.F.R. § 761.65)" and "adequately accounts for PCB waste inventories."

   Although the RCRA Closure Plan in Section 10 of the Application indicates that PCBs will be sampled, decontaminated, and disposed of as part of RCRA closure, the closure plan does not provide sufficient details regarding, among other things, characterization and verification sampling as well as PCB cleanup standards. EPA therefore cannot make a determination.

CHLA will have two options regarding the TSCA Closure Plan:

- Combine the RCRA and TSCA Closure Plans, pending approval for a permit modification to the RCRA Permit from California Department of Toxic Substances and Control (DTSC). The proposed amendments to the RCRA closure plan incorporating more information on TSCA closure would be need to be approved by EPA prior to a final DTSC review. *Note:* A change to the Closure Plan of the RCRA permit may also constitute a Major modification of the permit, triggering the Public Participation Requirements set forth in 40 C.F.R. § 124.

- The RCRA and TSCA Closure Plans will remain separate, and CHLA will submit a revised TSCA Closure Plan for EPA review. A separate TSCA Closure plan may refer to aspects of the RCRA Closure Plan that may be applicable for TSCA closure as long as the RCRA Closure Plan is included as an attachment to the revised TSCA application.

Please clearly state your preferred choice between these two options for the Closure Plan in the revised TSCA application. Regardless of which option is chosen, note that the Closure Plan will be reviewed for its adherence to the requirements set forth in paragraphs (d) through (g) of 40 C.F.R. § 761.65. The comments provided in the section below pertain solely to a review of the Closure Plan provided in Sections 4 through 6 of the current Application, and may be used as a starting point for the revised Closure Plan.

2. **Itemized TSCA Closure Cost Estimate.** While extra money has been included in the RCRA Closure Cost Estimate and FAM through the "double counting" of inventory waste, EPA cannot ensure that this amount will be enough to cover the TSCA Closure requirements. Closure Cost Estimation must be carried out in accordance with 40 C.F.R. § 761.65(f). Please provide an itemized breakdown of the TSCA closure costs separate from RCRA closure in the revised Application.

3. **Financial Assurance will reflect Closure Cost Estimate.** One FAM may be used to cover both RCRA and TSCA Closure. However, the amount covered by the FAM must directly reflect the amounts calculated in the Closure Cost Estimates for both RCRA and TSCA. CHLA will have the following two options for the FAM:

   - Two separate FAMs for RCRA and TSCA closure will be kept. DTSC will be the beneficiary of the financial instrument for RCRA Closure, and EPA will be the beneficiary of the financial instrument for TSCA closure. Originals of the separate financial instrument documents are to be kept at DTSC and EPA, respectively.

   - One FAM will cover both RCRA and TSCA Closure. Both DTSC and EPA will be recipients of the duplicate original FAM documents. In the Closure

FAM, the RCRA and TSCA Closure Costs need to be delineated. An adjustment to the Closure financial instrument may also trigger a Permit Modification that would require DTSC approval.

Please affirm your choice by proposing an updated FAM in the revised TSCA application. The proposal for the updated FAM must satisfy the requirements set forth in 40 C.F.R. § 761.65(g).

The following comments apply to the TSCA-only Closure Plan as provided in Section 4 of the Application. Overall, the Application does not provide sufficient detail on the steps taken to close in accordance with 40 C.F.R. § 761.65(e)(1):

A commercial storer of PCB waste shall have a written closure plan that identifies the steps that the owner or operator of the facility shall take to close the PCB waste storage facility in a manner that eliminates the potential for post-closure releases of PCBs which may present an unreasonable risk to human health or the environment. An acceptable closure plan must include, at a minimum, all of the following:

(i) A description of how the PCB storage areas of the facility will be closed in a manner that eliminates the potential for post-closure releases of PCBs into the environment.

(iv) A detailed description of the steps needed to remove or decontaminate PCB waste residues and contaminated containment system components, equipment, structures, and soils during closure in accordance with the levels specified in the PCB Spills Cleanup Policy in subpart G of this part, including a description of the methods for sampling and testing of surrounding soils, and the criteria for determining the extent of removal or decontamination.

TSCA-only Closure Plan

31. Closure Performance Standards – Section 4.3.2

The Cleanup levels specified in Table 4-4 of the Application only apply to non-porous surfaces. In the revised application, please propose Cleanup levels for all media that may be impacted by PCBs (concrete, soils, sediments, non-porous surfaces such as metal, etc.).

EPA will require that risk-based cleanup levels be proposed as closure standards and these could either be EPA's Regional Screening Levels (RSLs) or site-specific risk-based cleanup levels derived via a site-specific risk assessment. The closure standards to be established in the closure plan must take into account the future land uses for the

CHLA facility as well as for adjacent properties. Currently, EPA's RSL for PCBs are 0.22 mg/kg and 0.74 mg/kg based on residential and industrial exposure scenarios, respectively. The RSLs are non site-specific, risk-based concentrations derived from standardized equations combining exposure assumptions with EPA toxicity data. More information for RSLs can be found at http://www.epa.gov/region9/superfund/prg/. These RSLs are the most up-to-date PCB risk-based values developed by EPA. However, if these RSLs at any time are revised or EPA develops other PCB risk-based concentrations that may supersede the RSLs, the most current risk-based values will be used at the time of facility closure.

In addition to the above, please ensure that DTSC's cleanup standards for PCBs are also being met. Provide information on both sets of appropriate regulatory requirements along with a description of which ones will take precedence during closure.

32. Quality Assurance Project Plan – Section 4.3.3.4

In this section, please address the Data Quality Objectives (DQOs) in accordance with EPA's *Guidance on Systematic Planning Using the Data Quality Objectives Process*, QA/G-4. This document can be found online at *http://www.epa.gov/quality/qs-docs/g4-final.pdf*. The revised Quality Assurance Project Plan (QAPP) should also include information on the laboratory to be used for closure sampling, as well as that lab's detection limits for PCBs. For the purposes of this closure plan, you may submit the QAPP for the lab currently used by CHLA for analysis of samples, spill cleanup verification,etc..

The Lab QAPP must be in accordance with *EPA's Requirements for Quality Assurance Project Plans*, EPA QA/R-5, which can be found online at: *http://www.epa.gov/region8/qa/QAEPAr5-final.pdf*. Please ensure that the Lab QAPP will include:

- Actions the lab will take when errors or inconsistencies arise
- Detection levels for each type of sample – note that the detection level must be at least one-fifth of cleanup standards (also referred to as *action levels)*
- A flagging protocol that is consistent with the *USEPA Contract Laboratory Program's National Functional Guidelines,* which can be found online at: *http://www.epa.gov/superfund/programs/clp/download/somnfg.pdf.*

33. Illegible Figure – Figure 4-1

The figure provided here is difficult to read. Please provide a clearer picture.

34. Transformer Draining Area – Section 4.1.5

Recent inspections have shown that a separate area, possibly used for transformer draining operations or equipment storage, exists in the Container Storage Warehouse. This area is denoted as the Incompatible Storage Room in Drawing P003-CC-110. Such

an area would require special sampling and cleanup activities during closure. Please clarify the use of this room, provide dimensions for secondary containment, describe any other structural features in this area, and describe the sampling activities necessary to ensure adequate decontamination as part of the closure plan.

35. Electrical Equipment Inventory – Section 4.2

Please provide information on any piping, hoses, or pumps that are used to transfer liquid PCBs. The closure plan must provide a description of these materials for disposal as TSCA waste or decontamination for unrestricted reuse.

36. PCB Closure Plan Sampling and Decontamination – Section 4.3

Include, as part of this section, a plan to sample the following additional locations at CHLA:

- Door jambs and flooring in bathrooms adjacent to the PCB areas, as well as along pathways to and from the bathroom(s). Experience with other PCB Storage facilities has shown that PCBs often migrate on shoe covers or in areas where shoe covers are removed and donned.
- All temporary storage areas, including loading/unloading docks, and any other locations around the facility outside of the approved areas that PCBs are handled.

Please also include in this section a drawing that indicates where known spills have occurred.

37. Chip and Core Sampling – Section 4.3.1

Chip sampling and/or core sampling, rather than wipe sampling, are the appropriate means of determining PCB contamination in or on porous materials. For closure at CHLA, this type of sampling will be required in the following areas:

- Walls - which are not epoxy coated
- Along cracks in the floor
- In areas that were not epoxy coated prior to PCB handling operations
- In areas of known spills to verify that PCB oil did not penetrate the surface

Please note these requirements in the revised application and refer to the EPA Guidance for Sampling Porous Surfaces for PCBs, which can be found online at: *http://www.epa.gov/region1/cleanup/pcbs/pdfs/484692.pdf.* This document can be found attached to this NOD, in Attachment C.

38. Field Investigation Objectives and Sampling Location and Rationale – Section 4.3.3.3

The planned characterization sampling in this section of the current Application is divided into "Judgmental sampling" and "Systematic sampling." As stated above, judgmental sampling will also need to incorporate chip and core sampling. For systematic sampling prior to decontamination, which we will hereby refer to as 'Characterization sampling', proposed grids have been provided in Figures 4-2 through 4-4.

Typically for a PCB cleanup or closure site, EPA will prescribe Characterization sampling requirements in accordance with Subpart N of 40 C.F.R. § 761. The requirements of Subpart N specify, among other things, the grid spacing for testing porous (40 C.F.R. § 761.265) and non-porous surfaces (40 C.F.R. § 761.267), as well as chemical extraction and analysis methods (40 C.F.R. § 761.272). In the current Application, the proposed sampling locations, though similar in density to Subpart N sampling, differ slightly in design. Please either justify this divergence from the Subpart N sampling requirements, or revise the closure plan such that the Subpart N sampling requirements will be followed for site characterization.

39. Sampling Activities and Analytical Requirements – Section 4.3.3.3

Please provide the following information for Soil, Chip, Core and Wipe sampling:

1. Specify the methods used for acquiring samples (i.e. wipe samples in accordance with Subpart P for non-porous samples, the attached SOP for porous surfaces, etc.).
2. Specify sample sizes to be obtained (i.e. grams per sample).
3. Provide a sample labeling and numbering protocol – this is necessary to ensure consistency between field and laboratory labeling.
4. Specify the methods used for prepping the sample for analysis.
5. Confirm that EPA Method 8082 will be used for PCB analysis.

In addition, this section should either be referenced or repeated in Section 4.3.5 to ensure that the same protocols will be followed for Verification sampling.

40. Post-Cleanup Verification Procedures – Section 4.3.5

Section 4.3.5.1 describes the procedure of judgmental sampling, or sampling by targeting known spills and liquid collection areas, for the verification of the adequacy of post-cleanup procedures. These types of samples *will* be required during closure, and EPA may request additional samples, based on but not limited to, the facility history of spills and indications of discoloration on the walls, flooring, and in loading/unloading areas.

However, similar to the requirements for Characterization sampling, EPA also prescribes Verification grid sampling requirements in accordance with Subpart O (for porous surfaces) and Subpart P (for non-porous surfaces) of 40 C.F.R. § 761. In the revised application, please provide a description of how Verification grid sampling will be carried out in accordance with these Subparts.

41. Waste Collection – Section 4.3.5.3

Please incorporate by reference the requirements for the disposal and decontamination of waste in accordance with 40 C.F.R. § 761.65(e)(7)

42. Closure Plan Review – Section 4.5

In this section, CHLA describes a plan to "notify EPA of intent to close facility" 60 days prior to the initiation of facility closure, in accordance with 40 C.F.R. § 761.65(e)(6)(i). At this time, CHLA shall either petition EPA with a demonstration that the closure plan is sufficiently up to date, or submit a permit modification application with an updated closure plan. Please note this requirement in the updated application.

43. Closure Cost Estimate – Tables 5-1 and 5-2

The estimates in this section will have to be updated to reflect changes in the closure plan, specifically regarding the # of samples taken and the # of hours for labor. The current estimated cost of $45 per wipe sample is too low based on our current estimates. Please check with the proposed laboratory, and update the cost per sample depending on the type (soil, chip, core, and wipe); or, if CHLA wishes, an estimate of $95 for the analytical alone may be used for chip, core and wipe sampling cost estimation purposes.

Minor Errors

44. Section 4.1.3

"Bay DW-3 and DW-7" should be changed to "Bay DW-3 and DW-6"

45. Section 4.1.5.2

This Section refers to "Bay #1" while the following Table 4-2 refers to that area as "(Formerly Bay #1)". Please choose a consistent naming system.

46. Section 4.2.1, Table 4-3

This section states that 8,745 gallons of liquid waste and 22 pallets are the maximum inventory for the facility. However, 8,745 gallons divided by 55 gallons per drum divided

by 4 drums per pallet yields a total of 40 pallets. Please change this number or explain where the 22 pallet figure comes from.

47. Section 4.3.5

In this section, the specific items addressed regarding verification sampling pertain to 40 C.F.R. § 761.125(c)(5)(viii), not 40 C.F.R. § 761.125(c)(5)(iii) as stated in the current Application.