

Intended for

**Santa Monica-Malibu Unified School District
Santa Monica, California**

Date

April 23, 2018

**NOTIFICATION AND REQUEST FOR APPROVAL,
PCB REMEDIATION WASTE PLAN,
BUILDINGS D, F, G, I AND J
MALIBU HIGH SCHOOL, MALIBU, CALIFORNIA**

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1. INTRODUCTION

On behalf of Santa Monica-Malibu Unified School District (SMMUSD or District), Ramboll US Corporation (Ramboll) hereby submits to the U.S. Environmental Protection Agency (EPA) this *Notification and Request for Approval, PCB Remediation Waste Plan* ("Cleanup Plan") for portions of the property located at 30215 Morning View Drive, Malibu, CA, otherwise known as Malibu High School (MHS). For the purpose of this submittal, "the Site" shall refer only to Buildings D, F, G, I and J on the campus of MHS. These buildings are currently proposed for flooring renovation projects to commence in Summer 2018. This work plan is being submitted in accordance with 40 CFR 761.61(c) (Risk-Based Disposal approval) as an Addendum to the July 2014 *Site-Specific PCB-Related Building Materials Management, Characterization and Remediation Plan for the Library and Building E Rooms 1, 5 and 8 at Malibu High School* ("MHS Specific Plan") (ENVIRON, 2014a), as supplemented by the *Supplemental Removal Information for the Library, Building E - Rooms 1, 5, and 8 and Building G - Room 506 at Malibu High School* ("Supplement") (ENVIRON, 2014b), and as approved by the EPA Region IX ("EPA's 2014 Approval Letter" [EPA, 2014a] and "EPA's November 2015 Approval Letter" [EPA, 2015]).

Figure 1 depicts the layout of the Site, and **Figures 2 through 6** depict sampling locations from investigations conducted to date to identify PCB concentrations in building materials prior to planned renovation activities.

2. BACKGROUND INFORMATION

SMMUSD is the owner and operator of the MHS buildings. Buildings D, F, G, I and J were all constructed in approximately 1963. As part of a modernization project at MHS, Buildings D, F, G, I and J are all scheduled for flooring renovation projects beginning in Summer 2018.

3. NATURE AND EXTENT OF CONTAMINATION

3.1 Initial Characterization of Building Materials Prior to Flooring Renovation Project

In anticipation of a flooring renovation project, samples of building materials were recently collected for waste characterization purposes. Representative bulk samples were collected by Alta Environmental (Alta) from various building materials in D, F, G, I and J for PCB analysis (EPA Method 8082 via Soxhlet Extraction). Based on the results of this sampling, several materials were confirmed to exceed the TSCA threshold of 50 milligrams per kilogram (mg/kg, or parts per million [ppm]) for PCBs, which included the following:

Building D

- 9"x9" beige floor tile/mastic (up to 199 mg/kg)
- Black mastic associated with 9"x9" beige floor tile (5,390 mg/kg)
- 12"x12" light grey speckled floor tile with glue (54.4 mg/kg)
- Glue associated with 12" light grey speckled floor tile (188 mg/kg)
- 12"x12" light blue floor tile with glue (up to 117 mg/kg)
- Glue associated with 12" light blue floor tile (up to 488 mg/kg)

Building F

- Yellow glue with residual black mastic associated with 12" grey speckled floor tile (906 mg/kg), Room 303
- Black mastic associated with 9" brown floor tile (up to 1,320 mg/kg), Rooms 303A

Building G

- Black mastic located under hardwood floor (up to 271 mg/kg), Room 505

Building I

- Grey adhesive associated with grey sheet vinyl (162 mg/kg), Room 402B

Building J

- 9"x9" brown floor tile (53.3 mg/kg), Room 703A
- 9"x9" tan floor tile (93.5 mg/kg), Room 722
- Black mastic for floor tile (up to 3,420 mg/kg), Rooms 704A and 722
- Glue for floor tile (up to 976 mg/kg), Room 703A

The locations of all bulk samples collected from flooring materials as well as the interpreted extent of >50 mg/kg PCB flooring materials are provided on **Figures 2 through 6**. Laboratory reports are provided in **Appendix A**.

As mentioned above, representative sampling of the flooring materials was conducted for waste characterization, and as such, flooring samples were not necessarily collected from every room where new flooring is proposed. However, samples were collected for PCB analysis from all flooring materials suspected to possibly contain PCBs within each building. For rooms/areas that were not sampled/tested, the District plans to assume that the flooring materials contained in those rooms/areas are similar in PCB concentration to the flooring materials tested in a different location of that building. Provided below is an example of how the District plans to implement this procedure:

Light blue floor tile with glue was tested for PCBs in Rooms 201, 211 and 219 of Building D with detections of 59.7, 117 and 78.2 mg/kg, respectively. For other rooms/areas in Building D where the same light blue floor tile with glue are present, the District will assume that the flooring materials contained in those rooms/areas are similar in PCB concentration to Rooms 201, 211 and 219.

No sampling of the porous concrete slab beneath the >50 mg/kg PCB flooring materials in Buildings D, F, G, I or J has been performed. However, sampling was conducted in Buildings A and B/C, where PCB concentrations of the concrete slab beneath >50 mg/kg PCB flooring materials ranged from non-detect to 24.6 mg/kg (Ramboll, 2018). As such, for the purpose of this Cleanup Plan, the concrete slab at Buildings D, F, G, I, J is assumed to contain PCBs at concentrations >1 mg/kg, but below approximately 24.6 mg/kg.

4. PROPOSED CLEANUP STRATEGY

This section presents a cleanup plan for the >50 mg/kg PCB flooring materials as well as the concrete slab which is proposed to remain in place during the floor renovation project. A discussion on remedial goal/approach, disposal options, schedule, and owner certification is provided below. In summary, the remedial plan for the Site is to remove all >50 mg/kg PCB flooring materials for off-Site disposal as PCB Bulk Product Waste, and then encapsulate the underlying concrete slab before new linoleum flooring (tile or sheet) is installed.

4.1 Cleanup Levels and Remedial Approach

The major components of the plan include:

- The removal and proper disposal of all >50 mg/kg PCB flooring materials. The >50 mg/kg PCB flooring materials will be transported to approved facilities based on the "as found"

concentrations. The extent of the >50 mg/kg PCB flooring materials are shown on **Figures 2 through 6**;

- For the porous concrete slab remaining in place beneath the >50 mg/kg PCB flooring materials, for the purpose of this Cleanup Plan, the concrete is assumed to contain PCBs at >1 mg/kg, but below approximately 24.6 mg/kg. As such, the concrete is proposed to be encapsulated prior to the installation of new flooring;
- Installation of new linoleum on top of the encapsulated concrete slab;
- Recording a deed notice for the encapsulation remedial approach; and
- Long term monitoring of the encapsulated surfaces.

Through the removal of the PCB source materials (flooring materials), and the application of an encapsulant on surfaces that contain residual PCBs, the proposed Cleanup Plan removes those PCB containing materials not authorized for continued use and restricts exposure pathways to residual PCBs, thereby, not posing an unreasonable risk of injury to health or the environment.

4.2 Cleanup Plan

4.2.1 Site Preparation and Controls

Prior to initiating the removal of any of the >50 mg/kg PCB flooring materials, the following site controls will be implemented:

- A Health & Safety Plan will be developed specific to the work activities. All workers will be HAZWOPER trained and will follow applicable Federal and State regulations regarding the work activities;
- Polyethylene containment will be constructed enclosing each area prior to work. The use of HEPA filtration will be incorporated to control dust and odors that are generated during the cleanup activities. In addition, the containment will be maintained during the removal activities and during the encapsulant cure time to control odors from the applications, as needed;
- A decontamination area for personnel and equipment will be erected at the containment exit point;
- The use of HEPA filtration will be incorporated to establish negative pressure controls to control dust generated during the removal activities. Wet wiping and water misting inside of containment will be used as a dust suppressant as needed;
- Access to the active work areas by the contractor;
- All powered tools will be equipped with appropriate tool guards and dust/debris collection systems (i.e., HEPA filters). Wet wiping and vacuuming of all tools and equipment in the work area will be performed at the completion of the work activity; and
- Air/dust monitoring will be conducted outside of the containment area during the active removal of >50 mg/kg PCB flooring materials. To reduce dust levels and exposures to dust, a combination of engineered controls (e.g., work zone enclosures, misting), equipment equipped with HEPA filters and dust controls, and personal protective equipment (PPE – respirators) will be implemented as part of the work activities.

4.2.2 Floor Material Removal

The following summarizes the activities to be conducted as part of this removal task:

- All work surfaces will be wetted to minimize dust during removal of >50 mg/kg PCB flooring materials;

- >50 mg/kg PCB flooring materials (see Section 3.1 for summary) will be removed using a combination of hand tools and power tools. This may include use of grinders or mechanical floor strippers in order to create an open textured surface for adhesion of the encapsulant.
- Upon the completion of the initial removal activities, the concrete slabs will be visually inspected for the presence of any residual mastic/glue. If residual mastic/glue is observed, then any residual mastic/glue will be removed from the concrete using a combination of hand tools and power tools until the residual mastic/glue is no longer visible.
- All removed >50 mg/kg PCB flooring materials will be transported off-site and disposed of in accordance with 40 CFR 761.62 as Bulk Product Waste (see Section 4.2.5).

4.2.3 Encapsulation of Building Materials

As described above, porous concrete in direct contact with the >50 mg/kg PCB flooring materials is assumed for the purpose of this Cleanup Plan to contain >1 mg/kg PCBs. As such, for the concrete slab beneath the >50 mg/kg PCB flooring materials, an encapsulant consisting of a liquid epoxy coating (Sikagard 62, or equivalent) will be applied to eliminate the direct exposure pathway and leaching transport pathway from residual PCBs in these building materials.

The encapsulant will be applied directly to the concrete slab subsequent to removal of the >50 mg/kg PCB flooring materials. The protective coating will be applied in two coats of contrasting colors for a total thickness of approximately 16 mils.

The following describes the proposed remedial activities for these building conditions:

- Prior to application of the encapsulant, all surfaces will be prepared so that they have open textured surface for adhesion of the encapsulant and are dry, clean and sound. Cleaning will be conducted using either wet methods and/or HEPA filter vacuuming¹;
- Two coats in contrasting colors of the encapsulant (Sikagard 62, or equivalent) will be directly applied to the concrete slab. Efforts will be made to minimize the potential for cross-contamination between the two coats of encapsulant;
- The polyethylene containment will be used to control access to the work area and to control vapors from the encapsulation during and following application. The containment will be maintained until after confirmatory sampling results have been received (see Section 4.2.4.1) or longer if needed due to potential odors; and
- All generated waste material (dust, PPE, application tools, etc.) will be containerized in a secure location in an appropriate waste container for subsequent off-site disposal. Personal protective equipment will be wet wiped and containerized for off-site disposal.

Once the encapsulant is installed, no grinding or surface preparation on the encapsulant surface is permitted.

4.2.4 Confirmatory Air and Wipe Samples

This section describes the procedures to be followed for confirmatory samples collected immediately subsequent to installation of the encapsulant. The first round of sampling (surface wipes only) is to be performed inside of containment on the encapsulated surface on the floor. The second round of sampling (surface wipes and air) is to be performed outside of containment.

¹ After cleaning the inside of containment, if asbestos was also identified in the flooring materials, an asbestos encapsulant (Fiberlock, or equivalent) will be applied to all surfaces inside containment.

Additional sampling activities associated with long-term monitoring are described in Section 4.2.10.

4.2.4.1 Wipe Sampling of Encapsulated Surfaces (Prior to Removal of Containment)

After the >50 mg/kg PCB flooring materials have been removed, the concrete slab has been encapsulated, the interior of containment will be cleaned using either wet methods or a HEPA vacuum². Surface wipe samples will then be collected on the encapsulated surface. Note that the surface wipe samples are to be collected before containment is removed and before new flooring has been installed. The following describes the proposed wipe sampling protocols:

- Baseline verification wipe samples of the encapsulated floor surfaces will be collected at a sample frequency of 1 sample from each containment area or 1 sample per every 3,000 square feet (whichever is greater), which is approximately the size of some of the 1st floor classrooms in Building D;
- Wipe samples will be collected on gauze pads wetted with hexane using the Standard Wipe Test described in 40 CFR 761.123, which specifies a collection surface area of 100 cm². Samples will be labeled, sealed, placed in closed containers, and sent under chain-of-custody procedures to the analytical laboratory;
- All samples will be extracted using EPA Method 3540C (Soxhlet Extraction) and analyzed for PCBs using EPA Method 8082; and
- Analytical results from the wipe samples of the encapsulated surfaces will be evaluated to determine whether or not this task is complete as follows:
 - Analytical results $\leq 1 \mu\text{g}/100 \text{ cm}^2$ – Encapsulation complete, containment established around the area can now be removed and site controls dismantled.
 - Analytical results $> 1 \mu\text{g}/100 \text{ cm}^2$ – Additional application of the encapsulant may be applied and additional testing conducted at off-site locations, after consultation with EPA.

4.2.4.2 Air and Wipe Sampling of Encapsulated Areas (After Removal of Containment)

Once the surface wipe samples described above in Section 4.2.4.1 meet EPA Region IX's cleanup goal of $<1 \mu\text{g}/100\text{cm}^2$, containment will be removed and final surface wipe samples as well as air samples will be collected from the encapsulated areas. The following procedures will be followed during collection of air and surface wipe samples.

4.2.4.3 Wipe Sampling of Encapsulated Areas (After Removal of Containment)

After containment has been removed from each encapsulated area, surface wipe samples will be collected from representative surfaces in the remediated rooms (including areas not inside of the previous containment area) to verify that there are no exceedances of EPA Region IX's cleanup goal of $<1 \mu\text{g}/100\text{cm}^2$ prior to release of the area for unrestricted access. The following describes the proposed wipe sampling protocols:

- Consistent with the protocols outlined in the MHS Specific Plan, at least 2 final verification wipe samples will be collected from representative surfaces (window sills, countertops, etc.) from each containment area or per every 3,000 square feet (whichever is greater);
- Wipe samples will be collected on gauze pads wetted with hexane using the Standard Wipe Test described in 40 CFR 761.123, which specifies a collection surface area of 100 cm². Samples will be labeled, sealed, placed in closed containers, and sent under chain-of-custody procedures to the analytical laboratory.

² After cleaning the inside of containment, if asbestos was also identified in the flooring materials, an asbestos encapsulant (Fiberlock, or equivalent) will be applied to all surfaces inside containment.

- All samples will be extracted using EPA Method 3540C (Soxhlet Extraction) and analyzed for PCBs using EPA Method 8082.
- Analytical results from the wipe samples of the encapsulated surfaces will be evaluated to determine whether or not this task is complete as follows:
 - Analytical results $\leq 1 \mu\text{g}/100 \text{ cm}^2$ – Task complete.
 - Analytical results $> 1 \mu\text{g}/100 \text{ cm}^2$ – Additional cleaning of the area using wet methods and/or HEPA filter vacuuming will be conducted and an additional round of wipe samples will be collected.

4.2.4.4 Air Sampling (After Removal of Containment)

Air samples will be collected using the procedures previously approved by EPA on October 31, 2014 (EPA, 2014a), and outlined in the MHS Specific Plan (ENVIRON, 2014a). The following describes the proposed air sampling protocols:

- Verification air samples of the encapsulated rooms will be collected at a sample frequency of 1 sample per containment area;
- For QA/QC purposes, at least one ambient air sample will be collected to evaluate the concentrations of PCBs in the outdoor air around MHS during the sampling event;
- Each air sample will be collected using a constant flowrate for a period of 24 hours with the lights on, windows closed, and heating, ventilation, and air conditioning (HVAC) turned off. These conditions represent conditions that would maximize potential airborne concentrations as compared to normal occupancy conditions; thus these conditions represent conservative worst-case exposure potentials (i.e., concentrations during routine operations in these rooms are expected to be lower);
- The air samples will be collected and analyzed for Aroclors using EPA Method TO-10A or EPA Method TO-4A and detection limits below EPA's Exposure Levels for Evaluation of PCBs in Indoor School Air will be achieved;
- Air samples will be sealed, labeled, wrapped in foil, and packed on ice in a sealed cooler at the end of the sampling and picked up by courier under chain-of-custody procedures for delivery to the analytical laboratory for PCB analysis;
- The cleanup goals for air sampling correspond to EPA's Exposure Levels for Evaluation of PCBs in Indoor School Air (EPA, 2016), which are $<200 \text{ ng}/\text{m}^3$ for children 3 to <6 years, $<300 \text{ ng}/\text{m}^3$ for children 6 to <12 years, $<500 \text{ ng}/\text{m}^3$ for children 12 to <15 years, $<600 \text{ ng}/\text{m}^3$ for children 15 to <19 years, and $<500 \text{ ng}/\text{m}^3$ for adults 19 years or older; and
- Analytical results from the air samples will be evaluated to determine whether or not this task is complete as follows:
 - If analytical results are less than EPA's Exposure Levels for Evaluation of PCBs in Indoor School Air – Task complete.
 - If analytical results are greater than EPA's Exposure Levels for Evaluation of PCBs in Indoor School Air – Additional cleaning will be conducted and an additional round of air samples will be collected.

4.2.5 Contingency Plan

If wider distributions of potential PCB-containing building materials are found, or other obstacles force changes in the cleanup approach, contingencies will be developed in consultation with the District and EPA prior to implementation.

4.2.6 Data Validation

All samples will be submitted to a certified and accredited laboratory for analysis. Upon receipt of laboratory data, a data quality and data usability assessment will be completed. The data review will be conducted in accordance with EPA protocols. This review will include a completeness check of field documentation including sample collection and preservation methods, a completeness check of the laboratory data and documentation, a review of the internal laboratory quality assurance/quality control procedures and results including surrogate recoveries, the matrix spike/matrix spike duplicate results, blank results, laboratory control standard results, an evaluation of sample holding times, and field duplicate results. Upon receiving the data validation summaries, any qualifiers applied to the data will be added to the data summary tables presented in the final report.

4.2.7 Site Restoration

Following completion of encapsulation activities and verification that the confirmatory wipe samples collected inside of containment have met cleanup levels, the containment established around each area will be removed, site controls will be dismantled, and all wastes will be transported off-site for proper disposal. Then, following verification that confirmatory air and wipe samples collected outside of containment have met cleanup levels, unrestricted access to each area will be restored and new flooring can then be installed on top of the encapsulated surface. The anticipated procedures for installation of new flooring are provided below.

A cementitious layer (Ardex, or equivalent) will first be installed on top of the encapsulant to create appropriate adhesion for the flooring. Glue will then be spread and the linoleum flooring will then be installed.

4.2.8 Waste Management and Off-Site Disposal

The following activities will be completed with regard to the proper storage and disposal of PCB wastes:

- All >50 mg/kg PCB flooring materials will be designated for disposal as PCB Bulk Product Waste in accordance with 40 CFR 761.62;
- All generated non-liquid waste material (PPE, polyethylene sheeting, etc.) will be segregated and containerized in an appropriate waste container and will be designated for disposal as PCB Remediation Waste in accordance with 40 CFR 761.61(a)(5)(v).
- Water generated during decontamination (or as part of dust suppression) that is collected on polyethylene sheeting will be contained onsite in 55-gallon drums, sampled for PCBs and other potential constituents, and designated for offsite disposal in accordance with 40 CFR 761.79 and/or California hazardous waste regulations, as applicable.
- Secure, lined, and covered waste containers (roll-off or equivalent) or 55-gallon DOT-approved steel containers will be staged in a secured area for the collection of PCB wastes generated during the work activities in accordance with 40 CFR 761.65;
- All containers will be properly labeled and marked in accordance with 40 CFR 761.40;
- Upon completion of the work, or when a container is considered full, Bulk Product Waste and PCB Remediation Waste will be transported off-site for disposal under either a Hazardous Waste Manifest or Bill of Lading (in accordance with both EPA and California regulations) to a facility in accordance with 40 CFR 761 and 22 CCR 66262.23. All operators and trucks will have proper Department of Transportation certificates and vehicle inspection certifications; and
- Copies of all manifests, waste shipment records, and certificates of disposal will be collected and provided as part of the final report to EPA.

4.2.9 Recordkeeping and Documentation

Following completion of the work activities, records and documents per 40 CFR Part 761 will be generated and maintained at the offices of SMMUSD, 1651 Sixteenth Street, Santa Monica, CA. These documents will be made available to EPA upon request. A final report documenting the completion of the work activities and including, but not limited to, a description of the work activities, verification analytical results, volumes of disposed materials, photographs, and waste disposal documentation will be prepared and submitted to EPA.

It is understood that at the end of the useful life of the building, all areas containing residual concentrations of PCBs will be managed and disposed of properly. A deed restriction notifying of the encapsulated surfaces will be placed on the property, until all PCBs in excess of clean up levels are removed from the building.

4.2.10 Long-Term Maintenance and Monitoring Plan

Prior to re-occupancy of the encapsulated rooms/areas by students, a long-term Maintenance and Monitoring Plan (MMP) will be developed. The MMP will discuss visual inspections of encapsulated areas, proposed confirmatory sampling activities, proposed sampling frequency, reporting, contingency measures, and maintenance guidelines and procedures. The MMP will be submitted to EPA under a separate submittal.

4.3 Schedule

Work related to the removal of >50 mg/kg PCB flooring materials, installation of encapsulation, and subsequent installation of new flooring is tentatively scheduled as shown below:

- Summer 2018: Buildings F, G, I and Building D (three labs and a few 2nd floor rooms)
- Winter 2018/2019 or Spring 2019: Building D (more 2nd floor rooms) and Building J
- Summer 2019: Building D (remaining labs, 2nd floor rooms and teachers' lounge)

4.4 Certification

Please see Appendix A of the MHS Specific Plan (ENVIRON, 2014a) for a written certifications signed by: 1) the owner of the property where the cleanup site is located, and 2) the party conducting the cleanup, that 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 (§761.61(a)(3)(i)(E)).

5. CONCLUSION



On behalf of SMMUSD, Ramboll requests EPA approval of this *Notification and Request for Approval, PCB Remediation Waste Plan* under 40 CFR 761.61(c) associated with the removal of >50 mg/kg PCB flooring materials and encapsulation of the underlying concrete slab, assumed to contain PCBs at concentrations >1 mg/kg, but below approximately 24.6 mg/kg.

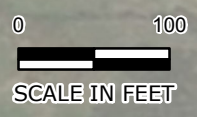
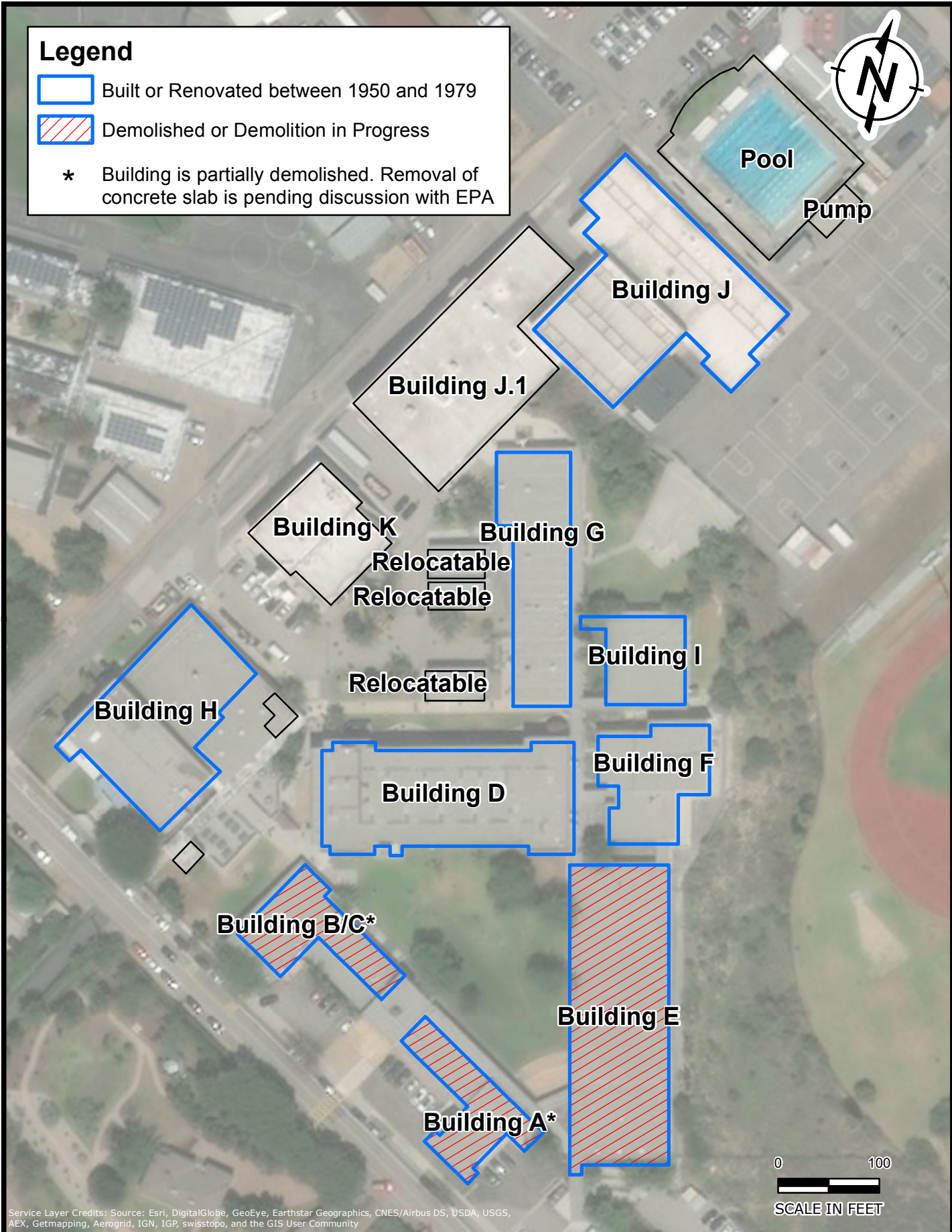
If conditions are encountered that vary substantially from those anticipated, this plan may be revised to accommodate those conditions. Pursuant to 40 CFR Section 761.61(a)(3)(ii), EPA will be notified of changes to this plan, in writing, at least 14 days prior to the preferred date for implementation of the changes.

6. REFERENCES

- ENVIRON. 2014a. *Site-Specific PCB-Related Building Materials Management, Characterization and Remediation Plan for the Library and Building E Rooms 1, 5, and 8 at Malibu High School*. July 3. Available online: <http://www.smmusd.org/PublicNotices/PCBRemediationPlan070314.pdf>.
- ENVIRON. 2014b. *Supplemental Removal Information for the Library, Building E - Rooms 1, 5, and 8 and Building G - Room 506 at Malibu High School*. September 26. Available online: <http://www.smmusd.org/PublicNotices/MHSSupRemovalSSP092614.pdf>.
- EPA. 2014a. Letter from Jared Blumenfeld/EPA to Sandra Lyon/SMMUSD. October 31. Available online: http://www.smmusd.org/PublicNotices/EnvDocs/EPAtoSL_103114.pdf.
- EPA. 2014b. Letter from Steve Armann/EPA to Sandra Lyon/SMMUSD. January 27. Available online: <http://www.smmusd.org/PublicNotices/EPAletterToSL012714.pdf>
- EPA. 2015. Letter from Jeff Scott/EPA to Sandra Lyon/SMMUSD. November 2. Available online: <http://www.smmusd.org/publicnotices/MalibuSupplementalApproval.pdf>.
- EPA. 2016. Exposure Levels for Evaluation of PCBs in Indoor School Air. February 26. Available online: <https://www.epa.gov/pcbs/exposure-levels-evaluation-polychlorinated-biphenyls-pcbs-indoor-school-air>.
- Ramboll. 2018. *Notification and Request for Approval, Cleanup and Disposal of PCB Remediation Waste Plan, Buildings A and B/C*. March 2.

Legend

-  Built or Renovated between 1950 and 1979
-  Demolished or Demolition in Progress
- * Building is partially demolished. Removal of concrete slab is pending discussion with EPA

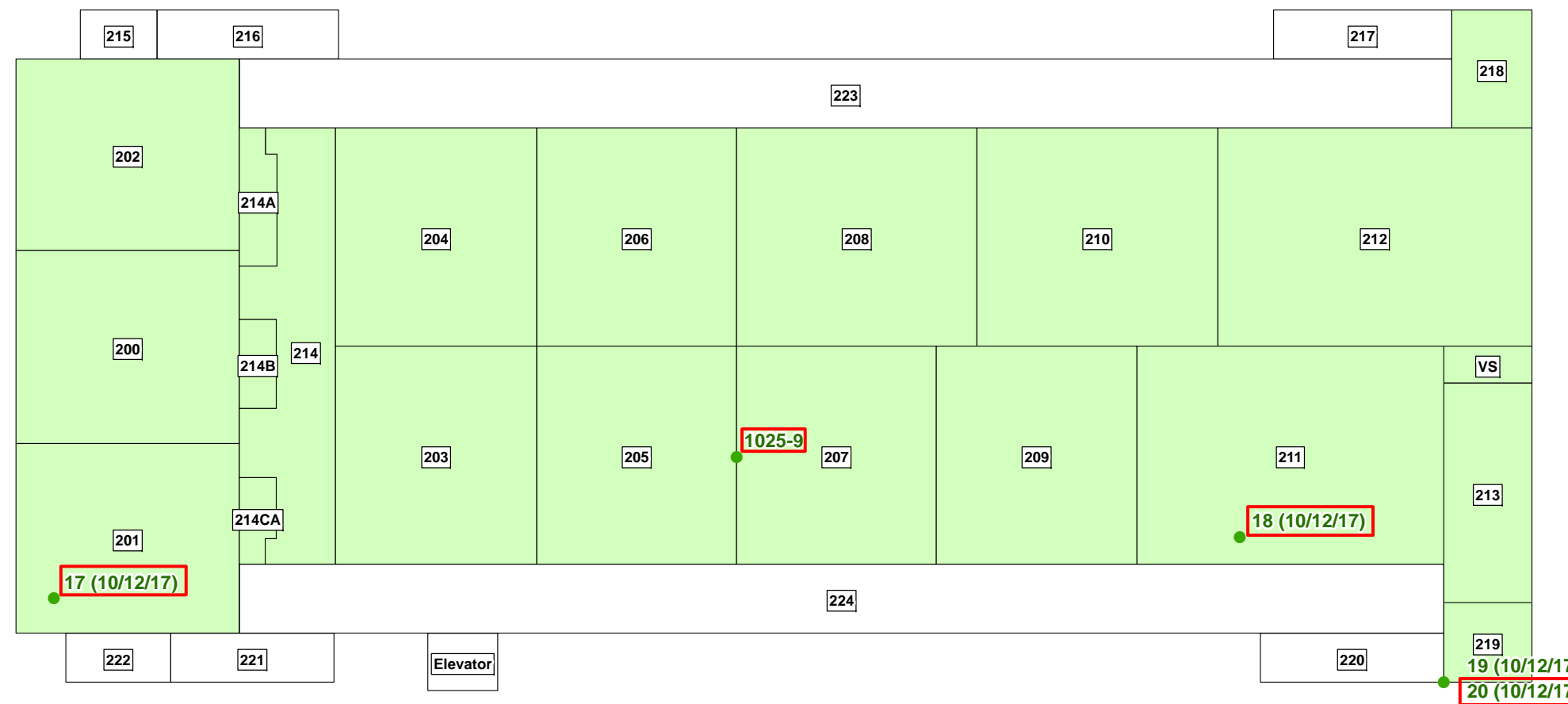
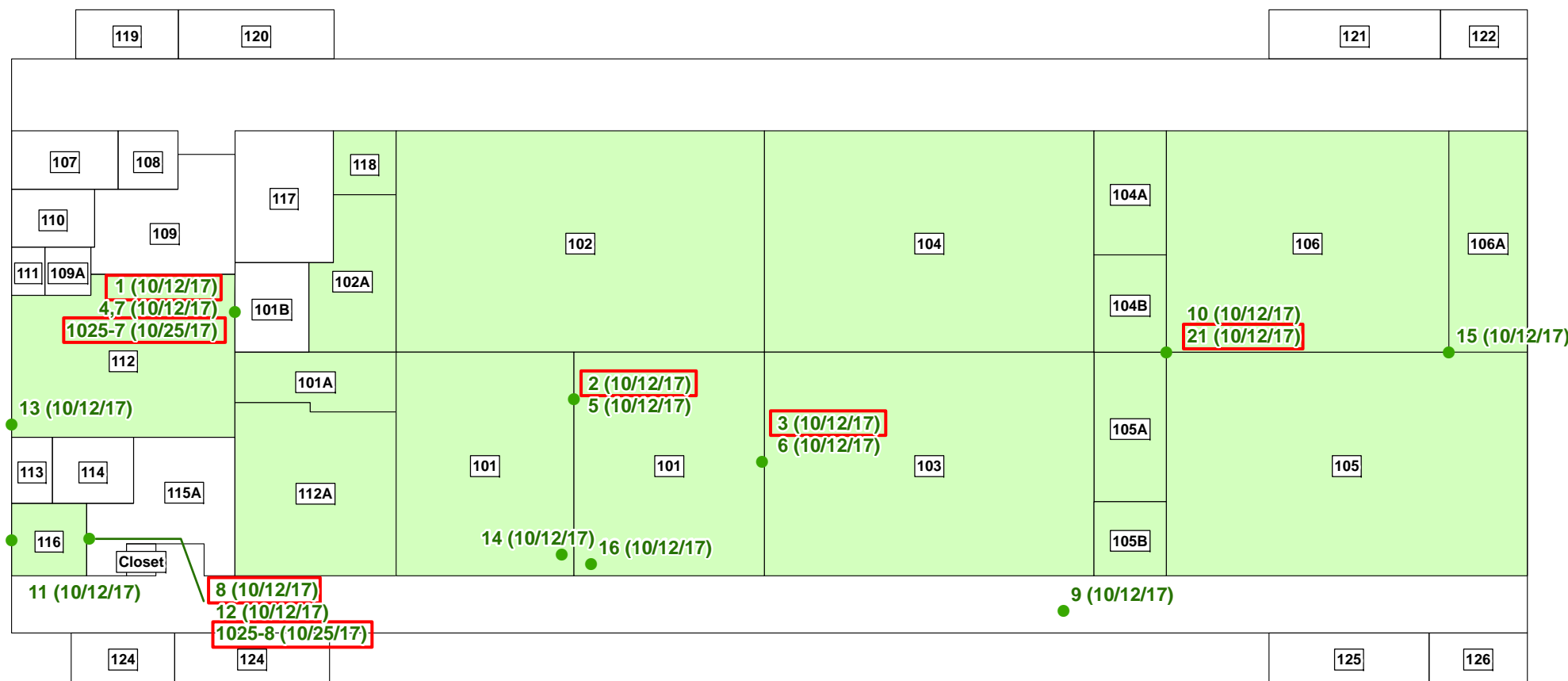


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	<p>Site Plan for Malibu High School Malibu High School 30215 Morning View Drive, Malibu, California</p>	<p>FIGURE 1</p>
DRAFTED BY: RC	DATE: 3/2/2018	PROJECT: 1690001822

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Pre-Demolition Source Bulk Samples		
Sample Number	Sample Description	Reported PCBs mg/kg (ppm)
01 (10/12/17)	9" Beige floor tile and black mastic	199 (Aroclor 1254)
02 (10/12/17)	9" Beige floor tile and black mastic	86.1 (Aroclor 1254)
03 (10/12/17)	9" Beige floor tile and black mastic	106 (Aroclor 1254)
1025-7	Mastic associated with 9" beige floor tile	5,390 (Aroclor 1254)
04 (10/12/17)	Adhesive for carpet	5.88 (Aroclor 1254)
05 (10/12/17)	Adhesive for carpet	11.6 (Aroclor 1254)
06 (10/12/17)	Adhesive for carpet	8.18 (Aroclor 1254)
07 (10/12/17)	4" Brown cove base and glue	3.27 (Aroclor 1254)
08 (10/12/17)	12" Light grey speckled floor tile with glue	64.4 (Aroclor 1254)
09 (10/12/17)	12" Light grey speckled floor tile with glue	5.5 (Aroclor 1254)
10 (10/12/17)	12" Light grey speckled floor tile with glue	47.6 (Aroclor 1254)
1025-8	Glue associated with 12" light grey speckled floor tile	188 (Aroclor 1254)
11 (10/12/17)	4" Grey cove base with glue	2.25 (Aroclor 1254)
12 (10/12/17)	4" Grey cove base with glue	1.51 (Aroclor 1254)
13 (10/12/17)	4" Grey cove base with glue	3.0 (Aroclor 1254)
14 (10/12/17)	4" Blue cove base with glue	2.71 (Aroclor 1254)
15 (10/12/17)	4" Blue cove base with glue	2.34 (Aroclor 1254)
16 (10/12/17)	4" Blue cove base with glue	2.17 (Aroclor 1254)
17 (10/12/17)	12" Light blue floor tile with glue	59.7 (Aroclor 1254)
18 (10/12/17)	12" Light blue floor tile with glue	117 (Aroclor 1254)
19 (10/12/17)	12" Light blue floor tile with glue	20.2 (Aroclor 1254)
20 (10/12/17)	12" Light blue floor tile with glue	78.2 (Aroclor 1254)
21 (10/12/17)	Glue associated with 12" light grey speckled floor tile	96.3 (Aroclor 1254)
1025-9	Glue associated with 12" light blue floor tile	488 (Aroclor 1254)

Notes for Table:
 - PCB detection > 50 mg/kg



Legend

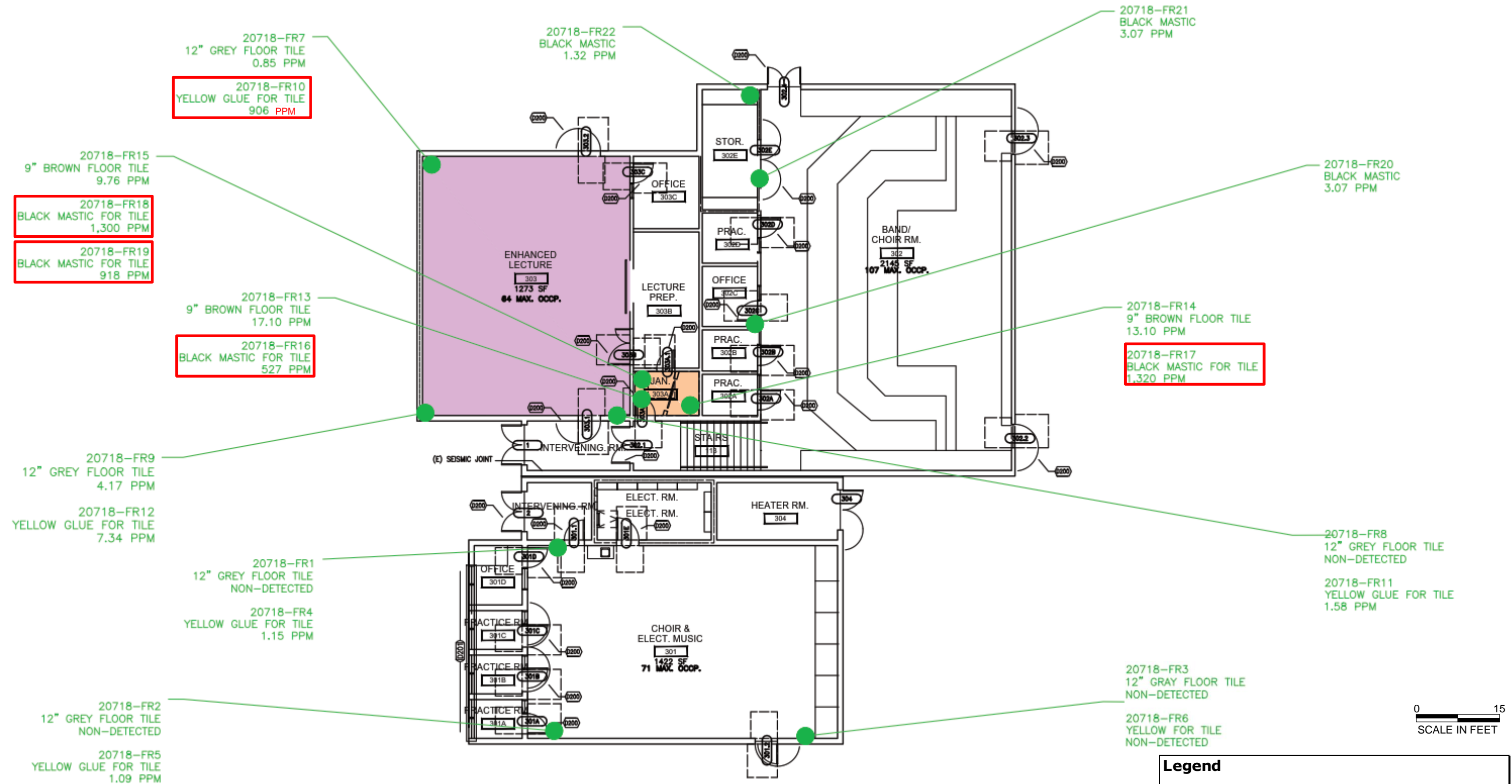
- Extent of > 50 mg/kg PCB Flooring Materials
- Pre-Demolition Source Bulk Samples
- Location of >50 mg/kg sample

Source: Alta Environmental, Sampling Location Map, dated November 10, 2017



Sample Location Map - Building D
 Malibu High School
 30215 Morning View Drive
 Malibu, California

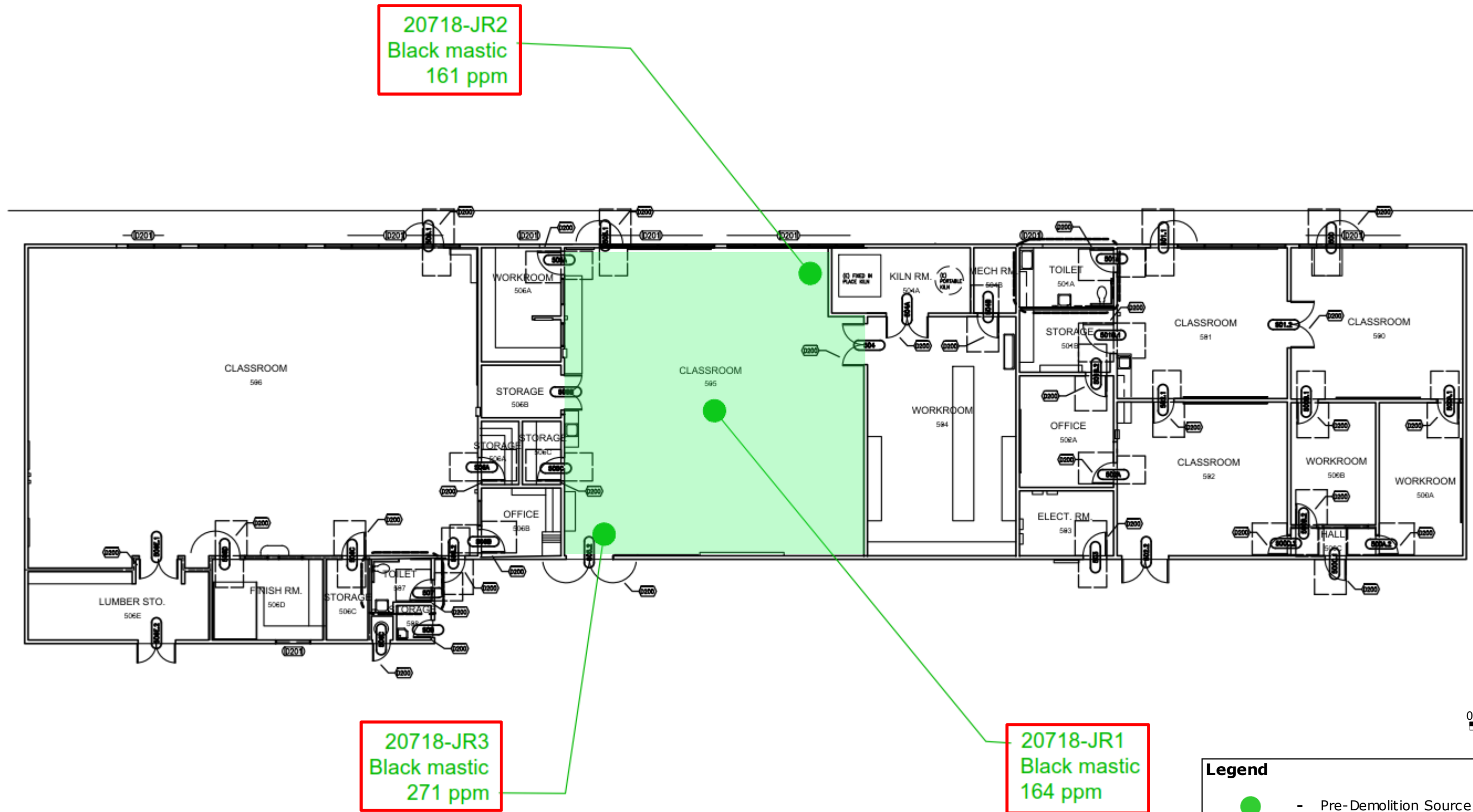
FIGURE
2



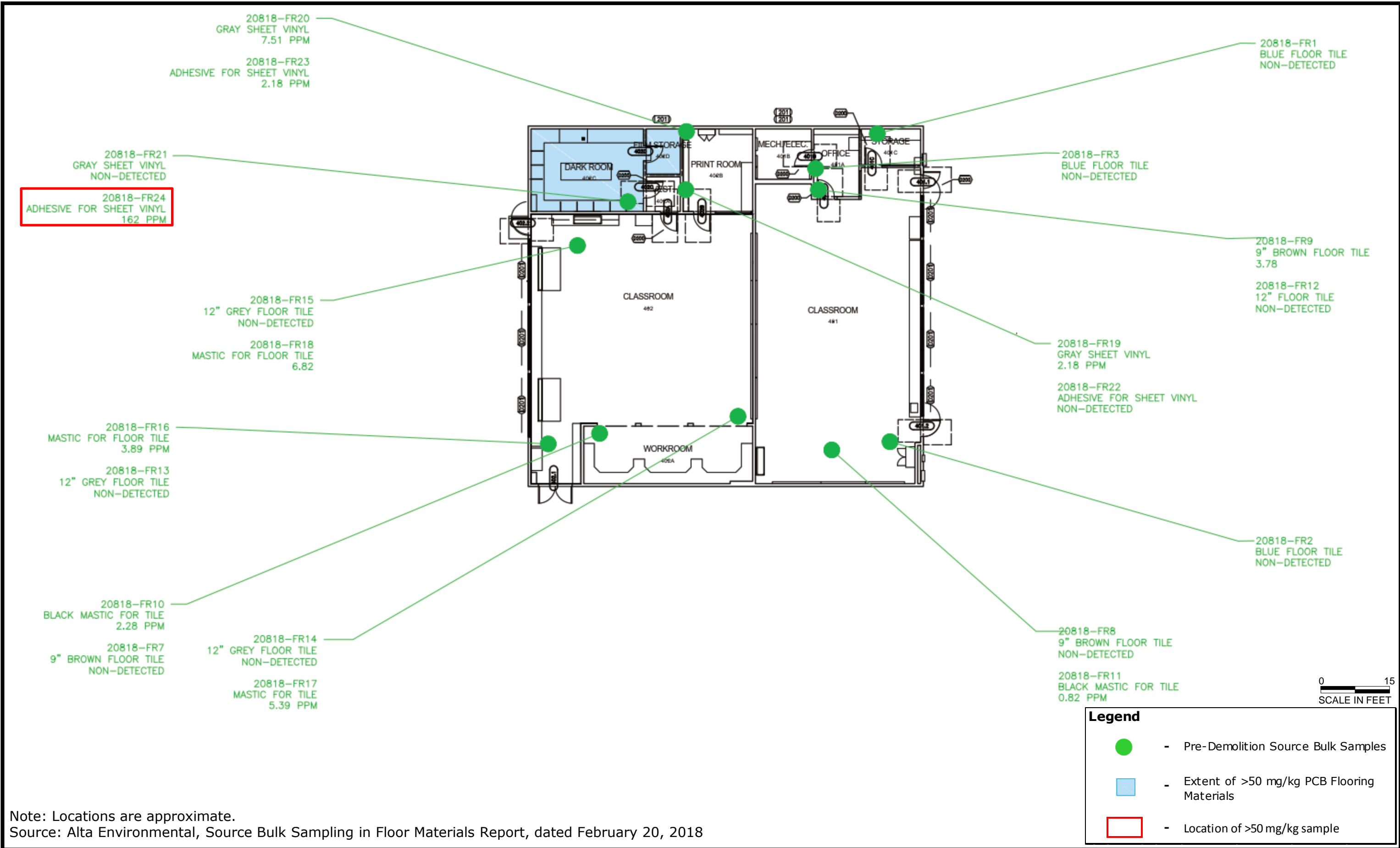
Legend

- - Pre-Demolition Source Bulk Samples
- Extent of >50 mg/kg PCB Flooring Materials
- Location of >50 mg/kg sample

Note: Locations are approximate.
 Source: Alta Environmental, Source Bulk Sampling in Floor Materials Report, dated February 20, 2018



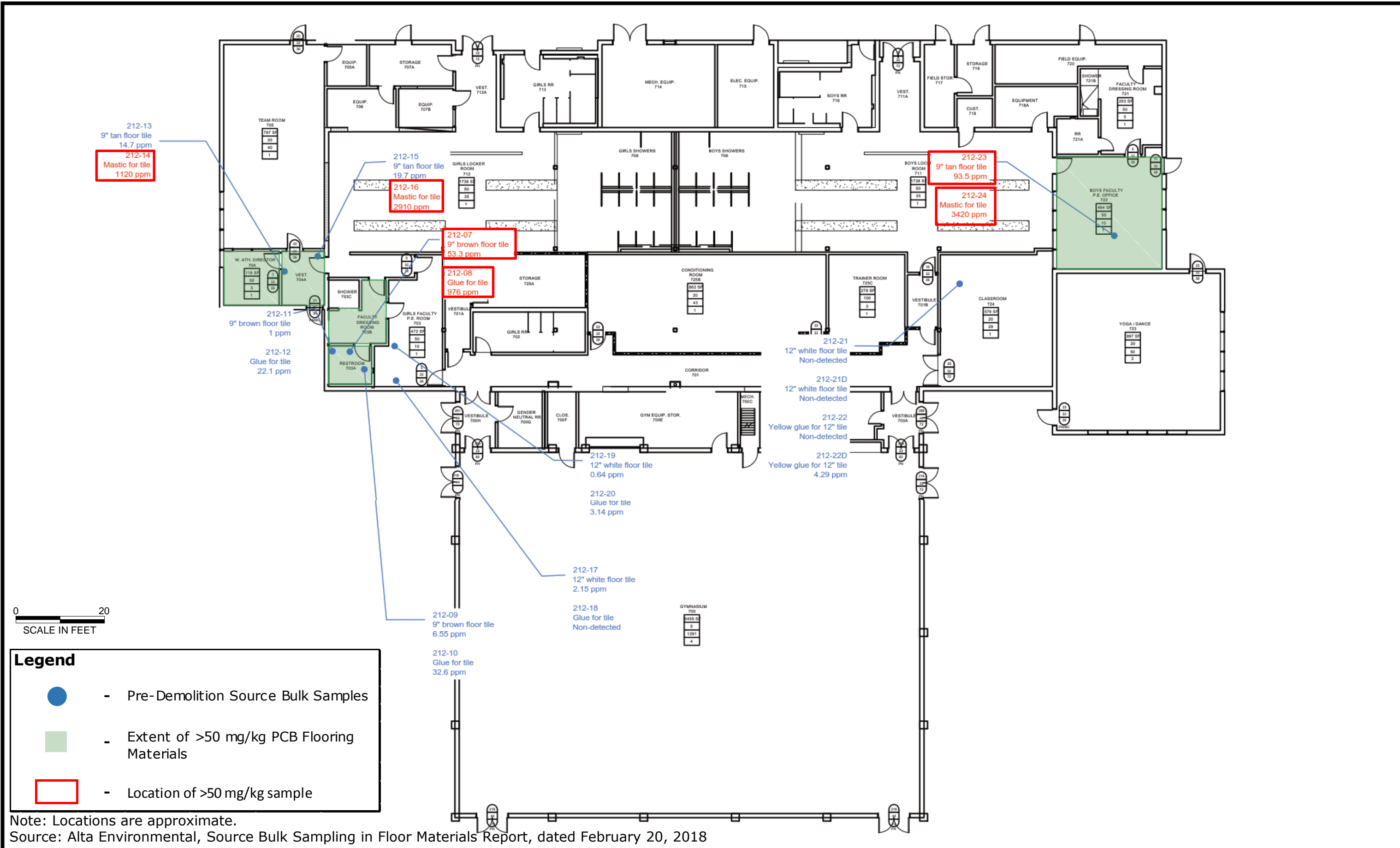
Note: Locations are approximate.
 Source: Alta Environmental, Source Bulk Sampling in Floor Materials Report, dated February 20, 2018



Note: Locations are approximate.
 Source: Alta Environmental, Source Bulk Sampling in Floor Materials Report, dated February 20, 2018

Legend

- - Pre-Demolition Source Bulk Samples
- Extent of >50 mg/kg PCB Flooring Materials
- Location of >50 mg/kg sample





LABORATORY REPORTS

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

Date: October 20, 2017

Mr. Cesar Ruvalcaba
Alta Environmental
3777 Long Beach Blvd, Annex Building
Long Beach, CA 90807
Tel: (562) 495-5777 Email: Cesar.Ruvalcaba@altaenviron.com

Project: **Malibu - Bldg. D**
Lab I.D.: **171013-36 through -56**

Dear Mr. Ruvalcaba:

The **analytical results** for the solid samples, received by our laboratory on October 13, 2017, are attached. The samples were received intact, and accompanying chain of custody.

Enviro-Chem appreciates the opportunity to provide you and your company this and other services. Please do not hesitate to call us if you have any questions.

Sincerely,



Curtis Desilets
Vice President/Program Manager



Andy Wang
Laboratory Manager

LABORATORY REPORT

CUSTOMER: **Alta Environmental**
 3777 Long Beach Blvd, Annex Building, Long Beach, CA 90807
 Tel: (562) 495-5777 Email: Cesar.Ruvalcaba@altaenviron.com

PROJECT: **Malibu - Bldg D**

DATE SAMPLED: 10/12/17

MATRIX: SOLID

REPORT TO: MR. CESAR RUVALCABA

DATE RECEIVED: 10/13/17

DATE EXTRACTED: 10/16-17/17

DATE ANALYZED: 10/18-19/17

DATE REPORTED: 10/20/17

PCBs ANALYSIS; PAGE 1 OF 2

METHOD: EPA 3540C/8082

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

SAMPLE I.D.	LAB I.D.	PCB- 1016	PCB- 1221	PCB- 1232	PCB- 1242	PCB- 1248	PCB- 1254	PCB- 1260	TOTAL PCBs*	DF
01	171013-36	ND	ND	ND	ND	ND	199 ***	ND	199 ***	50
02	171013-37	ND	ND	ND	ND	ND	86.1 ***	ND	86.1 ***	5
03	171013-38	ND	ND	ND	ND	ND	106 **	ND	106 ***	20
04	171013-39	ND	ND	ND	ND	ND	5.88	ND	5.88	10
05	171013-40	ND	ND	ND	ND	ND	11.6	ND	11.6	10
06	171013-41	ND	ND	ND	ND	ND	8.18	ND	8.18	10
07	171013-42	ND	ND	ND	ND	ND	3.27	ND	3.27	1
08	171013-43	ND	ND	ND	ND	ND	64.4 ***	ND	64.4 ***	10
09	171013-44	ND	ND	ND	ND	ND	5.50	ND	5.50	1
10	171013-45	ND	ND	ND	ND	ND	47.6	ND	47.6	10
11	171013-46	ND	ND	ND	ND	ND	2.25	ND	2.25	1
12	171013-47	ND	ND	ND	ND	ND	1.51	ND	1.51	1
13	171013-48	ND	ND	ND	ND	ND	3.00	ND	3.00	1
14	171013-49	ND	ND	ND	ND	ND	2.71	ND	2.71	1
15	171013-50	ND	ND	ND	ND	ND	2.34	ND	2.34	1
16	171013-51	ND	ND	ND	ND	ND	2.17	ND	2.17	2
17	171013-52	ND	ND	ND	ND	ND	59.7 ***	ND	59.7 ***	10
Method Blank		ND	ND	ND	ND	ND	ND	ND	ND	1

PQL 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5

COMMENTS

DF = Dilution Factor

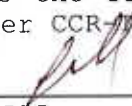
PQL = Practical Quantitation Limit

Actual Detection Limit = DF X PQL

ND = Non-Detected Or Below the Actual Detection Limit

* = Sum of the PCB 1016, 1221, 1232, 1242, 1248, 1254 and 1260

*** = The concentration exceeds the TTLC Limit of 50, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

LABORATORY REPORT

CUSTOMER: **Alta Environmental**
 3777 Long Beach Blvd, Annex Building, Long Beach, CA 90807
 Tel: (562) 495-5777 Email: Cesar.Ruvalcaba@altaenviron.com

PROJECT: **Malibu - Bldg D**

DATE RECEIVED: 10/13/17
 DATE EXTRACTED: 10/16-17/17
 DATE ANALYZED: 10/19/17
 DATE REPORTED: 10/20/17

DATE SAMPLED: 10/12/17
 MATRIX: SOLID
 REPORT TO: MR. CESAR RUVALCABA

PCBs ANALYSIS; PAGE 2 OF 2

METHOD: EPA 3540C/8082


UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

SAMPLE I.D.	LAB I.D.	PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260	TOTAL PCBs*	DF
18	171013-53	ND	ND	ND	ND	ND	117 ***	ND	117 ***	20
19	171013-54	ND	ND	ND	ND	ND	20.2	ND	20.2	4
20	171013-55	ND	ND	ND	ND	ND	78.2 ***	ND	78.2 ***	10
21	171013-56	ND	ND	ND	ND	ND	96.3 ***	ND	96.3 ***	20
Method Blank		ND	ND	ND	ND	ND	ND	ND	ND	1

PQL 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5

COMMENTS

DF = Dilution Factor
 PQL = Practical Quantitation Limit
 Actual Detection Limit = DF X PQL
 ND = Non-Detected Or Below the Actual Detection Limit
 * = Sum of the PCB 1016, 1221, 1232, 1242, 1248, 1254 and 1260
 *** = The concentration exceeds the TTLC Limit of 50, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)

Data Reviewed and Approved by: 

CAL-DHS ELAP CERTIFICATE No.: 1555

Enviro-Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766

Tel (909)590-5905 Fax (909)590-5907

EPA 8082 QA/QC Report

Matrix: **Soil/Solid/Sludge**

Date Analyzed: 10/18-19/2017

Unit: mg/Kg(PPM)

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

Spiked Sample Lab I.D.: 171018-LCS1/2

Analyte	S.R.	spk conc	MS	%REC	MSD	%REC	%RPD	ACP %RPD	ACP %REC
PCB (1016+1260)	0.000	0.100	0.080	80%	0.075	75%	7%	0-20%	70-130

Lab Control Spike (LCS) Recovery:

Analyte	spk conc	LCS	% REC	ACP %REC
PCB (1016+1260)	0.100	0.086	86%	75-125

Surrogate Recovery	ACP%	ACP%	%REC	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.		MB	171013-86	171013-87	171013-94	171013-36	171013-37	171013-38	
Tetra-chloro-meta-xylene	50-150	111%	125%	148%	98%	136%	133%	112%	
Decachlorobipneyl	50-150	89%	107%	79%	71%	87%	89%	75%	

Surrogate Recovery	%REC	%REC	%REC	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.	171013-39	171013-40	171013-41	171013-42	171013-43	171013-44	171013-45	171013-46	
Tetra-chloro-meta-xylene	115%	114%	140%	127%	148%	139%	126%	124%	
Decachlorobipneyl	69%	76%	120%	68%	92%	92%	94%	83%	

Surrogate Recovery	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.	171013-47	171013-48	171013-49	171013-50	171013-51	171013-52
Tetra-chloro-meta-xylene	125%	128%	120%	116%	136%	104%
Decachlorobipneyl	108%	108%	91%	92%	95%	89%

S.R. = Sample Result

* = Surrogate fail due to matrix interference (If Marked)

spk conc = Spike Concentration

Note: LCS, MS, MSD are in control therefore results are in control.

%REC = Percent Recovery

ACP %RPD = Acceptable Percent RPD Range

ACP %REC = Acceptable Percent Recovery Range

Analyzed and Reviewed By: 

Final Reviewer: _____

Enviro-Chem, Inc. Laboratories
 1214 E. Lexington Avenue,
 Pomona, CA 91766
 Tel: (909) 590-5905 Fax: (909) 590-5907
CA-DHS ELAP CERTIFICATE #1555

Turnaround Time
 Same Day
 24 Hours
 48 Hours
 72 Hours
 1 Week (Standard)
 Other:

MATRIX	No. OF CONTAINERS	TEMPERATURE	PRESERVATION	EM Method PCB 5082	Misc./PO#
					SMSD-17-7239

SAMPLE ID	LAB ID	SAMPLING DATE TIME		MATRIX	No. OF CONTAINERS	TEMPERATURE	PRESERVATION	Analysis Required				COMMENTS
		DATE	TIME									
01	171013-36	10-12-17	1600	Bulk	1		ICE	X				
02	- 37		1610		1							
03	- 38		1615		1							
04	- 39		1620		1							
05	- 40		1622		1							
06	- 41		1625		1							
07	- 42		1630		1							
08	- 43		1638		1							
09	- 44		1640		1							
10	- 45		1645		1							Split Set
11	- 46		1720		1							
12	- 47		1728		1							
13	- 48		1730		1							
14	- 49		1820		1							
15	- 50		1828		1							

Company Name: <u>Alta Environmental</u>	Project Contact: <u>C. Ruvalcaba</u>	Sampler's Signature:
Address: <u>3777 Long Beach Blvd</u>	Tel:	Project Name/ID: <u>Malibu H.S.</u>
City/State/Zip: <u>Long Beach Ca</u>	Fax:	<u>Bldg D</u>

Relinquished by:	Received by:	Date & Time: <u>10/13/2017 10:15 AM</u>	Instructions for Sample Storage After Analysis: <input type="radio"/> Dispose of <input type="radio"/> Return to Client <input type="radio"/> Store (30 Days) <input type="radio"/> Other:
Relinquished by:	Received by:	Date & Time:	
Relinquished by:	Received by:	Date & Time:	

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

Date: October 30, 2017

Mr. Cesar Ruvalcaba
Alta Environmental
3777 Long Beach Blvd, Annex Building
Long Beach, CA 90807
Tel: (562) 495-5777 Email: Cesar.Ruvalcaba@altaenviron.com

Project: **SMSD-17-7239 / Malibu High Bldg. D**
Lab I.D.: **171026-7 through -15**

Dear Mr. Ruvalcaba:

The **analytical results** for the solid samples, received by our laboratory on October 26, 2017, are attached. The samples were received intact, and accompanying chain of custody.

Enviro-Chem appreciates the opportunity to provide you and your company this and other services. Please do not hesitate to call us if you have any questions.

Sincerely,



Curtis Desilets
Vice President/Program Manager



Andy Wang
Laboratory Manager

LABORATORY REPORT

CUSTOMER: **Alta Environmental**
 3777 Long Beach Blvd, Annex Building, Long Beach, CA 90807
 Tel: (562) 495-5777 Email: Cesar.Ruvalcaba@altaenviron.com

PROJECT: **SMSD-17-7239 / Malibu High Bldg. D**

DATE SAMPLED: 10/25/17 DATE RECEIVED: 10/26/17
 MATRIX: SOLID DATE EXTRACTED: 10/26-27/17
 REPORT TO: MR. CESAR RUVALCABA DATE ANALYZED: 10/27/17
 DATE REPORTED: 10/30/17

PCBs ANALYSIS

METHOD: EPA 3540C/8082

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

SAMPLE I.D.	LAB I.D.	PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260	TOTAL PCBs*	DF
1025-1	171026-7	ND	ND	ND	ND	ND	21.6	ND	21.6	1
1025-2	171026-8	ND	ND	ND	ND	ND	6.79	ND	6.79	1
1025-3	171026-9	ND	ND	ND	ND	ND	1.77	ND	1.77	1
1025-4	171026-10	ND	ND	ND	ND	ND	0.713	ND	0.713	1
1025-5	171026-11	ND	ND	ND	ND	ND	2.53	ND	2.53	1
1025-6	171026-12	ND	ND	ND	ND	ND	0.515	ND	0.515	1
1025-7	171026-13	ND	ND	ND	ND	ND	5390	ND	5390	800
1025-8	171026-14	ND	ND	ND	ND	ND	188	ND	188	40
1025-9	171026-15	ND	ND	ND	ND	ND	488	ND	488	40
Method Blank		ND	ND	ND	ND	ND	ND	ND	ND	1

PQL 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5

COMMENTS

DF = Dilution Factor
 PQL = Practical Quantitation Limit
 Actual Detection Limit = DF X PQL
 ND = Non-Detected Or Below the Actual Detection Limit
 * = Sum of the PCB 1016, 1221, 1232, 1242, 1248, 1254 and 1260
 *** = The concentration exceeds the TTLC Limit of 50, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)

Data Reviewed and Approved by: _____
 CAL-DHS ELAP CERTIFICATE No.: 1555

Enviro-Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909)590-5905 Fax (909)590-5907

EPA 8082 QA/QC Report

Matrix: **Soil/Solid/Sludge**

Date Analyzed: 10/27/2017

Unit: mg/Kg(PPM)

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

Spiked Sample Lab I.D.: 171027-LCS1/2

Analyte	S.R.	spk conc	MS	%REC	MSD	%REC	%RPD	ACP %RPD	ACP %REC
PCB (1016+1260)	0.000	0.100	0.082	82%	0.078	78%	5%	0-20%	70-130

Lab Control Spike (LCS) Recovery:

Analyte	spk conc	LCS	% REC	ACP %REC
PCB (1016+1260)	0.100	0.091	91%	75-125

Surrogate Recovery	ACP%	ACP%	171026-13	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.		MB	171026-13	171026-14	171026-15	171026-7	171026-8	171026-9	
Tetra-chloro-meta-xylene	50-150	112%	134%	114%	113%	114%	117%	120%	
Decachlorobipneyl	50-150	85%	95%	105%	79%	87%	94%	96%	

Surrogate Recovery	%REC	%REC	%REC	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.	171026-10	171026-11	171026-12						
Tetra-chloro-meta-xylene	114%	123%	120%						
Decachlorobipneyl	87%	101%	124%						

Surrogate Recovery	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.						
Tetra-chloro-meta-xylene						
Decachlorobipneyl						

S.R. = Sample Result

* = Surrogate fail due to matrix interference (If Marked)

spk conc = Spike Concentration

Note: LCS, MS, MSD are in control therefore results are in control.

%REC = Percent Recovery

ACP %RPD = Acceptable Percent RPD Range

ACP %REC = Acceptable Percent Recovery Range

Analyzed and Reviewed By: 

Final Reviewer: 

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

Date: February 13, 2018

Mr. Cesar Ruvalcaba
Alta Environmental
3777 Long Beach Blvd, Annex Building
Long Beach, CA 90807
Tel: (562) 495-5777 Email: Cesar.Ruvalcaba@altaenviron.com

Project: **Malibu - Bldg. F**
Lab I.D.: **180209-59 through -80**

Dear Mr. Ruvalcaba:

The **analytical results** for the solid samples, received by our laboratory on February 9, 2018, are attached. The samples were received intact, and accompanying chain of custody.

Enviro-Chem appreciates the opportunity to provide you and your company this and other services. Please do not hesitate to call us if you have any questions.

Sincerely,



Curtis Desilets
Vice President/Program Manager



Andy Wang
Laboratory Manager

LABORATORY REPORT

CUSTOMER: **Alta Environmental**
 3777 Long Beach Blvd, Annex Building, Long Beach, CA 90807
 Tel: (562) 495-5777 Email: Cesar.Ruvalcaba@altaenviron.com

PROJECT: **Malibu - Bldg. F**

DATE RECEIVED: 02/09/18
 DATE SAMPLED: 02/07/18 DATE EXTRACTED: 02/09&12/18
 MATRIX: SOLID DATE ANALYZED: 02/12&13/18
 REPORT TO: MR. CESAR RUVALCABA DATE REPORTED: 02/13/18

PCBs ANALYSIS

METHOD: EPA 3540C/8082; PAGE 1 OF 2


UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

SAMPLE I.D.	LAB I.D.	PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260	TOTAL PCBs*	DF
20718-FR1	180209-59	ND	ND	ND	ND	ND	ND	ND	ND	1
20718-FR2	180209-60	ND	ND	ND	ND	ND	ND	ND	ND	1
20718-FR3	180209-61	ND	ND	ND	ND	ND	ND	ND	ND	1
20718-FR4	180209-62	ND	ND	ND	ND	ND	1.15	ND	1.15	1
20718-FR5	180209-63	ND	ND	ND	ND	ND	1.09	ND	1.09	1
20718-FR6	180209-64	ND	ND	ND	ND	ND	ND	ND	ND	2^
20718-FR7	180209-65	ND	ND	ND	ND	ND	0.850	ND	0.850	1
20718-FR8	180209-66	ND	ND	ND	ND	ND	ND	ND	ND	1
20718-FR9	180209-67	ND	ND	ND	ND	ND	4.17	ND	4.17	1
20718-FR10	180209-68	ND	ND	ND	ND	ND	906***	ND	906***	80
20718-FR11	180209-69	ND	ND	ND	ND	ND	1.58	ND	1.58	1
20718-FR12	180209-70	ND	ND	ND	ND	ND	7.34	ND	7.34	2
20718-FR13	180209-71	ND	ND	ND	ND	ND	17.9	ND	17.9	1
20718-FR14	180209-72	ND	ND	ND	ND	ND	13.1	ND	13.1	1
20718-FR15	180209-73	ND	ND	ND	ND	ND	9.76	ND	9.76	1
20718-FR16	180209-74	ND	ND	ND	ND	ND	527***	ND	527***	40
20718-FR17	180209-75	ND	ND	ND	ND	ND	1320***	ND	1320***	40
20718-FR18	180209-76	ND	ND	ND	ND	ND	1300***	ND	1300***	80
20718-FR19	180209-77	ND	ND	ND	ND	ND	918***	ND	918***	80
20718-FR20	180209-78	ND	ND	ND	ND	ND	2.58	ND	2.58	1
Method Blank		ND	ND	ND	ND	ND	ND	ND	ND	1

PQL 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5

COMMENTS

DF = Dilution Factor
 PQL = Practical Quantitation Limit
 Actual Detection Limit = DF X PQL
 ND = Non-Detected Or Below the Actual Detection Limit
 * = Sum of the PCB 1016, 1221, 1232, 1242, 1248, 1254 and 1260
 *** = The concentration exceeds the TTLC Limit of 50, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)
 ^ = Actual detection limit raised due to matrix interference

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

Enviro-Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909)590-5905 Fax (909)590-5907

EPA 8082 QA/QC Report

Matrix: **Soil/Solid/Sludge**
Unit: mg/Kg(PPM)

Date Analyzed: 2/12-13/2018

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)
Spiked Sample Lab I.D.: **180212-LCS1/2**

Analyte	S.R.	spk conc	MS	%REC	MSD	%REC	%RPD	ACP %RPD	ACP %REC
PCB (1016+1260)	0.000	0.100	0.109	109%	0.113	113%	4%	0-20%	70-130

Lab Control Spike (LCS) Recovery:

Analyte	spk conc	LCS	% REC	ACP %REC
PCB (1016+1260)	0.100	0.103	103%	75-125

Surrogate Recovery	ACP%	ACP%	%REC	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.		MB	180209-59	180209-60	180209-61	180209-62	180209-63	180209-64	
Tetra-chloro-meta-xylene	50-150	111%	118%	114%	108%	97%	118%	114%	
Decachlorobipneyl	50-150	91%	96%	90%	80%	81%	81%	110%	

Surrogate Recovery	%REC	%REC	%REC	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.	180209-65	180209-66	180209-67	180209-68	180209-69	180209-70	180209-71	180209-72	
Tetra-chloro-meta-xylene	109%	122%	119%	125%	97%	107%	131%	106%	
Decachlorobipneyl	85%	79%	126%	100%	105%	102%	135%	72%	

Surrogate Recovery	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.	180209-73	180209-74	180209-75	180209-76	180209-77	180209-78
Tetra-chloro-meta-xylene	104%	117%	120%	118%	130%	114%
Decachlorobipneyl	80%	101%	92%	79%	87%	110%

S.R. = Sample Result

* = Surrogate fail due to matrix interference (If Marked)

spk conc = Spike Concentration

Note: LCS, MS, MSD are in control therefore results are in control.

%REC = Percent Recovery

ACP %RPD = Acceptable Percent RPD Range

ACP %REC = Acceptable Percent Recovery Range

Analyzed and Reviewed By: 

Final Reviewer: 

LABORATORY REPORT

CUSTOMER: **Alta Environmental**
 3777 Long Beach Blvd, Annex Building, Long Beach, CA 90807
 Tel: (562) 495-5777 Email: Cesar.Ruvalcaba@altaenviron.com

PROJECT: **Malibu - Bldg. F**

DATE RECEIVED: 02/09/18
 DATE EXTRACTED: 02/09&12/18
 DATE ANALYZED: 02/12/18
 DATE REPORTED: 02/13/18

DATE SAMPLED: 02/07/18
 MATRIX: SOLID
 REPORT TO: MR. CESAR RUVALCABA

PCBs ANALYSIS

METHOD: EPA 3540C/8082; PAGE 2 OF 2

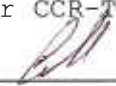
UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

SAMPLE I.D.	LAB I.D.	PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260	TOTAL PCBs*	DF
<u>20718-FR21</u>	<u>180209-79</u>	<u>ND</u>	<u>ND</u>	<u>ND</u>	<u>ND</u>	<u>ND</u>	<u>3.07</u>	<u>ND</u>	<u>3.07</u>	<u>1</u>
<u>20718-FR22</u>	<u>180209-80</u>	<u>ND</u>	<u>ND</u>	<u>ND</u>	<u>ND</u>	<u>ND</u>	<u>1.32</u>	<u>ND</u>	<u>1.32</u>	<u>1</u>
<u>Method Blank</u>		<u>ND</u>	<u>ND</u>	<u>ND</u>	<u>ND</u>	<u>ND</u>	<u>ND</u>	<u>ND</u>	<u>ND</u>	<u>1</u>

PQL 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5

COMMENTS

DF = Dilution Factor
 PQL = Practical Quantitation Limit
 Actual Detection Limit = DF X PQL
 ND = Non-Detected Or Below the Actual Detection Limit
 * = Sum of the PCB 1016, 1221, 1232, 1242, 1248, 1254 and 1260
 *** = The concentration exceeds the TTLC Limit of 50, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

Enviro-Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909)590-5905 Fax (909)590-5907

EPA 8082 QA/QC Report

Matrix: **Soil/Solid/Sludge**

Date Analyzed: 2/12-13/2018

Unit: mg/Kg(PPM)

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

Spiked Sample Lab I.D.: **180212-LCS1/2**

Analyte	S.R.	spk conc	MS	%REC	MSD	%REC	%RPD	ACP %RPD	ACP %REC
PCB (1016+1260)	0.000	0.100	0.090	90%	0.094	94%	5%	0-20%	70-130

Lab Control Spike (LCS) Recovery:

Analyte	spk conc	LCS	% REC	ACP %REC
PCB (1016+1260)	0.100	0.090	90%	75-125

Surrogate Recovery	ACP%	ACP%	%REC	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.		MB	180209-79	180209-80	180209-81	180209-82	180209-83	180209-84	
Tetra-chloro-meta-xylene	50-150	115%	129%	141%	134%	125%	144%	118%	
Decachlorobipneyl	50-150	98%	113%	132%	88%	76%	97%	98%	

Surrogate Recovery	%REC	%REC	%REC	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.	180209-85	180209-86	180209-87	180209-88	180209-89	180209-90	180209-91	180209-92	
Tetra-chloro-meta-xylene	94%	119%	143%	134%	116%	117%	136%	100%	
Decachlorobipneyl	76%	85%	109%	105%	84%	98%	96%	95%	

Surrogate Recovery	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.	180209-93	180209-94	180209-95	180209-96	180209-97	180209-98
Tetra-chloro-meta-xylene	120%	113%	113%	109*%	114%	109%
Decachlorobipneyl	88%	123%	80%	75%	131%	94%

S.R. = Sample Result

* = Surrogate fail due to matrix interference (If Marked)


spk conc = Spike Concentration

Note: LCS, MS, MSD are in control therefore results are in control.

%REC = Percent Recovery

ACP %RPD = Acceptable Percent RPD Range

ACP %REC = Acceptable Percent Recovery Range

Analyzed and Reviewed By: 

Final Reviewer: 

Enviro-Chem, Inc. Laboratories

1214 E. Lexington Avenue,
Pomona, CA 91766

Tel: (909) 590-5905 Fax: (909) 590-5907

CA-DHS ELAP CERTIFICATE #1555

Turnaround Time

- Same Day
- 24 Hours
- 48 Hours
- 72 Hours
- 1 Week (Standard)
- Other: _____

RUSH

MATRIX	No. OF CONTAINERS	TEMPERATURE	PRESERVATION	Analysis Required							Misc./PO#
											Malibu Bldg F

SAMPLE ID	LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	No. OF CONTAINERS	TEMPERATURE	PRESERVATION	Analysis Required							COMMENTS		
20718-F21	18020P-5P	2-7-18	1700	Bulk	1		ICE	X									
FR2	-60		1705		1			X									<p>ATO 48 HOUR RUSH -CAD</p>
FR3	-61		1715		1			X									
FR4	-62		1730		1			X									
FR5	-63		1735		1			X									
FR6	-64		1740		1			X									
FR7	-65		1800		1			X									
FR8	-66		1815		1			X									
FR9	-67		1830		1			X									
FR10	-68		1845		1			X									
FR11	-6P		1848		1			X									
FR12	-70		1850		1			X									
FR13	-71		1900		1			X									
FR14	-72		1902		1			X									
FR15	-73		1905		1			X									

Company Name: Alta Environmental Project Contact: Cesar Ruvalec Sampler's Signature: _____

Address: 3777 Long Beach Blvd Tel: _____ Project Name/ID: _____

City/State/Zip: Long Beach Ca Fax: _____ Malibu - Bldg F

Relinquished by: _____ 2-9-18 1140	Received by: _____	Date & Time: <u>2/9/2018 1140 AM</u>	Instructions for Sample Storage After Analysis: <input type="radio"/> Dispose of <input type="radio"/> Return to Client <input checked="" type="radio"/> Store (30 Days) <input type="radio"/> Other: _____
Relinquished by:	Received by:	Date & Time:	
Relinquished by:	Received by:	Date & Time:	

CHAIN OF CUSTODY RECORD

Date: 2-9-18

WHITE WITH SAMPLE • YELLOW TO CLIENT

Enviro-Chem, Inc. Laboratories

1214 E. Lexington Avenue,
Pomona, CA 91766

Tel: (909) 590-5905 Fax: (909) 590-5907

CA-DHS ELAP CERTIFICATE #1555

Turnaround Time

Same Day

24 Hours

48 Hours

72 Hours

1 Week (Standard)

Other:



MATRIX	No. OF CONTAINERS	TEMPERATURE	PRESERVATION	EPA Method 8002 PCB												Misc./PO#
				Malibu Bldg F												

SAMPLE ID	LAB ID	SAMPLING		MATRIX	No. OF CONTAINERS	TEMPERATURE	PRESERVATION	Analysis Required												COMMENTS							
		DATE	TIME																								
2018- FR16	18020P-74	2-07-18	1915	Bulk	1		Ice	X																			
FR 17	-75		1925		1			X																			
FR 18	-76		1926		1			X																			
FR 19	-77		1927		1			X																			
FR 20	-78		2000		1			X																			
FR 21	-79		2015		1			X																			
FR 22	-80		2030		1			X																			

ATO
48 HOUR
RUSH -
CSJ

Company Name: <u>Alta Environmental</u>			Project Contact: <u>Cesar Furestach</u>			Sampler's Signature:		
Address: <u>3777 Laguna Beach Blvd</u>			Tel:			Project Name/ID: <u>Malibu Bldg F</u>		
City/State/Zip: <u>Lag Beach Ca</u>			Fax:					
Relinquished by:		<u>2-9-18</u>	Received by:		<u>2/9/2018</u>	Date & Time: <u>11:40 AM</u>		
Relinquished by:		<u>1140</u>	Received by:			Date & Time:		
Relinquished by:			Received by:			Date & Time:		

Instructions for Sample Storage After Analysis:
 Dispose of Return to Client Store (30 Days)
 Other:

CHAIN OF CUSTODY RECORD

Date: 2-9-18

WHITE WITH SAMPLE • YELLOW TO CLIENT

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

Date: February 13, 2018

Mr. Cesar Ruvalcaba
Alta Environmental
3777 Long Beach Blvd, Annex Building
Long Beach, CA 90807
Tel: (562) 495-5777 Email: Cesar.Ruvalcaba@altaenviron.com

Project: **Malibu - Bldg. G&I**
Lab I.D.: **180209-81 through -104**

Dear Mr. Ruvalcaba:

The **analytical results** for the solid samples, received by our laboratory on February 9, 2018, are attached. The samples were received intact, and accompanying chain of custody.

Enviro-Chem appreciates the opportunity to provide you and your company this and other services. Please do not hesitate to call us if you have any questions.

Sincerely,



Curtis Desilets
Vice President/Program Manager



Andy Wang
Laboratory Manager

LABORATORY REPORT

CUSTOMER: **Alta Environmental**
 3777 Long Beach Blvd, Annex Building, Long Beach, CA 90807
 Tel: (562) 495-5777 Email: Cesar.Ruvalcaba@altaenviron.com

PROJECT: **Malibu - Bldg. G&I**

DATE SAMPLED: 02/07-08/18 DATE RECEIVED: 02/09/18
 MATRIX: SOLID DATE EXTRACTED: 02/09&12/18
 REPORT TO: MR. CESAR RUVALCABA DATE ANALYZED: 02/12&13/18
 DATE REPORTED: 02/13/18

PCBs ANALYSIS

METHOD: EPA 3540C/8082; PAGE 1 OF 2


UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

SAMPLE I.D.	LAB I.D.	PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260	TOTAL PCBs*	DF
20718-JR1	180209-81	ND	ND	ND	ND	ND	161***	ND	161***	8
20718-JR2	180209-82	ND	ND	ND	ND	ND	164***	ND	164***	8
20718-JR3	180209-83	ND	ND	ND	ND	ND	271***	ND	271***	16
20818-FR1	180209-84	ND	ND	ND	ND	ND	ND	ND	ND	1
20818-FR2	180209-85	ND	ND	ND	ND	ND	ND	ND	ND	1
20818-FR3	180209-86	ND	ND	ND	ND	ND	ND	ND	ND	1
20818-FR7	180209-87	ND	ND	ND	ND	ND	4.79	ND	4.79	1
20818-FR8	180209-88	ND	ND	ND	ND	ND	4.26	ND	4.26	4
20818-FR9	180209-89	ND	ND	ND	ND	ND	3.78	ND	3.78	4
20818-FR10	180209-90	ND	ND	ND	ND	ND	9.10	ND	9.10	4
20818-FR11	180209-91	ND	ND	ND	ND	ND	0.823	ND	0.82	1
20818-FR12	180209-92	ND	ND	ND	ND	ND	2.28	ND	2.28	1
20818-FR13	180209-93	ND	ND	ND	ND	ND	ND	ND	ND	1
20818-FR14	180209-94	ND	ND	ND	ND	ND	ND	ND	ND	1
20818-FR15	180209-95	ND	ND	ND	ND	ND	ND	ND	ND	1
20818-FR16	180209-96	ND	ND	ND	ND	ND	3.89	ND	3.89	4
20818-FR17	180209-97	ND	ND	ND	ND	ND	5.39	ND	5.39	4
20818-FR18	180209-98	ND	ND	ND	ND	ND	6.82	ND	6.82	4
Method Blank		ND	ND	ND	ND	ND	ND	ND	ND	1

PQL 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5

COMMENTS

DF = Dilution Factor
 PQL = Practical Quantitation Limit
 Actual Detection Limit = DF X PQL
 ND = Non-Detected Or Below the Actual Detection Limit
 * = Sum of the PCB 1016, 1221, 1232, 1242, 1248, 1254 and 1260
 *** = The concentration exceeds the TTIC Limit of 50, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

LABORATORY REPORT

CUSTOMER: **Alta Environmental**
 3777 Long Beach Blvd, Annex Building, Long Beach, CA 90807
 Tel: (562) 495-5777 Email: Cesar.Ruvalcaba@altaenviron.com

PROJECT: **Malibu - Bldg. G&I**

DATE SAMPLED: 02/07-08/18

MATRIX: SOLID

REPORT TO: MR. CESAR RUVALCABA

DATE RECEIVED: 02/09/18

DATE EXTRACTED: 02/09&12/18

DATE ANALYZED: 02/13/18

DATE REPORTED: 02/13/18

PCBs ANALYSIS

METHOD: EPA 3540C/8082; PAGE 2 OF 2

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM


SAMPLE I.D.	LAB I.D.	PCB- 1016	PCB- 1221	PCB- 1232	PCB- 1242	PCB- 1248	PCB- 1254	PCB- 1260	TOTAL PCBs*	DF
20818-FR19	180209-99	ND	ND	ND	ND	ND	ND	ND	ND	1
20818-FR20	180209-100	ND	ND	ND	ND	ND	7.51	ND	7.51	1
20818-FR21	180209-101	ND	ND	ND	ND	ND	ND	ND	ND	1
20818-FR22	180209-102	ND	ND	ND	ND	ND	ND	ND	ND	1
20818-FR23	180209-103	ND	ND	ND	ND	ND	2.18	ND	2.18	1
20818-FR24	180209-104	ND	ND	ND	ND	ND	162***	ND	162***	16

Method Blank ND ND ND ND ND ND ND ND ND ND 1

PQL 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5

COMMENTS

DF = Dilution Factor
 PQL = Practical Quantitation Limit
 Actual Detection Limit = DF X PQL
 ND = Non-Detected Or Below the Actual Detection Limit
 * = Sum of the PCB 1016, 1221, 1232, 1242, 1248, 1254 and 1260
 *** = The concentration exceeds the TTLC Limit of 50, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)

Data Reviewed and Approved by: 
 CAL-DHS ELAP CERTIFICATE No.: 1555

Enviro-Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766

Tel (909)590-5905 Fax (909)590-5907

EPA 8082 QA/QC Report

Matrix: **Soil/Solid/Sludge**

Date Analyzed: 2/12-13/2018

Unit: mg/Kg(PPM)

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

Spiked Sample Lab I.D.: **180212-LCS1/2**

Analyte	S.R.	spk conc	MS	%REC	MSD	%REC	%RPD	ACP %RPD	ACP %REC
PCB (1016+1260)	0.000	0.100	0.090	90%	0.094	94%	5%	0-20%	70-130

Lab Control Spike (LCS) Recovery:

Analyte	spk conc	LCS	% REC	ACP %REC
PCB (1016+1260)	0.100	0.090	90%	75-125

Surrogate Recovery	ACP%	ACP%	%REC	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.		MB	180209-79	180209-80	180209-81	180209-82	180209-83	180209-84	
Tetra-chloro-meta-xylene	50-150	115%	129%	141%	134%	125%	144%	118%	
Decachlorobipneyl	50-150	98%	113%	132%	88%	76%	97%	98%	

Surrogate Recovery	%REC	%REC	%REC	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.	180209-85	180209-86	180209-87	180209-88	180209-89	180209-90	180209-91	180209-92	
Tetra-chloro-meta-xylene	94%	119%	143%	134%	116%	117%	136%	100%	
Decachlorobipneyl	76%	85%	109%	105%	84%	98%	96%	95%	

Surrogate Recovery	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.	180209-93	180209-94	180209-95	180209-96	180209-97	180209-98
Tetra-chloro-meta-xylene	120%	113%	113%	109*	114%	109%
Decachlorobipneyl	88%	123%	80%	75%	131%	94%

S.R. = Sample Result

* = Surrogate fail due to matrix interference (If Marked)

spk conc = Spike Concentration

Note: LCS, MS, MSD are in control therefore results are in control.

%REC = Percent Recovery

ACP %RPD = Acceptable Percent RPD Range

ACP %REC = Acceptable Percent Recovery Range

Analyzed and Reviewed By: 

Final Reviewer: _____

Enviro-Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766

Tel (909)590-5905 Fax (909)590-5907

EPA 8082 QA/QC Report

Matrix: **Soil/Solid/Sludge**
 Unit: **mg/Kg(PPM)**

Date Analyzed: 2/13/2018

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)
Spiked Sample Lab I.D.: **180212-LCS1/2**

Analyte	S.R.	spk conc	MS	%REC	MSD	%REC	%RPD	ACP %RPD	ACP %REC
PCB (1016+1260)	0.000	0.100	0.088	88%	0.088	88%	1%	0-20%	70-130

Lab Control Spike (LCS) Recovery:

Analyte	spk conc	LCS	% REC	ACP %REC
PCB (1016+1260)	0.100	0.098	98%	75-125

Surrogate Recovery	ACP%	ACP%	%REC	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.		MB	180209-99	180209-100	180209-101	180209-102	180209-103	180209-104	
Tetra-chloro-meta-xylene	50-150	115%	124%	138%	113%	122%	126%	123%	
Decachlorobipneyl	50-150	90%	83%	112%	109%	113%	89%	93%	

Surrogate Recovery	%REC	%REC	%REC	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.									
Tetra-chloro-meta-xylene									
Decachlorobipneyl									

Surrogate Recovery	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.						
Tetra-chloro-meta-xylene						
Decachlorobipneyl						

S.R. = Sample Result

* = Surrogate fail due to matrix interference (If Marked)

spk conc = Spike Concentration

Note: LCS, MS, MSD are in control therefore results are in control.

%REC = Percent Recovery

ACP %RPD = Acceptable Percent RPD Range

ACP %REC = Acceptable Percent Recovery Range

Analyzed and Reviewed By: 

Final Reviewer: 

Enviro-Chem, Inc. Laboratories
 1214 E. Lexington Avenue,
 Pomona, CA 91766
 Tel: (909) 590-5905 Fax: (909) 590-5907
CA-DHS ELAP CERTIFICATE #1555

Turnaround Time
 Same Day
 24 Hours
 48 Hours
 72 Hours
 1 Week (Standard)
 Other:

RUSH

MATRIX	No. OF CONTAINERS	TEMPERATURE	PRESERVATION	Misc./PO#
				Malibu Blvd 6:1

SAMPLE ID	LAB ID	SAMPLING DATE TIME		MATRIX	No. OF CONTAINERS	TEMPERATURE	PRESERVATION	Analysis Required				COMMENTS
		DATE	TIME									
2084-FR12	190509-P2	20878	1908	Bulk	1		Ice	X				
FR13	P3		1923		1			X				A TO 48 HOUR RUSH - CM
FR14	-P4		1940		1			X				
FR15	-P5		1979		1			X				
FR16	-P6		1952		1			X				
FR17	-P7		2010		1			X				
FR18	-P8		2020		1			X				
FR19	-P9		2033		1			X				
FR20	-100		2078		1			X				
FR21	-101		2057		1			X				
FR22	-102		2110		1			X				
FR23	-103		2126		1			X				
FR24	-104		2143		1			X				
FR25	-105		2145		1			X				

Company Name: Atta Environmental	Project Contact: Cesar Pineda	Sampler's Signature:
Address: 3777 Long Blvd Bldg	Tel:	Project Name/ID: Malibu Blvd 6:1
City/State/Zip: Long Beach Ca	Fax:	

Relinquished by: 2-09-18	Received by:	Date & Time: 2/9/2018 11:42 AM	Instructions for Sample Storage After Analysis: <input type="radio"/> Dispose of <input type="radio"/> Return to Client <input type="radio"/> Store (30 Days) <input type="radio"/> Other:
Relinquished by: 1140	Received by:	Date & Time:	
Relinquished by:	Received by:	Date & Time:	

CHAIN OF CUSTODY RECORD

Date: 20818 -

WHITE WITH SAMPLE • YELLOW TO CLIENT

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

Date: February 15, 2018

Mr. Cesar Ruvalcaba
Alta Environmental
3777 Long Beach Blvd, Annex Building
Long Beach, CA 90807
Tel: (562)495-5777 Email: Cesar.Ruvalcaba@altaenviron.com

Project: **Malibu High School - Building J&H**
Lab I.D.: **180213-43 through -68**

Dear Mr. Ruvalcaba:

The **analytical results** for the solid samples, received by our laboratory on February 13, 2018, are attached. The samples were received intact, and accompanying chain of custody.

Enviro-Chem appreciates the opportunity to provide you and your company this and other services. Please do not hesitate to call us if you have any questions.

Sincerely,



Curtis Desilets
Vice President/Program Manager



Andy Wang
Laboratory Manager

LABORATORY REPORT

CUSTOMER: **Alta Environmental**
 3777 Long Beach Blvd, Annex Building, Long Beach, CA 90807
 Tel: (562) 495-5777 Email: Cesar.Ruvalcaba@altaenviron.com

PROJECT: **Malibu High School - Building J&H**

DATE SAMPLED: 02/12/18

MATRIX: SOLID

REPORT TO: MR. CESAR RUVALCABA

DATE RECEIVED: 02/13/18

DATE EXTRACTED: 02/13-14/18

DATE ANALYZED: 02/14&15/18

DATE REPORTED: 02/15/18

PCBs ANALYSIS

METHOD: EPA 3540C/8082; PAGE 1 OF 2

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

SAMPLE I.D.	LAB I.D.	PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260	TOTAL PCBs*	DF
212-01	180213-43	ND	ND	ND	ND	ND	ND	ND	ND	1
212-02	180213-44	ND	ND	ND	ND	ND	ND	ND	ND	4^
212-03	180213-45	ND	ND	ND	ND	ND	ND	ND	ND	1
212-04	180213-46	ND	ND	ND	ND	ND	ND	ND	ND	4^
212-05	180213-47	ND	ND	ND	ND	ND	ND	ND	ND	1
212-06	180213-48	ND	ND	ND	ND	ND	ND	ND	ND	1
212-07	180213-49	ND	ND	ND	ND	ND	53.3***	ND	53.3***	5
212-08	180213-50	ND	ND	ND	ND	ND	976***	ND	976***	40
212-09	180213-51	ND	ND	ND	ND	ND	6.55	ND	6.55	1
212-10	180213-52	ND	ND	ND	ND	ND	32.6	ND	32.6	4
212-11	180213-53	ND	ND	ND	ND	ND	1.00	ND	1.00	1
212-12	180213-54	ND	ND	ND	ND	ND	22.1	ND	22.1	2
212-13	180213-55	ND	ND	ND	ND	ND	14.7	ND	14.7	1
212-14	180213-56	ND	ND	ND	ND	ND	1120***	ND	1120***	80
212-15	180213-57	ND	ND	ND	ND	ND	19.7	ND	19.7	1
212-16	180213-58	ND	ND	ND	ND	ND	2910***	ND	2910***	160
212-17	180213-59	ND	ND	ND	ND	ND	2.15	ND	2.15	1
212-18	180213-60	ND	ND	ND	ND	ND	ND	ND	ND	1
212-19	180213-61	ND	ND	ND	ND	ND	0.640	ND	0.640	1
212-20	180213-62	ND	ND	ND	ND	ND	3.14	ND	3.14	2
Method Blank		ND	ND	ND	ND	ND	ND	ND	ND	1

PQL 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5

COMMENTS

DF = Dilution Factor

PQL = Practical Quantitation Limit


Actual Detection Limit = DF X PQL

ND = Non-Detected Or Below the Actual Detection Limit

* = Sum of the PCB 1016, 1221, 1232, 1242, 1248, 1254 and 1260

*** = The concentration exceeds the TTLC Limit of 50, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)

^ = Actual detection limit raised due to matrix interference

Data Reviewed and Approved by: 

CAL-DHS ELAP CERTIFICATE No.: 1555

LABORATORY REPORT

CUSTOMER: **Alta Environmental**
 3777 Long Beach Blvd, Annex Building, Long Beach, CA 90807
 Tel: (562) 495-5777 Email: Cesar.Ruvalcaba@altaenviron.com

PROJECT: **Malibu High School - Building J&H**

DATE SAMPLED: 02/12/18

MATRIX: SOLID

REPORT TO: MR. CESAR RUVALCABA

DATE RECEIVED: 02/13/18

DATE EXTRACTED: 02/13-14/18

DATE ANALYZED: 02/14&15/18

DATE REPORTED: 02/15/18

PCBs ANALYSIS

METHOD: EPA 3540C/8082; PAGE 2 OF 2

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

SAMPLE I.D.	LAB I.D.	PCB- 1016	PCB- 1221	PCB- 1232	PCB- 1242	PCB- 1248	PCB- 1254	PCB- 1260	TOTAL PCBs*	DF
212-21	180213-63	ND	ND	ND	ND	ND	ND	ND	ND	1
212-21D	180213-64	ND	ND	ND	ND	ND	ND	ND	ND	1
212-22	180213-65	ND	ND	ND	ND	ND	ND	ND	ND	2^
212-22D	180213-66	ND	ND	ND	ND	ND	4.29	ND	4.29	4
212-23	180213-67	ND	ND	ND	ND	ND	93.5***	ND	93.5***	5
212-24	180213-68	ND	ND	ND	ND	ND	3420***	ND	3420***	160

Method Blank ND ND ND ND ND ND ND ND ND 1

PQL 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5

COMMENTS

DF = Dilution Factor

PQL = Practical Quantitation Limit


Actual Detection Limit = DF X PQL

ND = Non-Detected Or Below the Actual Detection Limit

* = Sum of the PCB 1016, 1221, 1232, 1242, 1248, 1254 and 1260

*** = The concentration exceeds the TTLC Limit of 50, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)

^ = Actual detection limit raised due to matrix interference

Data Reviewed and Approved by: 

CAL-DHS ELAP CERTIFICATE No.: 1555

Enviro-Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909)590-5905 Fax (909)590-5907

EPA 8082 QA/QC Report

Matrix: **Soil/Solid/Sludge**
Unit: mg/Kg(PPM)

Date Analyzed: 2/14-15/2018

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)
Spiked Sample Lab I.D.: **180214-LCS1/2**

Analyte	S.R.	spk conc	MS	%REC	MSD	%REC	%RPD	ACP %RPD	ACP %REC
PCB (1016+1260)	0.000	0.100	0.088	88%	0.094	94%	6%	0-20%	70-130

Lab Control Spike (LCS) Recovery:

Analyte	spk conc	LCS	% REC	ACP %REC
PCB (1016+1260)	0.100	0.108	108%	75-125

Surrogate Recovery	ACP%	ACP%	%REC	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.		MB	180213-63	180213-64	180213-65	180213-66	180213-67	180213-68	
Tetra-chloro-meta-xylene	50-150	134%	125%	134%	124%	127%	121%	113%	
Decachlorobipneyl	50-150	96%	98%	92%	101%	121%	83%	106%	

Surrogate Recovery	%REC	%REC	%REC	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.									
Tetra-chloro-meta-xylene									
Decachlorobipneyl									

Surrogate Recovery	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.						
Tetra-chloro-meta-xylene						
Decachlorobipneyl						

S.R. = Sample Result

* = Surrogate fail due to matrix interference (If Marked)

spk conc = Spike Concentration

Note: LCS, MS, MSD are in control therefore results are in control.

%REC = Percent Recovery

ACP %RPD = Acceptable Percent RPD Range

ACP %REC = Acceptable Percent Recovery Range

Analyzed and Reviewed By: 

Final Reviewer: 

Enviro-Chem, Inc. Laboratories
 1214 E. Lexington Avenue,
 Pomona, CA 91766
 Tel: (909) 590-5905 Fax: (909) 590-5907
 CA-DHS ELAP CERTIFICATE #1555

Turnaround Time
 Same Day
 24 Hours
 48 Hours
 72 Hours
 1 Week (Standard)
 Other:

MATRIX	No. OF CONTAINERS	TEMPERATURE	PRESERVATION	EM 808 L				Misc./PO#

SAMPLE ID	LAB ID	SAMPLING DATE TIME		MATRIX	No. OF CONTAINERS	TEMPERATURE	PRESERVATION	Analysis Required				COMMENTS
		DATE	TIME									
212-01	180213-43	2/12/18	1700	Bulk			Ice	X				
-02	-44		1715				1x 402 (W)	X				
-03	-45		1745					X				
-04	-46		1800					X				
-05	-47		1815					X				
-06	-48		1830					X				
-07	-49		1845					X				
-08	-50		1900					X				
-09	-51		1915					X				
-10	-52		1925					X				
-11	-53		1935					X				
-12	-54		1945					X				
-13	-55		1955					X				
-14	-56		2005					X				
-15	-57		2010					X				

Company Name: ALTA Environmental	Project Contact: Cesar.Ruvalcaba@altaenviron.com	Sampler's Signature: J.R. / S.F.
Address: 3777 Long Beach Blvd, Annex Bldg	Tel:	Project Name/ID: Malibu High School
City/State/Zip: Long Beach CA 90807	Fax:	Building: J + H

Relinquished by: <i>Salt J</i> 2/13/18 12:00	Received by: <i>Jessie P</i>	Date & Time: 2/13/18 1300	Instructions for Sample Storage After Analysis: <input type="checkbox"/> Dispose of <input type="checkbox"/> Return to Client <input type="checkbox"/> Store (30 Days) <input type="checkbox"/> Other:
Relinquished by:	Received by:	Date & Time:	
Relinquished by:	Received by:	Date & Time:	

CHAIN OF CUSTODY RECORD

Date: _____

WHITE WITH SAMPLE - YELLOW TO CLIENT

Page _____ of _____

Enviro-Chem, Inc. Laboratories
 1214 E. Lexington Avenue,
 Pomona, CA 91766
 Tel: (909) 590-5905 Fax: (909) 590-5907
 CA-DHS ELAP CERTIFICATE #1555

Turnaround Time
 Same Day
 24 Hours
 48 Hours
 72 Hours
 1 Week (Standard)
 Other:

RUEN

SAMPLE ID	LAB ID	SAMPLING DATE TIME		MATRIX	No. OF CONTAINERS	TEMPERATURE	PRESERVATION	Analysis Required										COMMENTS			
		DATE	TIME					1	2	3	4	5	6	7	8	9	10				
212-16	180213-18	2/12/18	2015	Rmk	1	100%	Ice	X													
-17	-19		2025					X													
-18	-60		2035					X													
-19	-61		2045					X													
-20	-62		2055					X													
-21 18 S.F.	-63		2105					X													
-21D	-64		2115					X													Duplicate
-22	-65		2120					X													
-22D	-66		2125					X													Split set
-23	-67		2135					X													
-24	-68		2145					X													

Company Name: ALTA Environmental		Project Contact: Cesar.Ruvalcaba@altaenviron.com		Sampler's Signature: J.R. / S.F.	
Address: 3777 Long Beach Blvd, Annex Bldg		Tel:		Project Name/ID: Maribu High School	
City/State/Zip: Long Beach CA 90807		Fax:		Bridget J & H	
Relinquished by: Scott Jan 2/13/18 12:00	Received by: [Signature]	Date & Time: 2/13/18 1200		Instructions for Sample Storage After Analysis: <input type="radio"/> Dispose of <input type="radio"/> Return to Client <input type="radio"/> Store (30 Day) <input type="radio"/> Other:	
Relinquished by:	Received by:	Date & Time:			
Relinquished by:	Received by:	Date & Time:			

CHAIN OF CUSTODY RECORD