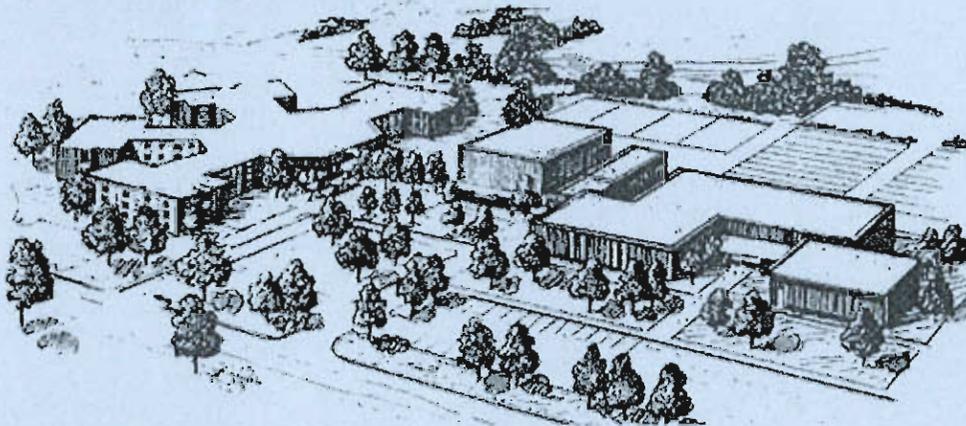


REPORT OF FINDINGS

New Bedford High School Indoor Polychlorinated Biphenyls Sampling



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1.0 INTRODUCTION

TRC Environmental Corporation (TRC) was retained by the City of New Bedford (City) to perform indoor air sampling and other environmental testing for polychlorinated biphenyls (PCBs) in the interior of New Bedford High School (NBHS) located on Hathaway Boulevard in New Bedford, Massachusetts (see Figure 1). Up to this point, TRC had acted in an advisory capacity for other air monitoring activities by another consultant at the newly constructed Keith Middle School (KMS), but was retained for the NBHS sampling when scope and scale of the NBHS sampling effort required additional technical and equipment resources.

TRC performed the required air monitoring work in accordance with the draft Indoor PCB Sampling Plan (Plan) prepared on an expedited basis and submitted to Ms. Kimberly Tisa, PCB Coordinator for United States Environmental Protection Agency (EPA) Region 1 on August 21, 2006 for review and comment. Sampling was initiated on Tuesday, August 22, 2006 and completed on August 23, 2006. The results of this work are detailed herein.

Subsequent sections of this report are organized as follows: Section 2 (Background), Section 3 (Technical Approach/Sampling Summary), Section 4 (Field Modifications to the Plan), Section 5 (Results), Section 6 (Discussion), Section 7 (Data Validation/Quality Summary), Section 8 (Conclusions and Recommendations) and Section 9 (References). Relevant supporting materials such as laboratory data reports, etc., are provided in the appendices and, where warranted, on the enclosed compact disk (CD).

2.0 BACKGROUND

From April 19 to April 21, 2006 BETA Group, Inc. (BETA) at the direction of the City collected eight air samples from selected locations at NBHS using high-volume sampling techniques to assess concentrations of airborne PCBs. The concentrations of total PCBs found in NBHS indoor locations by BETA ranged from 0.0043 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) to $0.0519 \mu\text{g}/\text{m}^3$. One of the air sampling results ($0.0519 \mu\text{g}/\text{m}^3$) was slightly above the EPA established Action Level¹ of $0.05 \mu\text{g}/\text{m}^3$, but below BETA's calculated "Maximum Acceptable Level"² of $0.3 \mu\text{g}/\text{m}^3$. These comparison concentrations were developed for the EPA-required indoor air monitoring program at the new KMS, and adopted by BETA with EPA's consent for use in assessing the concentrations of airborne PCBs in NBHS. For consistency with prior work, TRC uses these numerical values for comparison to air monitoring results for PCBs at NBHS.

Since the EPA Action Level of $0.05 \mu\text{g}/\text{m}^3$ was triggered during the April 2006 sampling event, indoor air monitoring was conducted again at NBHS to evaluate if detectable concentrations of PCBs remain in the air within the school building and, if present, to evaluate if these concentrations pose a potential risk to the occupants of the school. Since NBHS was constructed prior to 1978 (when PCB production was banned) and PCBs were identified in air within NBHS, EPA requested that supplemental investigation activities be conducted to identify potential PCB source materials within the school. Historically, PCBs were widely used in building materials (see Figure 2), and a review of research by Kohler et al (2005) suggests that NBHS may have been built during peak years of PCB usage in certain building materials, such as joint sealants (see Figure 3), which were often used in buildings of concrete construction.

TRC, BETA, EPA, the Massachusetts Department of Environmental Protection (MADEP), and the City conducted a walk through of NBHS on August 11, 2006 to identify potential PCB-containing materials. On August 18, 2006, the City requested that TRC prepare a sampling plan and conduct the required sampling at NBHS. The EPA-approved Plan implemented by TRC for the NBHS sampling effort was developed based on this walk through and was designed to provide a screen for potential PCB contamination within NBHS and to diagnose potential sources of airborne PCBs (TRC, 2006).

¹ EPA's Action Level is considered a threshold for further evaluation.

² Note that the term "Maximum Acceptable Level" is a misnomer; the concentration $0.3 \mu\text{g}/\text{m}^3$ represents a long-term average concentration that corresponds to risk benchmarks established by the Massachusetts Department of Environmental Protection (MADEP), assuming 25 years of daily work place exposure. TRC used this term during the August 31, 2006 Public Involvement Plan [PIP] meeting for consistency with prior presentations by BETA, but will refer to this concentration as Acceptable Long-Term Average Exposure Concentration. Short-term exposures at this concentration level do not represent an immediate threat to health. However, if the average concentration detected from multiple monitoring rounds suggests that the Acceptable Long-Term Average Exposure Concentration will be exceeded, prompt remedial action is warranted, as proposed by the City.

3.0 TECHNICAL APPROACH/SAMPLING SUMMARY

The tasks undertaken by TRC to execute the EPA-approved Plan included the following:

- Mobilization and sampling network installation;
- Initial indoor air sampling (24-hour duration), performed in conjunction with wipe and bulk sampling of building materials, equipment, and accumulated dust;
- Expedited laboratory analysis of air, wipe and bulk samples;
- Public meeting with presentation of initial (pre-validation) data;
- Data management and data validation; and
- Preparation of this report of findings.

The NBHS interior sampling was conducted under EPA supervision and in general conformance with current industry standards and engineering practices, including protocols found in the MADEP policy entitled *Indoor Air Sampling and Evaluation Guide*, WSC Policy #02-430 dated April 2002 (MADEP, 2002), with exceptions noted herein. Bulk sampling was conducted consistent with general industry practice. Wipe sampling was conducted in a non-standard manner due to physical constraints in areas selected for sampling. The data from wipe sampling were used, with EPA concurrence, only to establish the *presence* of PCBs, not the *magnitude* of the presence of PCBs on a given surface.

3.1 Air Sampling

The indoor air sampling was conducted with EPA present and in conformance with current industry standards and engineering practices, including protocols found in MADEP (2002). Two (2) general procedures were used: low volume and high volume air sampling, as described herein. Low volume sampling methods are typically used for indoor air sampling and high-volume methods are typically used for ambient outdoor sampling. Both methods provide adequate detection limits for evaluating exposure conditions.

Low-volume Air Sampling

Twenty-three (23) indoor air samples (including one co-located pair) and background air samples were collected in accordance with EPA Method TO-10A, *Determination of Pesticides and Polychlorinated Biphenyls in Ambient Air Using Low Volume Polyurethane Foam (PUF) Sampling Followed by Gas Chromatographic/Multi-Detector Detection (GC/MD)*, January 1999 (EPA, 1999a). Air samples were collected using a low-volume personal sampling pump equipped with a glass cylinder containing a polyurethane foam (PUF) sorbent plug for the collection of gas and particulate phase PCBs (see Figure 4). Samples were collected at a flow rate of approximately five liters per minute (5 lpm) with a sampling period of approximately 24 hours for a resulting total air volume of approximately 7.2 cubic meters (7.2 m³). Please refer to TRC' Sampling Plan (2006) for details on NBHS air sampling protocols utilized by TRC.

The PUF low-volume sampler is an air sampling system designed to trap airborne PCBs vapors and is equipped with a low-flow pump. The sampling cartridge is constructed of borosilicate glass, filled with the PUF plug, and is connected to the sampling pump with flexible tubing. PUF cartridges were generally placed at an elevation within the breathing space of potential receptors at NBHS.

High-volume Air Sampling

The prior PCB air sampling work conducted by BETA at NBHS in April 2006 was performed using high-volume air sampling techniques. In order to demonstrate comparability of TRC's low-volume approach with previously used high-volume sampling methods, the two TRC background samples were also collected using EPA Method TO-4A, *Determination of Pesticides and Polychlorinated Biphenyls in Ambient Air Using High Volume Polyurethane Foam (PUF) Sampling Followed by Gas Chromatographic/Multi-Detector Detection (GC/MD)*, January 1999 (EPA, 1999b) in conjunction with low-volume sampling at the same locations. Please refer to TRC's Sampling Plan (2006) for details on NBHS air sampling protocols utilized by TRC. The high-volume air sampling pumps were co-located with the low-volume sampling pumps at the background sampling locations, and the results of samples collected using both TO-4A (high volume) and TO-10A (low volume) were used to demonstrate comparability of the two methods in achieving the project objectives.

Note that TRC selected EPA method TO-10A (low-volume sampling) as the primary sampling method over EPA Method TO-4A (high-volume sampling) for the following reasons:

- The flows from the high-volume sampler (200 to 300 liters per minute [lpm]) have the potential for resuspension of dust deposits present within the building. These resuspended dusts will cause an overstatement of actual airborne dust concentrations present in the indoor environment under normal conditions. Hence the use of high volume samplers may introduce non-representative conditions within the indoor environment.
- The low-volume sampler is a more manageable system from the perspective of sampling procedures and media preparation. The smaller sorbent cartridges can be extracted using much smaller volumes of solvent and in much less time. Hence results were available to be provided much sooner to better accommodate the City's ambitious timeline for the monitoring program.
- The high-volume PCB air samples collected by BETA in April 2006 established an expected concentration range that was achievable by the low-volume method.
- The addition of wipe and bulk samples to the sampling program eliminated the necessity for the separation of the quartz fiber pre-filter and PUF media during the analysis, as described below. The elimination of these separate analyses makes

the low-volume system, which is PUF media only (without a quartz fiber pre-filter), more desirable; and

- The use of low-volume sampling for PCBs over a 24-hour period has been accepted by other agencies (i.e., EPA Region 2) for a high-profile ambient air monitoring program taking place in New York City.

The PUF high-volume sampler is a complete air sampling system designed to simultaneously collect suspended airborne particulates as well as trap airborne organic vapors. The PUF sampler is equipped with a bypass blower motor arranged with an independent cooling fan. A dual chambered aluminum sampling module contains both filtering systems. The upper chamber supports the airborne particulate filter media in a circular filter holder. The lower chamber encapsulates a glass cartridge, which contains the PUF for vapor entrapment.

The high-volume air sampling pumps were used for the collection of PCB particulate matter on a 102-millimeter diameter quartz fiber filter upstream of the glass cylinder containing the PUF plug for the collection of gas phase PCBs. This approach is consistent with EPA Method TO-4A. The high volume samples were collected at a flow rate of approximately 250 lpm over a sampling period of approximately 24 hours for a resulting total air volume of approximately 350 cubic meters (m³). Please refer to TRC's Sampling Plan (2006) for details on TRC's sampling protocols.

Air Sampling Locations

TRC collected 24-hour air samples on August 22, 2006. Figures 5A through 5C illustrate the approximate air sampling locations. Table 1 provides a summary of the location types and numbers of PCB air samples collected at NBHS. Twenty five (25) air samples were collected from inside the school to assess PCB exposure and two (2) samples were collected from outside the building to provide background concentrations of PCBs in air. The specific classrooms were selected on the basis of input from City, EPA, and TRC as well as reconnaissance screening for airborne particulate using an aerosol monitor.

Samples were collected away from obstacles to air flow with the PUF intake at a height of four to six feet above ground level (the height of the normal breathing zone). Specific sample locations were selected based upon screening of indoor particulate using an aerosol monitor to measure the approximate level of airborne particulate matter.

With regard to the airborne particulate screening using the aerosol monitor, the rationale for the high dust area sample (B-113 Hallway) collected by TRC considered the following:

- TRC's Sampling Plan (2006) plan submitted to EPA called for an indoor air sample to be collected in a high dust area as determined using a portable dust monitor.

- A walk through the high school with a dust monitor showed that elevated dust levels could be detected in places where custodians were either sweeping the floor or using a vacuum cleaner. The dust levels in these areas would drop very soon after the custodian moved on to another area of the school.
- An area that seemed to have relatively constant elevated concentrations of airborne dust was the shipping and receiving area where deliveries are made and school custodial staff enter and exit the building in the routine course of their work and during trash disposal. TRC selected this location (B-113 Hallway) based on the belief that this area would have relatively constant elevated dust readings due to the consistently high level of activity in this area.

Table 2 summarizes the dust monitor readings collected during TRC's reconnaissance survey of the building interior.

Analytical Parameters for Air Samples

Air samples were analyzed for PCB homologs (i.e., PCBs grouped by level of chlorination) by EPA Method 680, *Determination of Pesticides and PCBs in Water and Oil/Sediment by Gas Chromatography/Mass Spectrometry* November 1985 (EPA, 1985). This analytical procedure provides for an accurate determination of total PCBs in each air sample. Please refer to TRC's Sampling Plan (2006) for the analytical laboratory's Standard Operating Procedure (SOP) for extraction and analysis of samples for PCB analysis.

Although EPA high-volume method TO-4A provides for the analysis of the cartridge and the quartz prefilter together, the PUF cartridge and the quartz fiber prefilter of the two co-located TO-4A background samples were analyzed separately to assist in an assessment of particulate associated versus vapor phase PCB concentrations within the school, the results of which are provided in the data tables provided herein. For purposes of assessing risk and comparison to the EPA Action Level and other criteria or studies as discussed herein, the total PCB concentration was used.

TRC submitted all samples under strict chain-of-custody protocols to Northeast Analytical Labs (NEA) of Schenectady, New York for laboratory analysis. The PUF samples and associated quartz fiber prefilters (for the TO-4A high-volume samples) were wrapped separately in hexane-rinsed aluminum foil and maintained on ice from collection until arrival at NEA.

3.2 Wipe Sampling

Twenty-two (22) wipe samples (including one field duplicate pair) of bulk dust and surfaces were collected using hexane-moistened gauze wipes. The dust wipe samples were collected by holding the moistened wipe with surgical gloves and thoroughly wiping the target area. Samples were placed into air-tight laboratory 4-ounce glass containers. Each container was labeled with a location specific number.

Wipe samples collected for compliance monitoring purposes are typically collected using a 100 square centimeter (cm²) acetate template. However, in this application, many of the locations targeted for wipes had unusual configurations (e.g., interiors of floor drains, difficult to access void spaces beneath lockers, heater coils, etc.); therefore, with concurrence from the EPA representative on-site, the wipe samples were collected for non-quantitative diagnostic purposes to help evaluate the presence or absence of PCBs in an area or on a surface (see Section 4 - Field Modifications to the Plan).

Wipe Sampling Locations

Wipe samples were collected from horizontal surfaces where visible dust was noted and other potential areas of accumulation (e.g., drain traps, heater coils). The location of each sample was noted in detail and recorded on a floor plan of the NBHS building. Where feasible, wipe samples were collected in the vicinity of the indoor air samples. Figures 6A through 6C illustrate the approximate wipe sampling locations. Table 3 provides a summary of the location types and numbers of PCB wipe samples collected at NBHS.

Analytical Parameters for Wipe Samples

Wipe samples were collected and analyzed for PCB Aroclors by SW-846 Method 8082, *Polychlorinated Biphenyls (PCBs) by Gas Chromatography*, Revision 0, December 1996 (EPA, 1996a). Please refer to TRC's Sampling Plan (2006) for the analytical laboratory's SOP for extraction and analysis of samples for PCB analysis.

TRC submitted all samples under strict chain-of-custody protocols to NEA of Schenectady, New York for laboratory analysis. The samples were maintained on ice from collection until arrival at NEA.

3.3 Bulk Sampling

Bulk material samples were collected using hand tools such as a knife, razor blade, scraper, laboratory spatula, etc. Samples were collected from suspect PCB-containing materials such as window caulking and glazing (interior and exterior), bulk accumulations of dust, painted surfaces, and two liquid samples. Upon collection, samples were placed into air-tight laboratory provided 8-ounce glass containers. Each container was labeled with a location specific number. TRC endeavored to collect samples in such a way so as to minimize damage to building systems and/or materials. After collection of each sample, the sampling implements were decontaminated.

Bulk Sampling Locations

Thirty-three (33) bulk material samples were collected from a variety of locations in NBHS buildings. Considerations for sampling locations included age of the materials (e.g., whether it was the original material or whether it had been replaced), color (e.g., grey paint versus green paint), and professional judgment. The location of each of the samples was noted in detail and recorded on a floor plan of the NBHS building. Figures

7A through 7C illustrate the approximate bulk sampling locations. Table 4 provides a summary of the types and numbers of PCB bulk samples collected at NBHS.

Analytical Parameters for Bulk Samples

Bulk samples were collected and analyzed for PCB Aroclors by SW-846 Method 8082, *Polychlorinated Biphenyls (PCBs) by Gas Chromatography*, Revision 0, December 1996 (EPA, 1996a). Refer to TRC's Sampling Plan (2006) for the analytical laboratory's SOP for extraction and analysis of samples for PCB analysis.

TRC submitted all samples under strict chain-of-custody protocols to NEA. The bulk samples were maintained on ice from time of collection until arrival at NEA.

3.4 Field Quality Assurance/Quality Control

Quality Assurance and Quality Control (QA/QC) were assessed using various types of QC samples, as described below:

- **Field/trip blanks** consist of clean sample media (e.g., PUF media or wipes) that accompany sample containers to the site until arrival at the laboratory in the same cooler or shipping container. Field/trip blanks were used to ensure that there was no contamination as a result of the field handling and shipment/transportation activities. One field/trip blank was submitted to the laboratory with the indoor air samples for both the TO-4A and TO-10A methods. Field/trip blanks were not included with the wipe samples.
- **Field duplicates** for air samples are co-located samples (two samples) collected next to each other in the same vertical location. Co-located samples for air consist of two (2) separate sample collection systems and operating contemporaneously at the same location. The field duplicates provide a measure of precision for the combined sampling and analysis scheme. Two indoor air field duplicate pairs were collected (Hallway Locker 1579 and classroom A110-4). The relative percent differences of the detected homologs were within established acceptance criteria (EPA, 1996b) for the field duplicate pair collected in classroom A110-4. Due to a pump failure for the original sample in the field duplicate pair collected at the Hallway Locker 1579, precision criteria could not be generated.

Field duplicates for wipe samples were an additional aliquot of an adjacent sample submitted for the same parameters as the original sample. Field duplicates provide a measure of precision for the combined sampling and analysis scheme. One wipe field duplicate pair was collected (B-288: ceiling air supply vent); results of both analyses were nondetect for all PCB Aroclors. It should be noted that bulk field duplicate pairs were not collected, as required in TRC's Sampling Plan (2006) due to the limited amount of material available for the individual samples.

- **Cooler temperature blanks** consisting of a sample containers filled with non-preserved water (potable or distilled) were included in all coolers. The laboratory used these temperature blanks to ensure that proper preservation of the samples was maintained during sample shipment. The laboratory recorded the results of the temperature blanks on the chain-of-custody or sample login form immediately upon receipt of the samples at the laboratory, prior to inventory and refrigeration. All cooler temperature blanks were within the acceptance criteria of $4^{\circ}\text{C} \pm 2^{\circ}\text{C}$.
- **Media certification checks** were performed as batch checks for all media certified clean by the laboratories. Results of the media certification checks are stored in the project files and available for review upon request.

3.5 Laboratory Data Management and Documentation

All laboratory results were delivered to TRC electronically (electronic data deliverable [EDD]) and in hard-copy form. Following the receipt of all laboratory reports, TRC tabulated the results in a spreadsheet format using the EDD. The results of all data produced by the laboratory were automatically transferred to TRC's proprietary Lowell Information System (LIS) database. No manual data entry of the results was required, therefore eliminating the introduction of errors. All raw data including chromatograms and copies of internal chains of custody were submitted by the laboratory.

All field data were recorded in the form of field notes to maintain a permanent record of all field activities. Information recorded included date, weather, individuals on site, field screening results, sampling observations and techniques, and any additional relevant information. All field notes and photographs are maintained and stored in dedicated project files.

4.0 FIELD MODIFICATIONS TO PLAN

Several adjustments to the Plan were required based on field conditions, as summarized below:

4.1 Sampling Plan Departures

The following summarizes sampling plan departures:

- Wipe sampling of flat surfaces (top of cabinets and ducts) was performed by wiping a 10 x 10 centimeter area using the template provided by NEA where possible consistent with TRC's Sampling Plan (2006). However, wipe sampling of non flat surfaces (e.g., pipes, air intake vents, cooling system coils) was performed in such a manner so as to optimize the amount of material on the gauze. This most likely resulted in wiping an area greater than 100 square centimeters but this is difficult to verify given the irregular shapes of the surfaces sampled. With EPA approval the wipe sample results were viewed in a non-quantitative manner and used simply to establish the presence or absence of PCBs in an area or on a surface.
- The hydraulic fluid from the elevator was targeted for sampling, but was not collected. The NBHS plant engineer informed TRC, EPA, and City representatives that the lifting system of the elevator was recently replaced (within the last 3 years). TRC evaluated the need to sample the lift system in consultation with EPA's in-field representative and determined that the oil did not need to be sampled.
- The ceiling board and ceiling mastic in the auto shop is considered a single sample; TRC obtained concurrence in the field from EPA's on-site representative.
- The ceiling paint (spray-on fireproofing) was not sampled since TRC determined in discussions with NBHS facilities staff that the ceiling paint is not original to the school and was installed after the PCB ban.
- The sample of the kitchen floor drain was changed from a bulk sample to a wipe sample due to the fact no bulk material was present in the drain.
- Wall paint was not collected in the girl's gym storage room. The paint was on cinder block and could not be scraped off. EPA's in-field representative acknowledged the difficulty with sample collection and agreed that the sample could not be collected.
- The coating on the underside of the ceiling in the girl's gym storage room was not collected. The material was fireproofing placed on the steel floor decking for the second floor of the gym. The material was not accessible and appeared to be

irremovable. EPA's in-field representative acknowledged the difficulty with sample collection and agreed that the sample could not be collected.

- A pump failure occurred at Hallway Locker 1579 during collection of the indoor air sample; however, this sample was collected with a field duplicate sampling system, resulting in no loss of field data from this location.
- No MS/MSDs were performed on bulk samples due to the limited amount of material available for the original analysis.

4.2 Sample Equipment Damage

Three low-volume PUF glass sampling cartridges were found broken on the floor upon retrieval at the end of the sampling event. This prevented the collection of PCB air samples from the following locations A-307-3, A-212/213-4, and a background sample in the Front of the Main Office.

4.3 Additional Samples Collected That Were Not Specified in the Plan

The following additional samples were selected for collection by EPA's in-field representative, with the acknowledgement of the City representative.

- Window caulk in the cafeteria (bulk sample).
- Ambient air sample in the Auditorium.
- Wipe sample in the auditorium.
- Foam material from a mat in the girl's gym storage area (bulk sample).
- Wipe of air vent in the girl's gym storage area.
- Exterior window glazing and caulk.

5.0 RESULTS

The following summarizes the results of the air, wipe, and bulk sample analysis.

5.1 Air Sampling Results

The results of laboratory analysis of air samples collected from NBHS are summarized in Table 5. Total PCB concentrations detected in NBHS air ranged from 0.0024 $\mu\text{g}/\text{m}^3$ to 0.31 $\mu\text{g}/\text{m}^3$. Ten (10) results (or 12 if including the 2 field duplicates) were in excess of the EPA Action Level of 0.05 $\mu\text{g}/\text{m}^3$, which EPA considers a threshold for further evaluation. As illustrated in Figure 8, one result from classroom B-240 (0.31 $\mu\text{g}/\text{m}^3$) exceeded the Acceptable Long-Term Average Exposure Concentration of 0.3 $\mu\text{g}/\text{m}^3$. One result from class room A-114-3 (0.26 $\mu\text{g}/\text{m}^3$) approached, but did not exceed, the Acceptable Long-Term Average Exposure Concentration. No PCBs were detected in the background samples in excess of the EPA Action Level. Appendix A contains a CD of NEA laboratory data for the air samples.

5.2 Wipe Sampling Results

The results of laboratory analysis of wipe samples collected from NBHS are summarized in Table 6. However, since a uniform 100 cm^2 template could not be used to establish a consistent basis for comparison of results (e.g., sample to sample), the wipe results are considered non-quantitative and used only to establish the presence or absence of PCB contaminated dust. As shown in Table 6, the items or areas with the greatest number of PCB detections include the ventilation system and areas of horizontal surface dust accumulation such as the surfaces beneath locker bottoms, tops of ducts, tops of book cases, the top of a speaker housing, and light fixtures. Eight (8) (or 9 if field duplicate included) out of the 22 wipe samples did not detect PCBs. Wipe samples where PCBs were detected are indicated on Figures 6A, 6B, and 6C. Appendix A contains a CD of NEA laboratory data for the wipe samples.

5.3 Bulk Sampling Results

The results of laboratory analysis of bulk samples collected from NBHS are summarized in Table 7. The total PCB concentrations as Aroclors ranged from 0.2 milligrams per kilogram (mg/kg) to 36.5 mg/kg.³ The highest concentration materials are summarized below:

- Return Air Duct Dust - 36.5 mg/kg
- Window caulk (classroom) - 34.4 mg/kg
- Floor mastic - 18.1 mg/kg
- Foam padding - 10.2 mg/kg (possible repository)
- Auto lift sump contents (oil/water) - 10.9 mg/kg (oil fraction)

³ Milligrams per kilogram is equivalent to parts per million (ppm).

The 22 remaining detected concentrations ranged from 0.176 mg/kg (wall tile mastic) to 5.78 mg/kg (base molding mastic). PCBs were not detected in six (6) out of 33 samples. The average total PCB concentration in ventilation system dust was approximately 7.4 mg/kg. Bulk samples where PCBs were detected are indicated on Figures 7A, 7B, and 7C. Appendix A contains a CD of NEA laboratory data for the bulk samples.

6.0 DISCUSSION

6.1 PCB Sources

PCBs are semivolatile, persistent, lipophilic, organochlorine compounds characterized by low to moderate vapor pressures that vary inversely with molecular weight and degree of chlorination. PCBs can enter the air phase through several mechanisms including vaporization from source materials (such as building materials); desorption from dust, soil, and other PCB contaminated matter; and entrainment with suspended airborne particulates. Although PCB production in the United States ended in the late 1970s, PCB-treated materials represent a substantial source of current and future potential exposures given that an estimated 2 million tons of PCBs have been produced worldwide (Alcock et al, 1994), and many types of PCB-containing materials remain in use. PCB containing building materials such as concrete construction sealants may contain significant amounts of PCBs and act as diffuse emitters of PCBs to indoor air (Kohler et al, 2002). Other research has demonstrated a relationship between PCBs in building materials like sealants and caulks, and levels in indoor air and settled dust (Herrick et al, 2004).

TRC's NBHS interior PCB monitoring identified PCB-containing building materials such as window caulking and mastics. Miscellaneous PCB-containing building components and equipment items are also present, such as hydraulic oil, some remaining fluorescent light ballasts (NBHS recently replaced most fluorescent light fixtures) and ceiling tiles. Total PCB concentrations in building materials were as high as 34.4 mg/kg in classroom window caulking.

However, building materials are not the exclusive source of the PCBs detected in the indoor air in NBHS. The NBHS bulk sampling data suggest that PCB-contaminated dust in the air handling system is an important source of the PCBs detected in indoor air. Total PCB concentrations in the air handling system dust were as high as 36 mg/kg, with an average total PCB concentration of 7.4 mg/kg.

The possible sources of the PCB-contaminated dust are diverse. It is possible that fugitive dust originating from the McCoy field site (prior to development as soccer fields, for example) or the NBHS grounds could have been captured by air intakes for the NBHS ventilation system and contributed to the further buildup of PCBs in NBHS and factored into the concentrations of PCBs detected in air, bulk, and wipe samples. Also, the PCBs detected in NBHS could also be associated with background air concentrations and the effect of PCB laden dust accumulation over time in buildings. PCBs are commonly detected in air at low concentrations everywhere they have been measured and, in addition, the New Bedford area has been home to PCB-related industries and associated releases to the environment. PCBs most closely matching an Aroclor 1254 pattern were the dominant type of PCBs detected in KMS and NBHS soil investigations conducted by BETA. PCBs most closely matching Aroclor 1254, 1260, and 1268 patterns were most frequently detected in NBHS soil by BETA. PCBs matching other Aroclor patterns were detected in NBHS dust, including Aroclor 1242, Arcolor 1248, and Aroclor 1260. PCBs

matching Aroclor 1242, 1254, and in some cases Aroclor 1260 patterns were typically found in PCB-containing mastics, caulk, paint, hydraulic oil, and ceiling tiles sampled at NBHS. The close match in comparison of PCB Aroclor profiles for NBHS building materials and NBHS dust contamination does not exclude external sources as contributors to indoor air and dust interior PCB detections at NBHS, but does highlight the potential contributions of building materials.

NBHS air analyses were conducted on a homolog basis for the following PCB homolog groups: Monochlorobiphenyls, dichlorobiphenyls, trichlorobiphenyls, tetrachlorobiphenyls, pentachlorobiphenyls, hexachlorobiphenyls, heptachlorobiphenyls, octachlorobiphenyls, nonachlorobiphenyls, and decachlorobiphenyl. This approach was used because vaporization and desorption affects over time cause the airborne Aroclor profile to be skewed towards lower molecular weight congeners and hence the pattern does not mimic a “true” Aroclor pattern present in the “neat” product or technical mixtures. [The pattern also can be skewed if the Aroclor source has weathered over time and no longer matches the pattern in the original Aroclor mixture.] The results of the air analyses indicate that airborne PCB patterns are comprised almost entirely of dichlorobiphenyl, trichlorobiphenyl, and tetrachlorobiphenyl homologs. These data show the predominance of light PCB homologs, which are generally more abundant in the vapor phase. Given the predominance of higher molecular weight PCBs in bulk and wipe samples, the source of PCBs in air maybe related more to inter-media exchange attributable to vaporization of lighter PCB constituents from source materials and/or desorption from settled dust, rather than PCBs adsorbed to airborne dust particles directly.

6.2 Comparison to School/Other Indoor Air Environments

The concentrations of PCBs detected in indoor air at NBHS are comparable to other school and/or indoor air environments such as offices and homes. As illustrated in Figures 9 and 10, other indoor air environments contain significant concentrations of PCBs in air due largely to the presence of PCB-containing building materials. The comparisons illustrated in Figures 9 and 10 are presented on a semi-quantitative basis owing to likely differences in the sampling and analyses procedures employed in the various studies and environmental conditions at the time of data collection in each different study, which can have a significant influence on the presence of PCB in indoor air. In particular, the process of volatilization is strongly influenced by temperature, with vapor pressures of chlorinated organic chemical species like PCBs increasing by a factor of 2.7 to 3.6 for each 10 degree Celsius rise in temperature (Foreman and Bidleman, 1990). These inter-study variances are not accounted for in Figures 9 and 10.

6.3 PCB Concentrations in Outdoor Air

Outdoor air samples collected at NBHS by TRC were all below the 0.05 $\mu\text{g}/\text{m}^3$ EPA Action Level. Background concentrations ranged from 0.0015 to 0.0040 $\mu\text{g}/\text{m}^3$ Total PCBs. The NBHS outdoor air concentrations were within the range of total PCB background concentrations detected at the nearby KMS by BETA during outdoor air and

indoor air sampling conducted on August 4 and 5, 2006, August 18 and 19, 2006, and September 14 and 15, 2006 (BETA, 2006). The outdoor air concentrations are also generally consistent with global background for PCBs in urban locations documented by Hunt (1986), Eisenreich et al (1992), and Pozo et al (2006), as well as concentrations for mid-1990s research conducted in parts of New Bedford and Dartmouth, Massachusetts that are typically upwind of contamination in New Bedford Harbor during fair weather when the greatest amount of PCB volatilization might occur (Vorhees et al 1997). These comparisons are summarized in Table 8.

6.4 Comparison to Site Specific Risk Based Criteria

The results of laboratory analysis of air samples collected from NBHS air ranged from 0.0024 $\mu\text{g}/\text{m}^3$ to 0.31 $\mu\text{g}/\text{m}^3$, with one result in excess of the Acceptable Long-Term Average Exposure Concentration of 0.3 $\mu\text{g}/\text{m}^3$. The actual risk-based calculations result in a value of 0.31 $\mu\text{g}/\text{m}^3$, but BETA might have rounded to one significant figure. In any event, the detected concentration of 0.31 $\mu\text{g}/\text{m}^3$ does not correspond to a risk that exceeds any MADEP benchmark. In addition, a one-time result in excess of this concentration does not constitute an immediate hazard or a long-term hazard to current occupants because the Acceptable Long-Term Average Exposure Concentration (0.3 $\mu\text{g}/\text{m}^3$) represents a long-term average concentration that corresponds to risk benchmarks established by MADEP, assuming 25 years of daily work place exposure. MADEP's risk benchmarks will not be exceeded by a single or even multiple detected concentrations that are higher than 0.3 $\mu\text{g}/\text{m}^3$ as long as the long-term average is at or below this concentration.

People are in general exposed almost continuously to low levels of PCBs through diverse exposure patterns that include background concentrations in outdoor air, indoor air in homes and other buildings, and their diet (generally considered the largest route of exposure to PCBs for human populations). Exposure to PCBs in NBHS contributes incrementally to this exposure, and while not the only source of exposure to the occupants of the building, the findings of TRC's investigation clearly identify an opportunity for intervention to improve air quality relative to PCBs in NBHS and reduce PCB exposure to building occupants.

6.5 Potential Remedial Actions

As outlined in TRC's August 31, 2006 public presentation, there are several initial remedies that can be readily implemented, and other remedial measures that can be safely scheduled and implemented over time. TRC also noted that additional data collection is warranted to understand the variation of PCB concentrations over time and space, and to verify existing known sources and quantify other sources, if present.

Removal of PCB contaminated dust that has accumulated in the air handling system is expected to improve the indoor air quality of the school and reduce airborne PCB concentrations. Therefore, TRC recommends that response actions be implemented to prioritize the remediation of this interior PCB source. The work would be conducted

under strict specifications and oversight during weekends and other off-hours while the school is not in use. Other remedial measures can be safely scheduled and implemented following the cleaning of the air handling system to address other sources such as window caulking, tile and baseboard mastics, hydraulic oils, remaining fluorescent light ballasts, etc.

7.0 DATA VALIDATION/QUALITY SUMMARY

TRC assessed the NBHS PCB sample results using the *EPA New England Data Validation Functional Guidelines for Evaluating Environmental Analyses*, revised December 1996 (EPA, 1996b). Modification of these guidelines was performed to accommodate the non-Contract Laboratory Program (CLP) analytical methodologies. TRC's assessment consisted of a limited (Tier II) validation, which includes, in part, the following parameters:

- Agreement of analyses conducted with TRC requests;
- Holding times and sample preservation;
- Initial and continuing calibrations;
- Method blanks;
- Surrogate spike recoveries;
- Matrix spike/matrix spike duplicate (MS/MSD) results;
- Laboratory control sample (LCS) results;
- Field duplicate results; and
- Quantitation limits and sample results

TRC's validation was performed on the air, wipe, and bulk samples, the results of which are summarized below. Complete data validation review memoranda are provided in Appendix B.

Air Samples

Twenty-eight (28) air samples were collected at the NBHS on August 22, 2006 and submitted to NEA for analysis as discussed herein. All samples were collected on PUF cartridges in accordance with EPA Method TO-10A (EPA, 1999a); the background samples were also collected on particulate filters and PUF cartridges in accordance with EPA method TO-4A (EPA, 1999b) in order to evaluate comparability with the TO-10A methodology. All air samples were analyzed for PCB homologues using EPA Method 680. In general, the data should be regarded as valid as reported and may be used for decision-making purposes. The results of sample TRC-TO10A-12 (collected near Hallway Locker 1579) are biased low due to a pump failure sometime during the sampling period. This bias is identified in the final data tables discussed herein. The results of the collocated sample collected at this location (TRC-TO10A-13) should be used for decision-making purposes. The reporting limits for the PCB homologues were below the EPA Action Level of 0.050 ug/m³ in each sample.

Wipe Samples

Twenty two (22) wipe samples were collected by TRC at NBHS on August 22 and 23, 2006 and submitted to NEA for analysis. The samples were analyzed for PCB Aroclors using SW-846 Method 8082 (EPA, 1996a). In general, the data should be regarded as valid as reported and may be used for decision-making purposes. Selected data points

were qualified as estimated because of nonconformance to certain QC criteria. The assigned qualifications are included in the final data tables discussed herein.

Bulk

Thirty three (33) bulk samples were collected by TRC at NBHS on August 22 and 23, 2006 and submitted to NEA for analysis. The samples were analyzed for polychlorinated biphenyl (PCB) Aroclors using SW-846 Method 8082 (EPA, 1996a). In general, the data should be regarded as valid as reported and may be used for decision-making purposes. Selected data points were qualified as estimated because of nonconformance of certain QC criteria. The assigned qualifications are included in the final data tables discussed herein.

8.0 CONCLUSIONS AND RECOMMENDATIONS

8.1 Conclusions

- The results of laboratory analysis of air samples collected from NBHS air ranged from $0.0024 \mu\text{g}/\text{m}^3$ to $0.31 \mu\text{g}/\text{m}^3$, with one result in excess of the Acceptable Long-Term Average Exposure Concentration of $0.3 \mu\text{g}/\text{m}^3$. However, as noted herein the detected $0.31 \mu\text{g}/\text{m}^3$ concentration does not correspond to a risk that exceeds any MADEP benchmark.
- A one-time result in excess of Acceptable Long-Term Average Exposure Concentration does not constitute an immediate hazard to current occupants. The Acceptable Long-Term Average Exposure Concentration ($0.3 \mu\text{g}/\text{m}^3$) represents a long-term risk level based on 25 years of daily work place exposure. MADEP's risk benchmarks will not be exceeded by a single or even multiple detected concentrations that are higher than $0.3 \mu\text{g}/\text{m}^3$ provided the long-term average is at or below this concentration.
- Building materials are an important, although not necessarily exclusive, source of the PCBs in the indoor air at NBHS. Sampling data suggests that dust in vents and caulking are important contributors. Other potentially significant contributors are tile and baseboard mastics. Miscellaneous sources are also present (hydraulic oil, few remaining ballasts, etc). Local and regional PCB contamination is also a factor likely contributing to indoor air levels.
- Likely airborne PCB concentrations detected in NBHS are similar to other schools and public buildings. This NBHS data agree with prior published data that highlight a global issue with PCBs in indoor air directly attributable to PCB contaminated building materials.

8.2 Recommendations

From a risk management and mitigation perspective, remedies such as cleaning of the air handling systems can be readily implemented. Other remedial measures targeting dust removal of PCB-containing material such as mastics, ballast, etc., should also be considered.

Additional data collection/monitoring are strongly recommended to understand the variation of PCB concentrations over time and space and to verify and quantify additional sources (if present). TRC recommends first implementing a remedy to remove PCB contaminated dust from the air handling system before further indoor air sampling is conducted. The removal of PCB-laden dust should reduce the PCB burden in schools, improve air circulation, and is a first step in improving the indoor air quality.

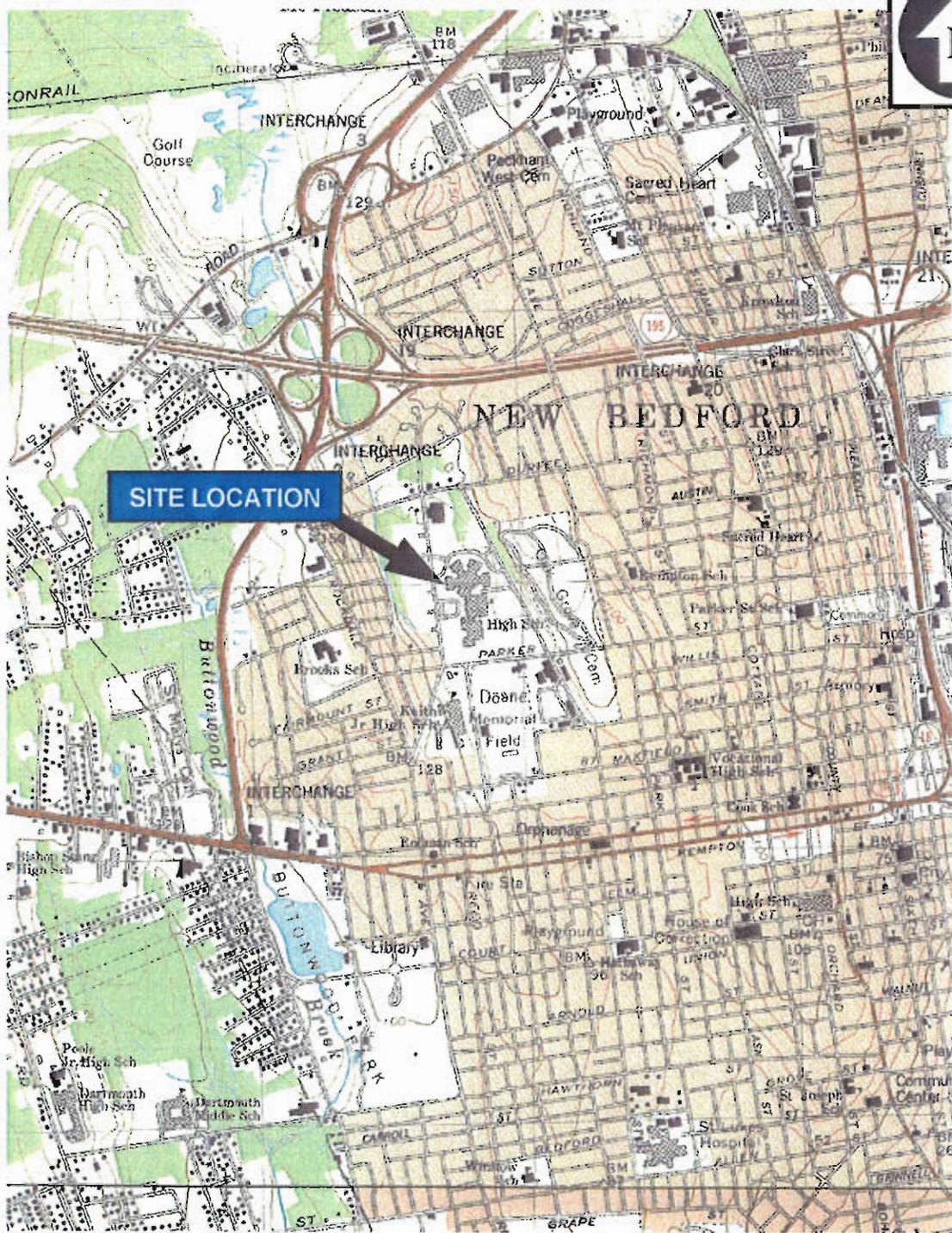
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FIGURES



BASE MAP IS A PORTION OF THE FOLLOWING 7.5' X 15' USGS TOPOGRAPHIC QUADRANGLES: NEW BEDFORD NORTH, MA, 1979; NEW BEDFORD SOUTH, MA 1977



**NEW BEDFORD HIGH SCHOOL
INDOOR POLYCHLORINATED
BIPHENYL SAMPLING**

SITE LOCUS

TRC Boot Mills South
116 John Street
Lowell, Massachusetts 01852
978-970-5800

**FIGURE
1**

Drawn: HWB
Checked: DS

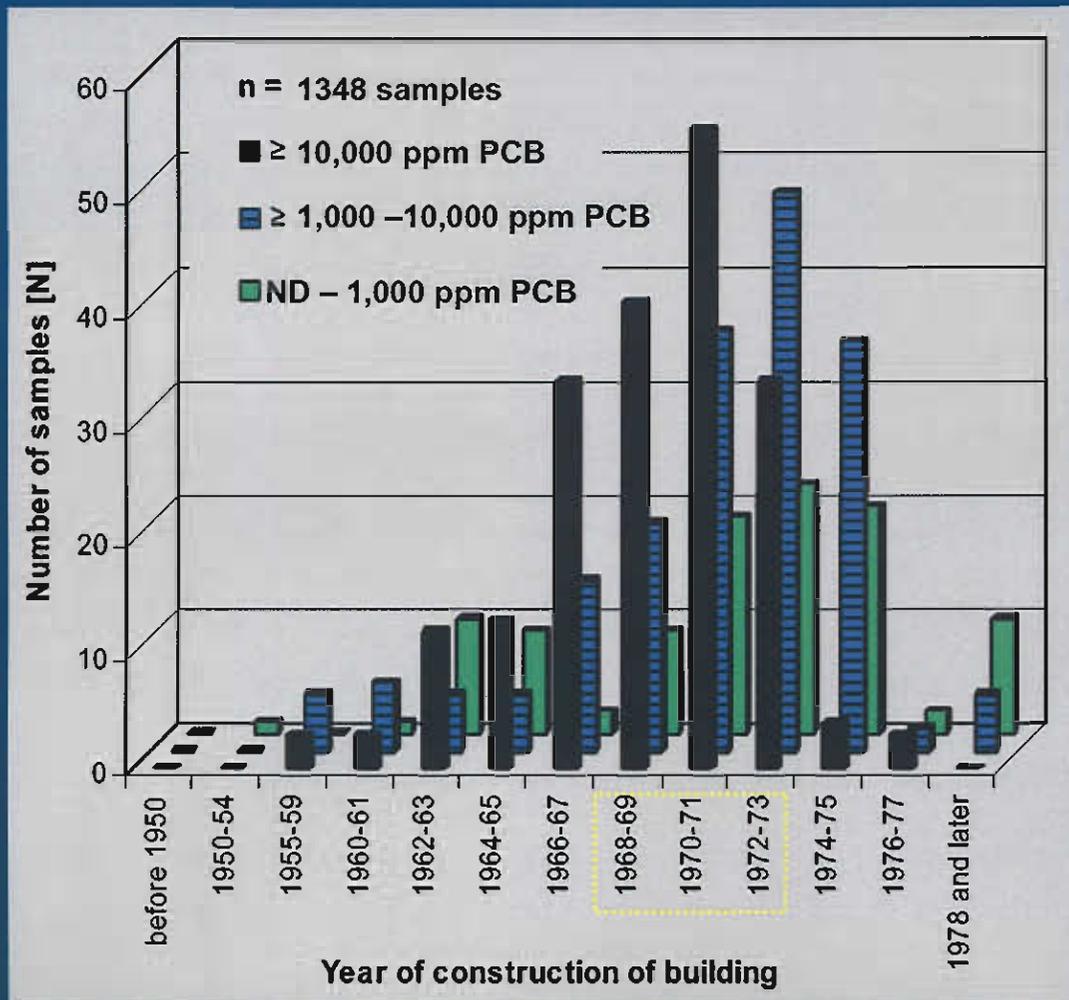
SCALE: AS SHOWN
Date 10/25/06

Figure 2: Common Historic Uses of PCBs in Buildings

- Sealants
- Paints
- Coolants
- Electrical Fluids
- Caulking
- Adhesives
- Flame Retardants
- Heat Transfer Fluids
- Hydraulic Lubricants
- Dedusting Agents
- Cutting Oils
- Carbonless Copy Paper

PCBs can also accumulate in areas of dust collection by several mechanisms.

Figure 3: Historic Joint Sealant Concentrations Swiss Study*



Period of New Bedford High School Construction

*Source: Kohler et al, 2005 Environmental Science and Technology, 2005, 39, 1967-1973

Figure 4: Air Sampling Train Examples

"PUF" Cartridge

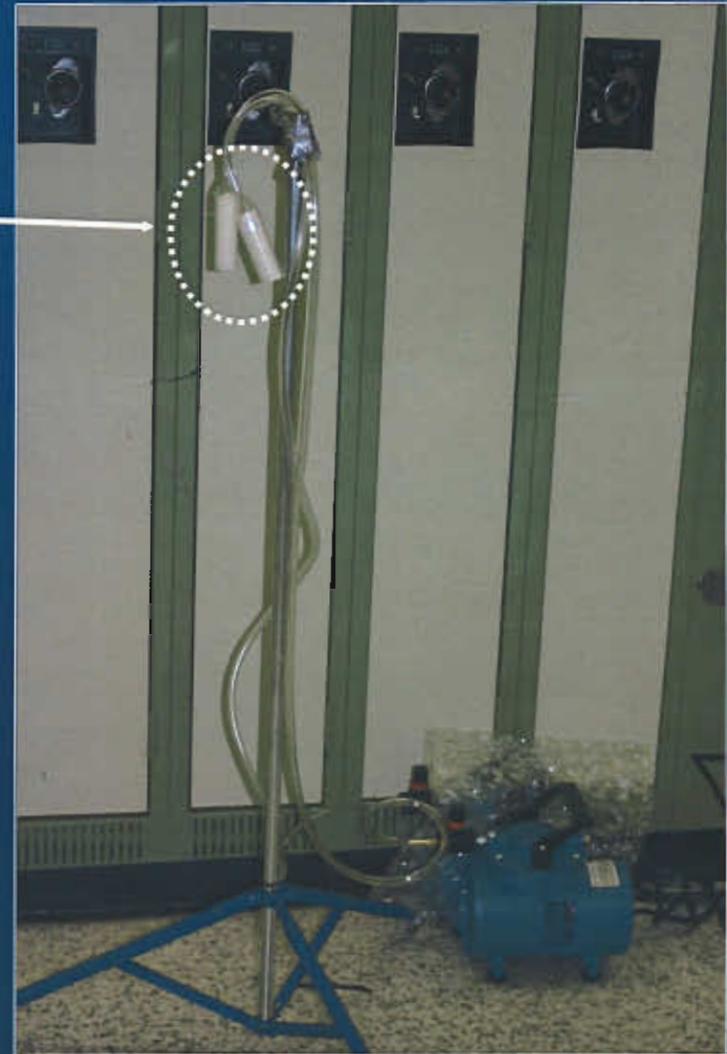


Figure 5A: First Floor Air Sampling Locations

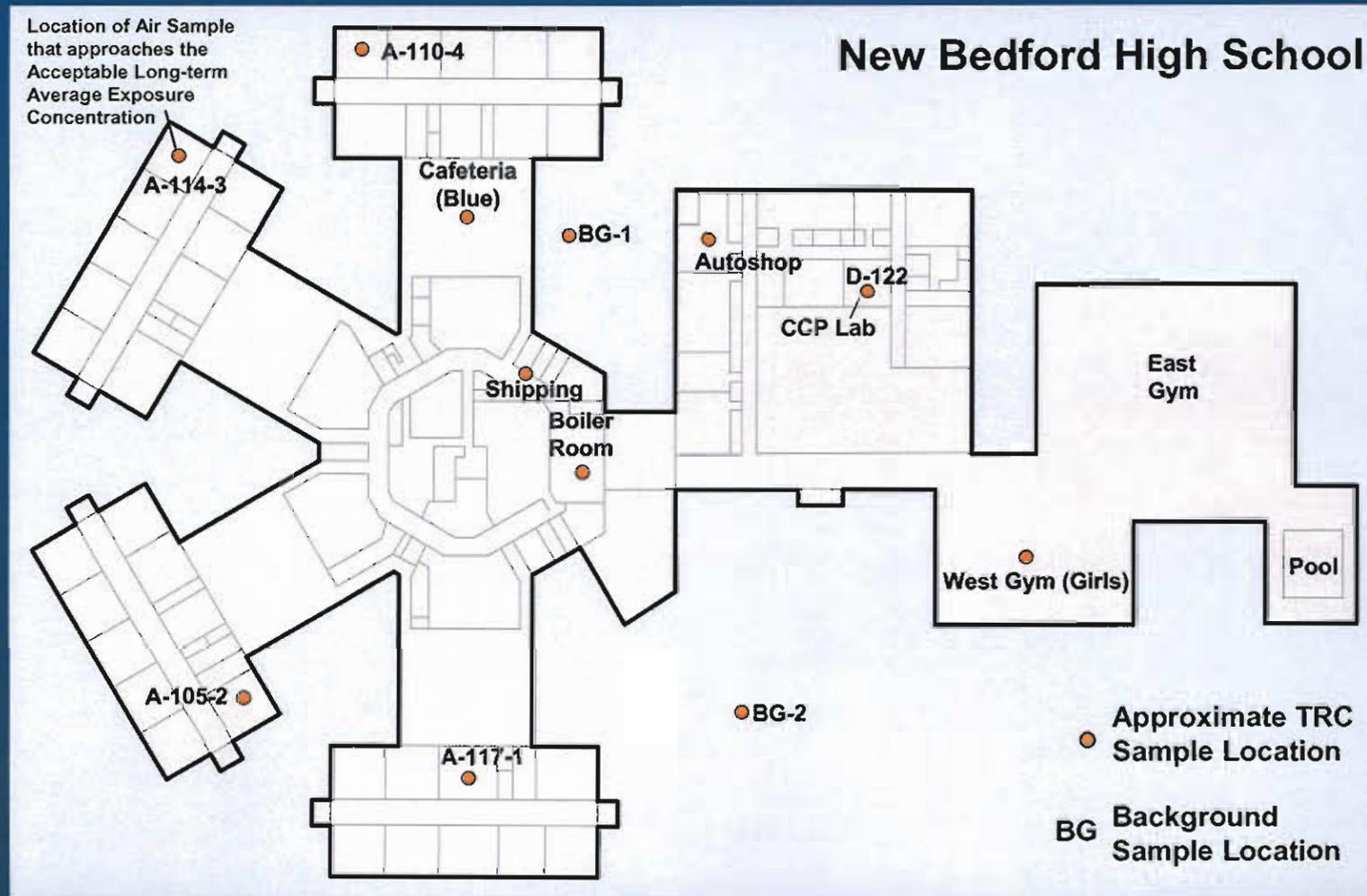


Figure 5B: Second Floor Air Sampling Locations

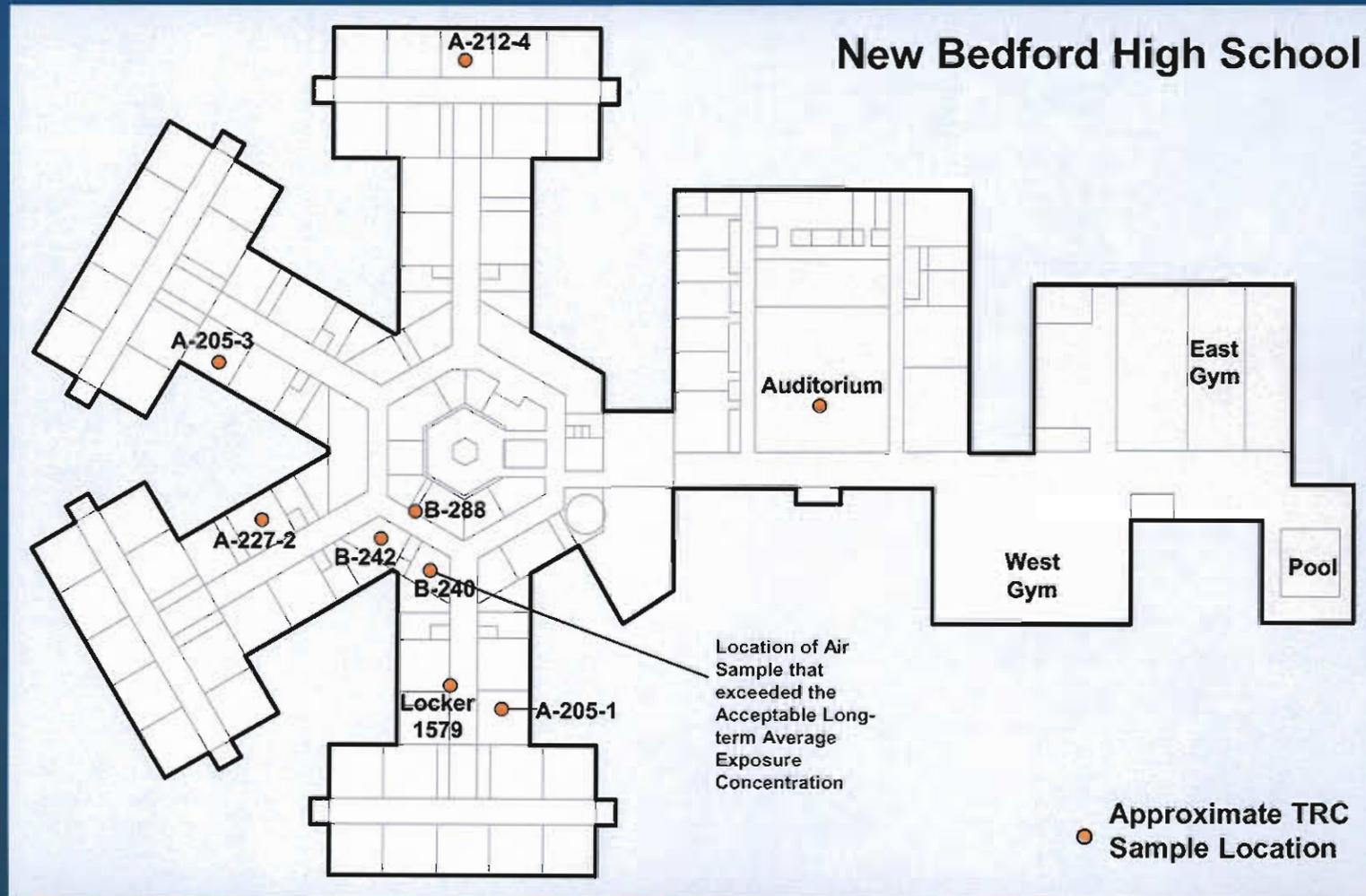


Figure 5C: Third Floor Air Sampling Locations

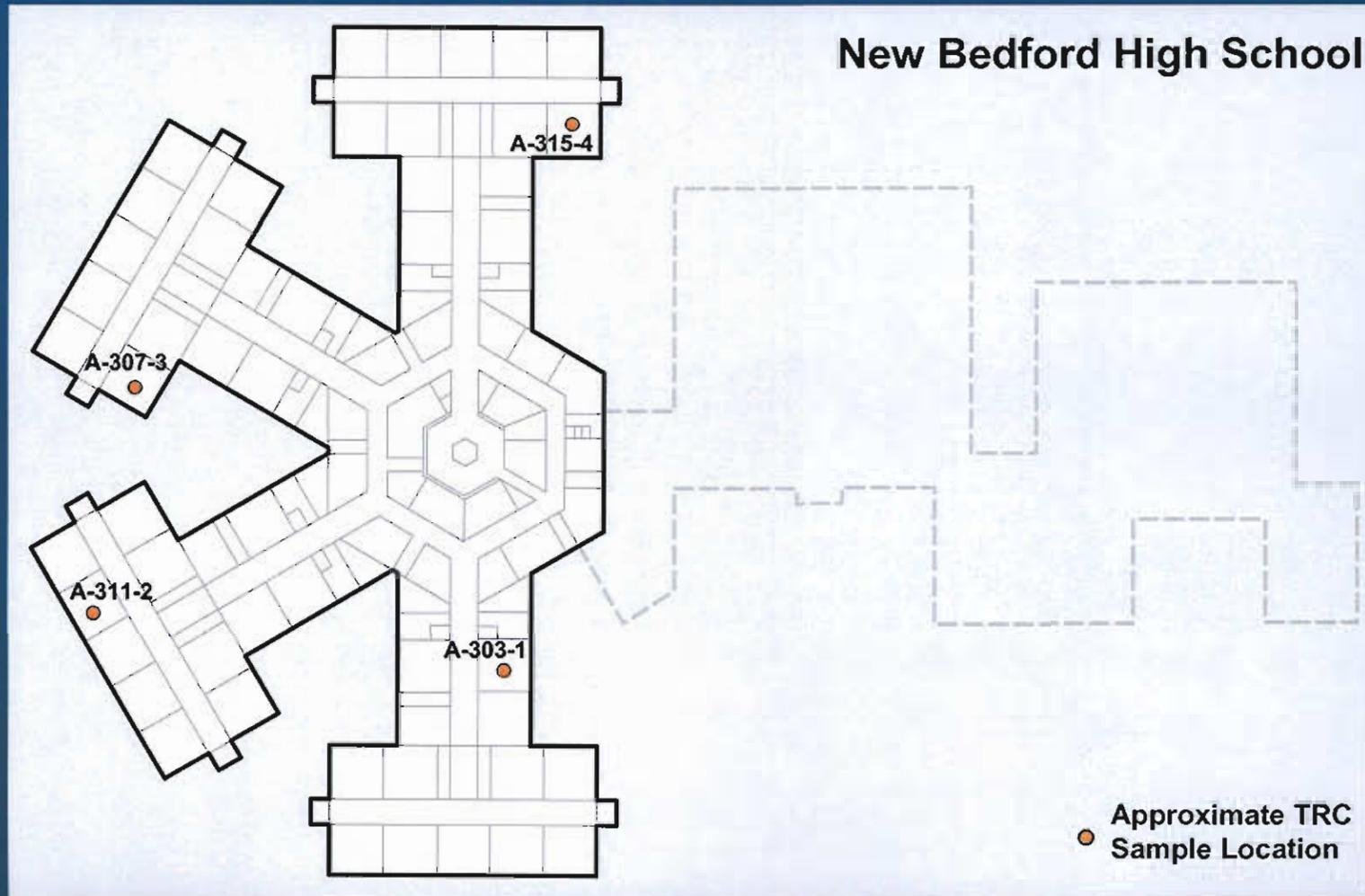


Figure 6A: First Floor Wipe Sample Locations

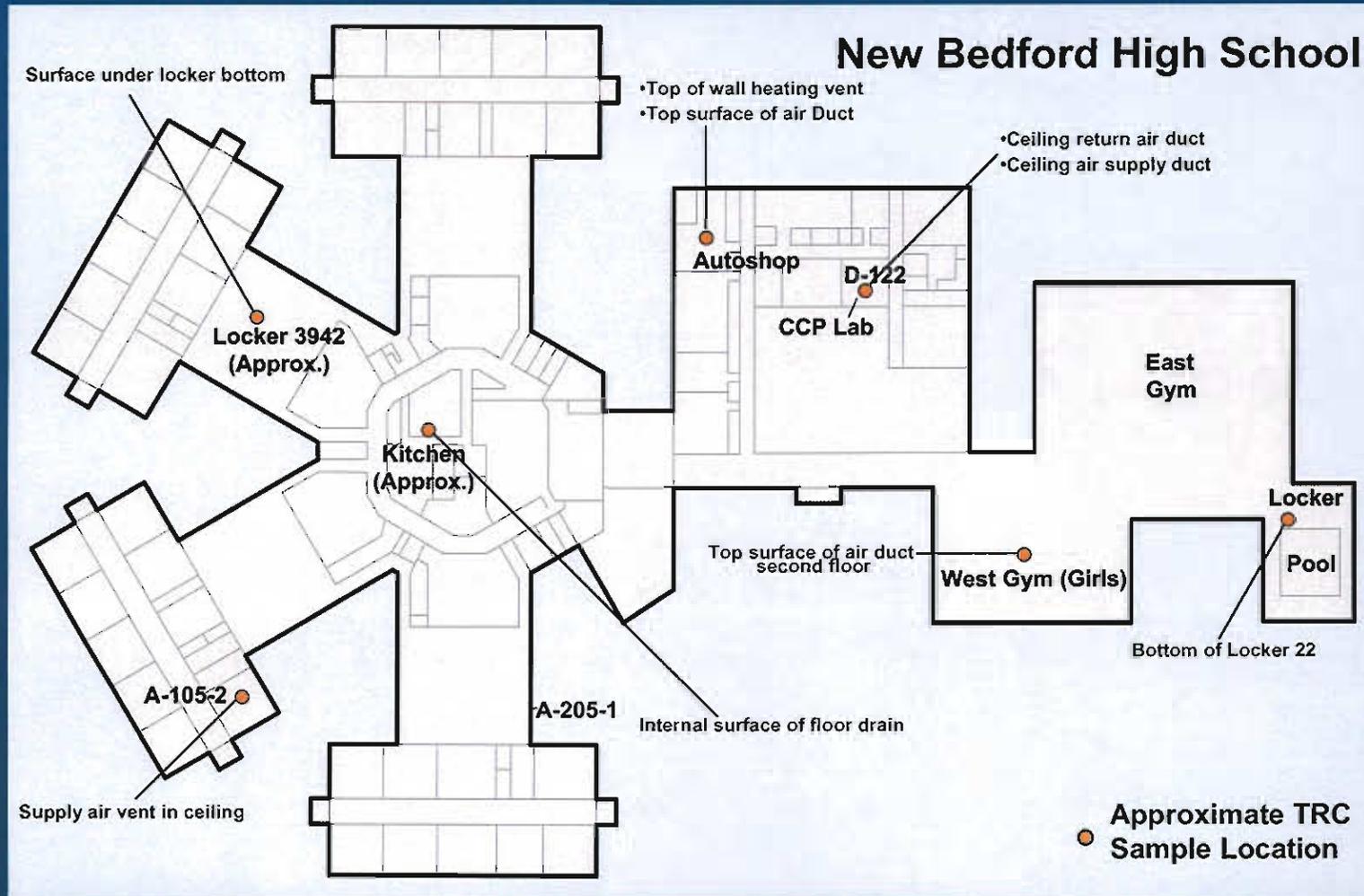


Figure 6B: Second Floor Wipe Sample Locations

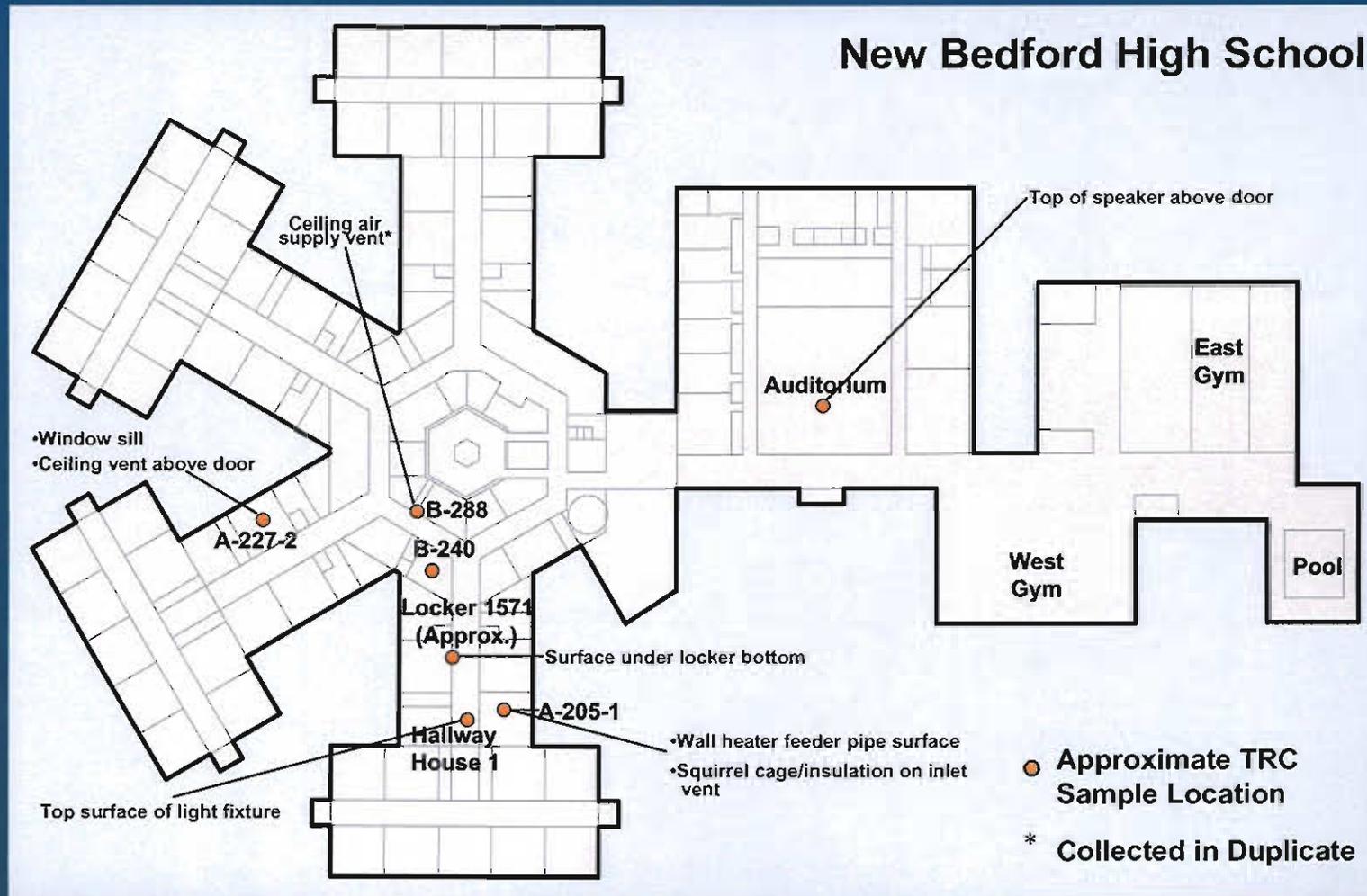


Figure 6C: Third Floor Wipe Sample Locations

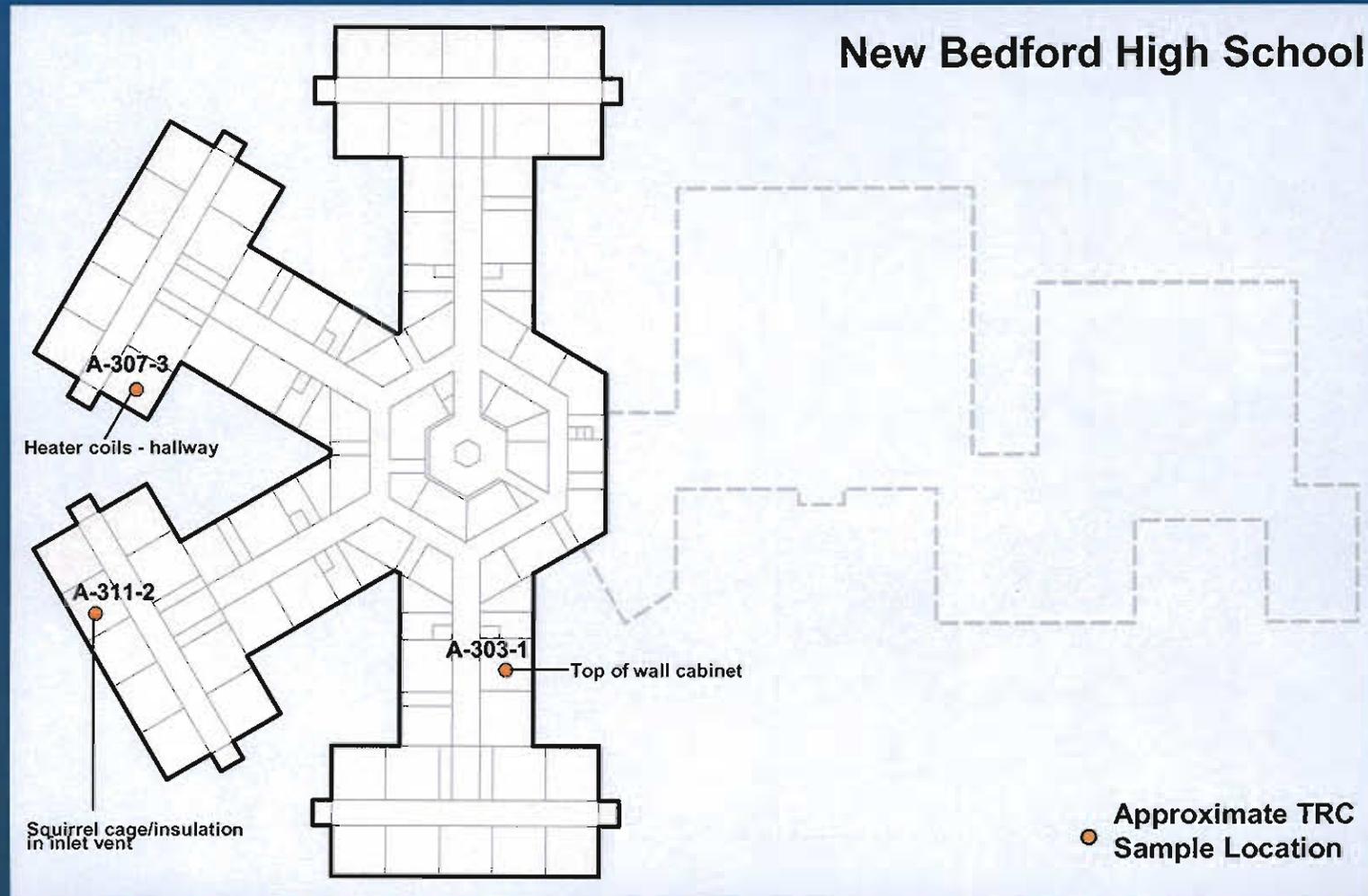


Figure 7A: First Floor Bulk Sample Locations

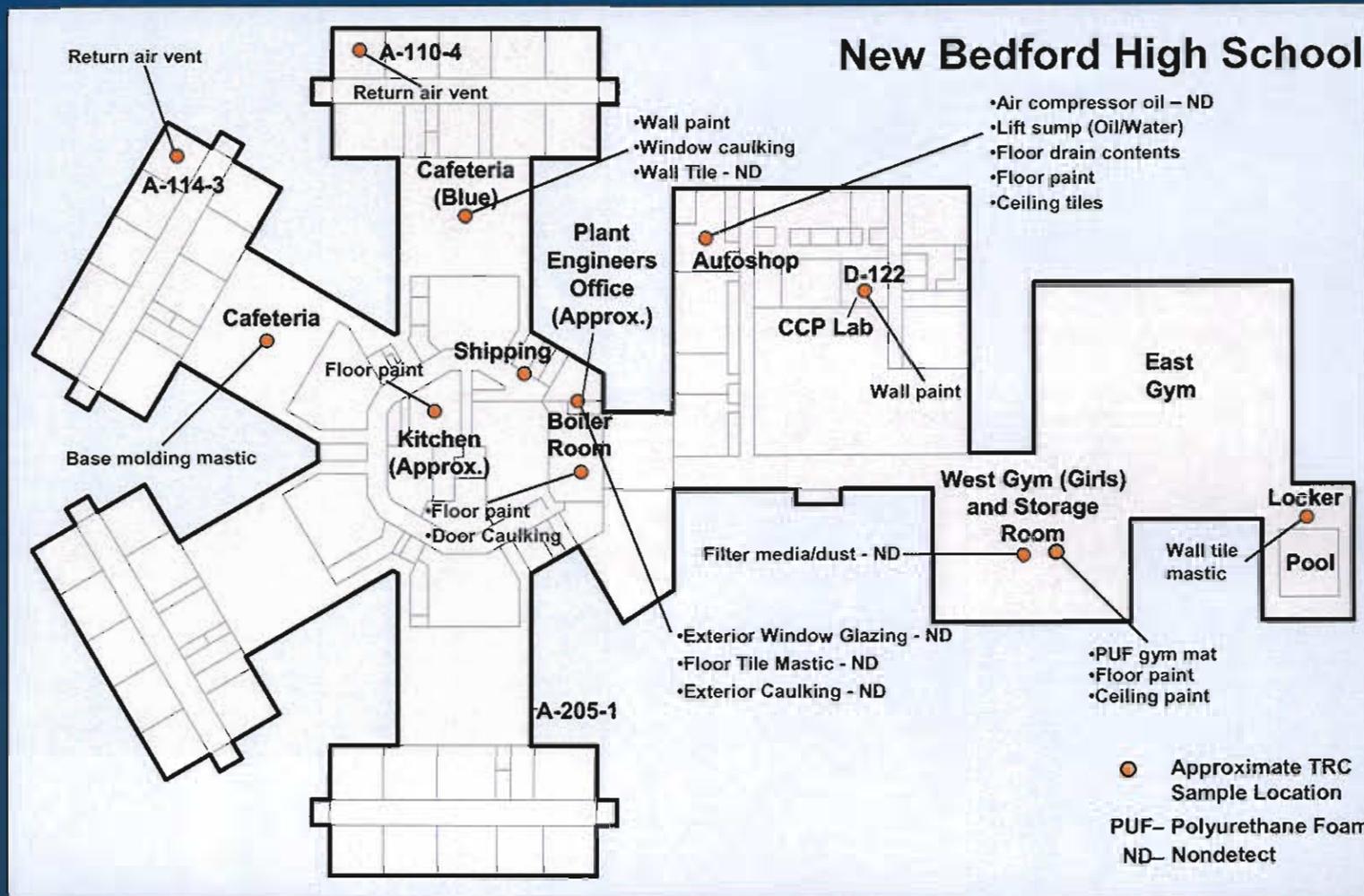


Figure 7B: Second Floor Bulk Sample Locations

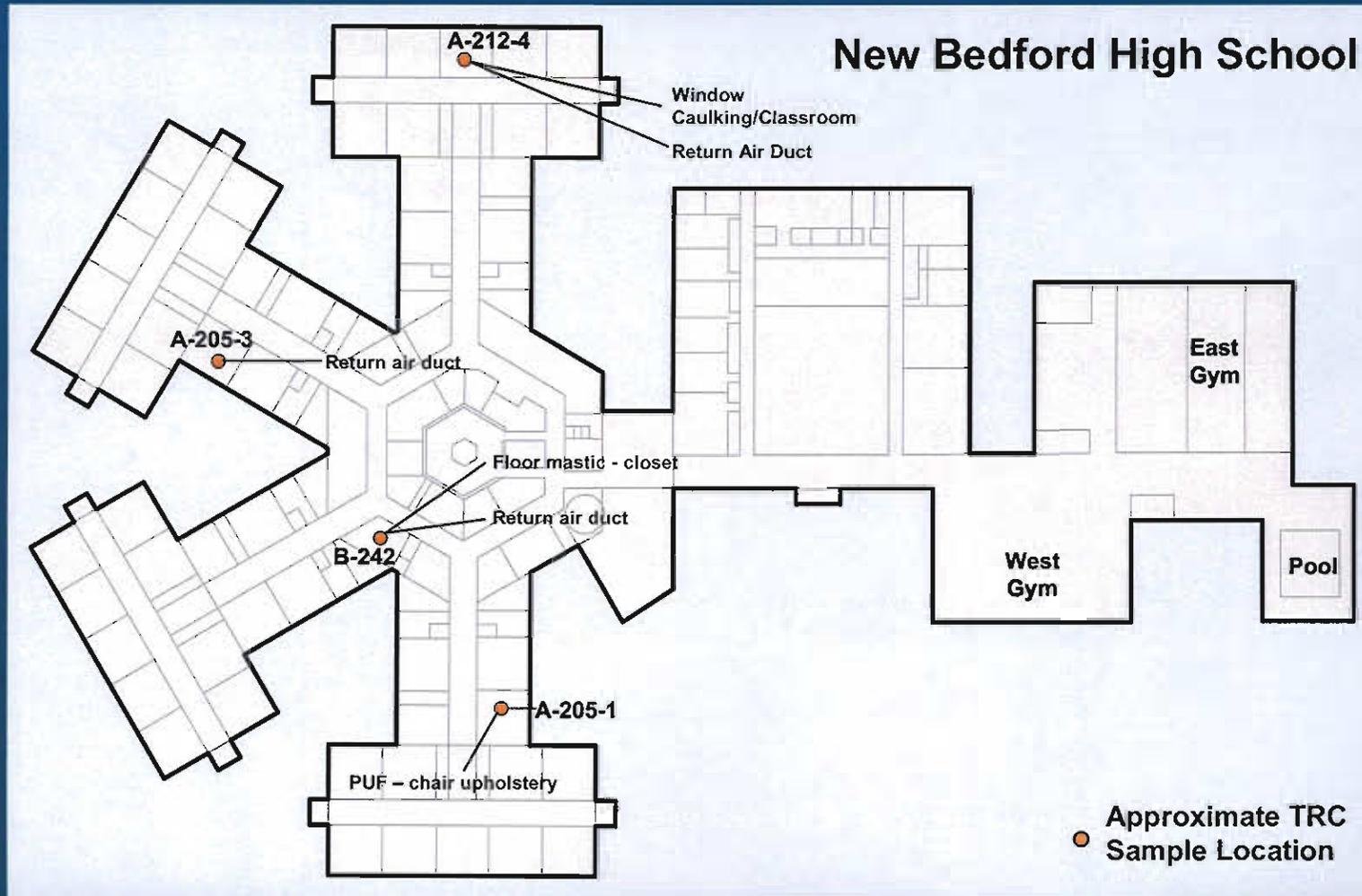


Figure 7C: Third Floor Bulk Sample Locations

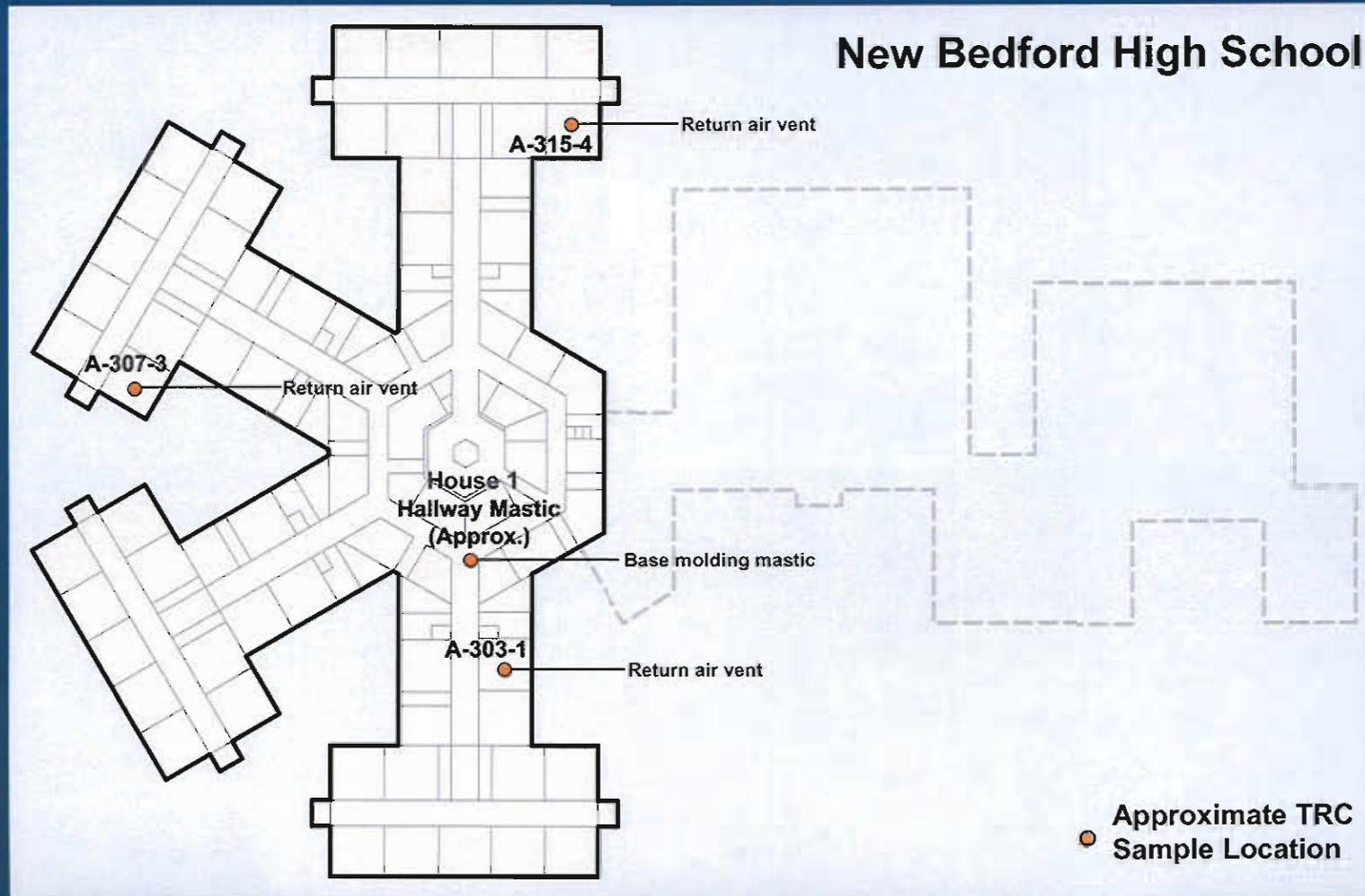


Figure 8: Graphic Summary - TRC NBHS Indoor Air Results August 2006

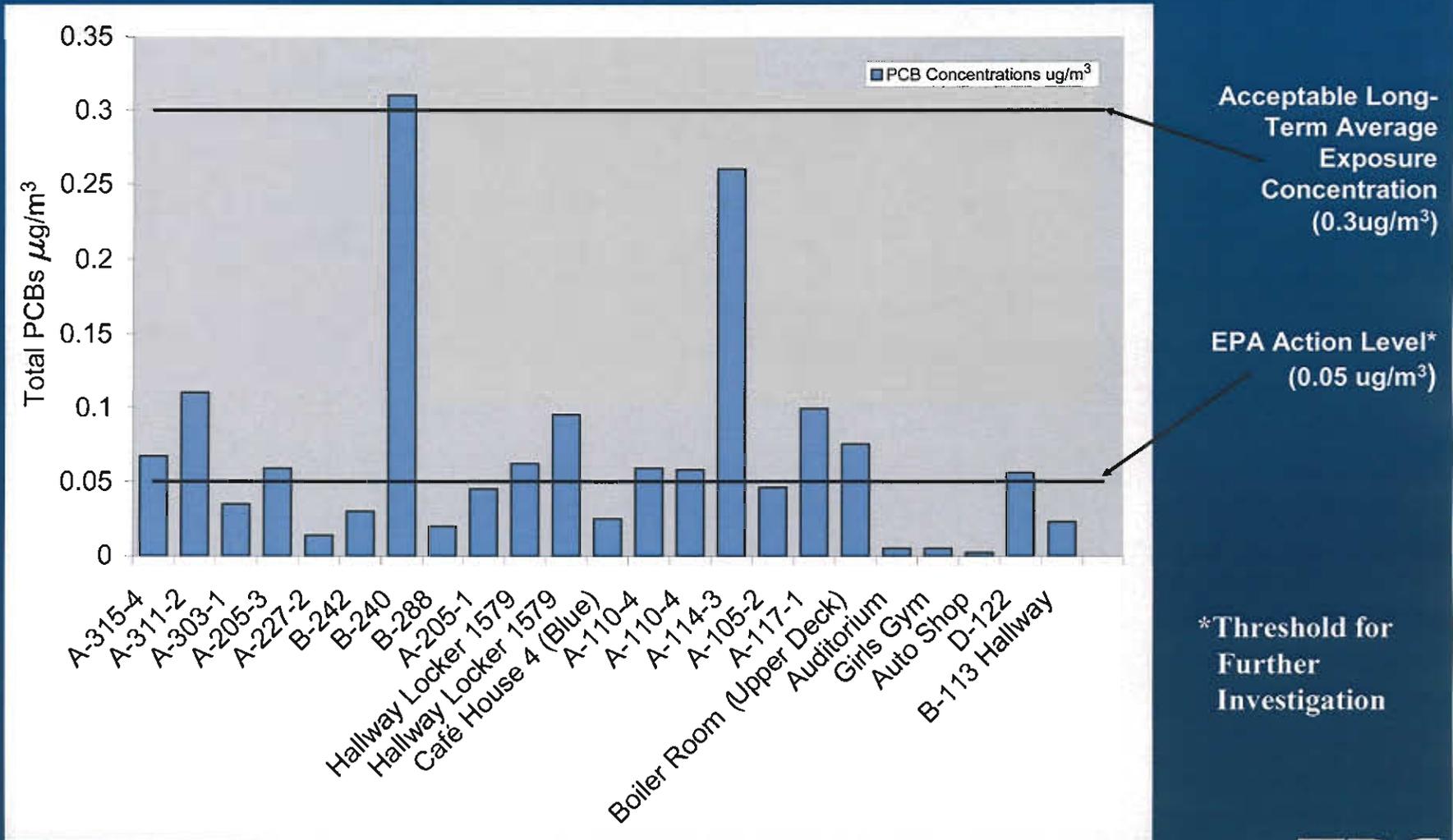
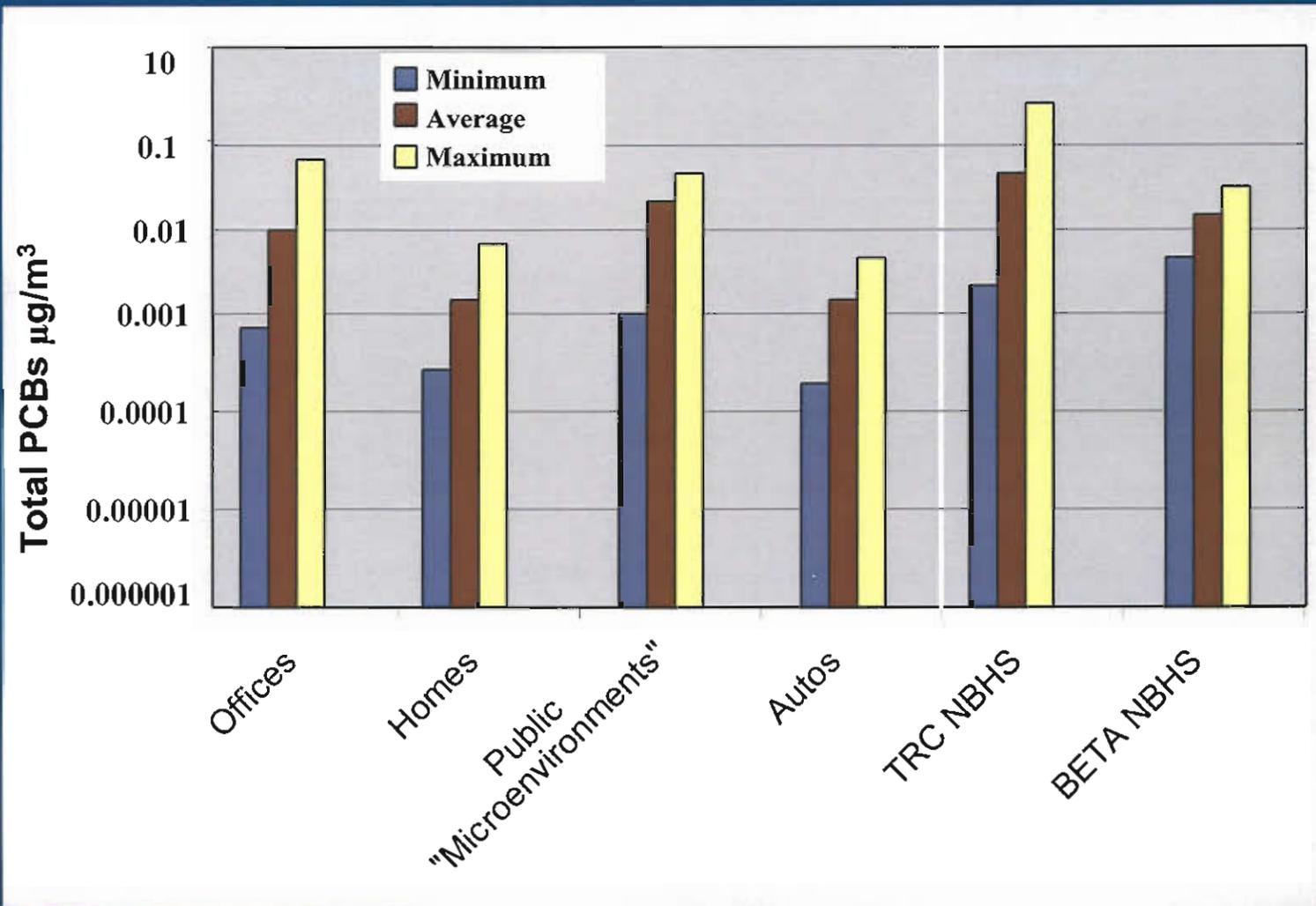


Figure 9: Comparison of TRC/BETA NBHS Indoor Air Data to Birmingham, England Indoor Air Data from 2003 to 2005*

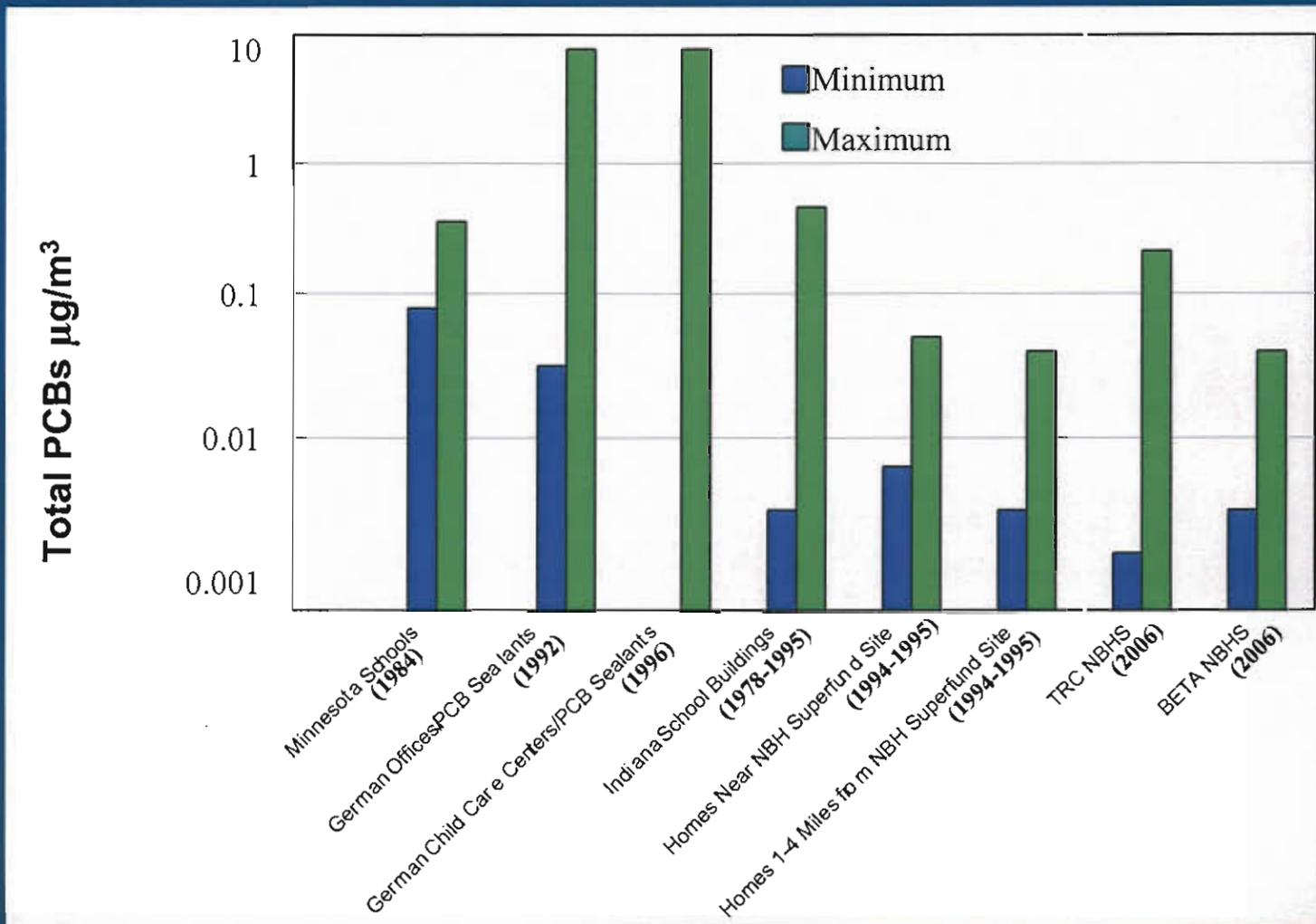


NBHS = New Bedford High School

$\mu\text{g}/\text{m}^3$ = micrograms per cubic meter

* Source = Harrad et al, 2006 Environmental Science and Technology 2006, 40, 4633-4638

Figure 10: Comparison of TRC and BETA NBHS Indoor Air Data to indoor Air concentrations from Various Studies*



NBH = New Bedford harbor

µg/m³ = micrograms per cubic meter

Source = Spengler, Samet, and McCarthy, 2001, *Indoor Air Quality Handbook*. McGraw, Hill, NY, NY

TABLES

Table 1

**Summary of the Location Types and Numbers of PCB Air Samples Collected
New Bedford High School
New Bedford, Massachusetts**

Location	Number of Samples Collected	Notes
Classrooms	17	Duplicate collected at A-110-4.
Hallways	3	Includes re-sampling of BETA maximum detection and a field duplicate and the hallway near shipping and receiving (the high dust level location).
Cafeteria	1	
Boiler room	1	
Auditorium	1	
Girls gymnasium	1	
Automobile Shop	1	
Background (playground/ near main office)	2	Includes co-located high volume samples.

Table 2

**Summary of Dust Monitor Readings Collected
New Bedford High School
New Bedford, Massachusetts**

Location	Airborne Dust Concentration $\mu\text{g}/\text{m}^3$	Comments
A-315-4	22	
Hallway third floor intersection of House 3 and 4	19	
Hallway House 2 third floor	19	
Hallway House 1 third floor	20	
Hallway House 4 second floor	19	
Hallway B-242	12	
Shipping and Receiving (outside Plant Engineers office)	32	Selected for PCB air sampling. Sample TRC-TO10A-27 (B-113 Hallway)
Blue Cafeteria	20	
Hallway House 2 second floor	40	Floor sweeping and vacuuming of stairs raising dust during time of measurement. Not representative of typical conditions.

Notes:

$\mu\text{g}/\text{m}^3$ - micrograms per cubic meter.

Table 3**Summary of the Location Types and Numbers of PCB Wipe Samples Collected
New Bedford High School
New Bedford, Massachusetts**

Location	Number of Samples Collected
Unit heater coil	1
Unit heater exterior air inlet	2
Cabinet/bookcase top	2
Window Sill	1
Top of light fixture	1
Ceiling vents/duct	6 (including duplicate)
Wall heater feeder pipe	1
Locker bottom	3
Floor drain	1
Auditorium speaker housing (top)	1
Duct/vent top surface	3

Table 4

**Summary of the Location Types and Numbers of PCB Bulk Samples Collected
New Bedford High School
New Bedford, Massachusetts**

Sample Type	Number of Samples Collected	Notes
Vent dust/residue	9	Bulk samples of the return air vents were performed by first removing the vent grill and then scraping material off the top, sides, and bottom of the duct and placing the material in the sample jar.
Air handling system filter/dust	1	This sample is from the inside of the girls gym duct and contains dust and air filter material from a broken air filter.
Tile/base molding mastic	5	
Caulking/glazing	5	Includes two exterior samples.
Paint	6	
Polyurethane foam upholstery/pads	2	One chair, one gymnasium pad.
Wall/ceiling tile	2	
Air compressor oil	1	
Automobile Shop Lift Sump Fluid	1	Analyzed oil fraction only.
Floor drain contents	1	

**Table 5: Summary of Analytical Results for Wipe Samples Collected August 2006
New Bedford High School
New Bedford, Massachusetts**

Analysis	Sample ID:	TRC-WIPE-1	TRC-WIPE-2	TRC-WIPE-3	TRC-WIPE-4	TRC-WIPE-5	TRC-WIPE-6
	Sample Location:	A-307-3	A-311-2	A-303-1	A-227-2	A-227-2	B-288
	Description:	Heater Coils - Hallway	Squirrel Cage/ Insulation Inlet Vent	Top of Wall Cabinet	Window Sill	Ceiling Vent Above Door	Ceiling Air Supply Vent
	Date sampled:	8/22/2006	8/22/2006	8/22/2006	8/22/2006	8/22/2006	8/22/2006
PCBs (ug/wipe)	Aroclor 1016	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U
	Aroclor 1221	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U
	Aroclor 1232	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U
	Aroclor 1242	0.500 U	0.549 U	0.500 U	0.500 U	0.575 U	0.500 U
	Aroclor 1248	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U
	Aroclor 1254	0.500 U	0.500 U	0.500 U	0.500 U	0.361 J	0.500 U
	Aroclor 1260	0.500 U	0.500 U	0.500 U	0.500 U	0.204 J	0.500 U
	Total PCBs	0.500 U	0.549 U	0.500 U	0.500 U	1.140 J	0.500 U

Notes:

All units in ug/wipe unless otherwise specified.

ug/wipe - micrograms per wipe.

J - Estimated value.

UJ - Estimated nondetect.

U - Compound was not detected at specified quantitation limit.

PCBs - Polychlorinated Biphenyls.

**Table 5: Summary of Analytical Results for Wipe Samples Collected August 2006
New Bedford High School
New Bedford, Massachusetts**

Analysis	Sample ID:	TRC-WIPE-16	TRC-WIPE-7	TRC-WIPE-8	TRC-WIPE-9	TRC-WIPE-10	TRC-WIPE-11
	Sample Location:	B-288	A-205-1	A-205-1	Locker 1571	House 1 Hallway	Locker 3942
	Description:	Ceiling Air Supply Vent	Wall Heater Feeder Pipe Surface	Squirrel Cage/ Insulation Inlet Vent	Surface Under Locker Bottom	Top Surface - Light Fixture (Near A-205-1)	Surface Under Locker Bottom
	Date sampled:	8/22/2006 Field Dup of Wipe-6	8/22/2006	8/22/2006	8/22/2006	8/22/2006	8/22/2006
PCBs (ug/wipe)	Aroclor 1016	0.500 U	0.500 U	0.500 U	0.500 U	0.500 UJ	0.500 U
	Aroclor 1221	0.500 U	0.500 U	0.500 U	0.500 U	0.500 UJ	0.500 U
	Aroclor 1232	0.500 U	0.500 U	0.500 U	0.500 U	0.500 UJ	0.500 U
	Aroclor 1242	0.500 U	0.500 U	0.500 U	0.500 U	0.500 UJ	0.500 U
	Aroclor 1248	0.500 U	0.500 U	0.472 J	0.770	0.436 J	0.670 J
	Aroclor 1254	0.500 U	0.500 U	0.500 U	0.500 U	0.500 UJ	0.500 U
	Aroclor 1260	0.500 U	0.500 U	0.500 U	0.500 U	1.34 J	0.500 U
	Total PCBs	0.500 U	0.500 U	0.472 J	0.770	1.776 J	0.670 J

Notes:

All units in ug/wipe unless otherwise specified.

ug/wipe - micrograms per wipe.

J - Estimated value.

UJ - Estimated nondetect.

U - Compound was not detected at specified quantitation limit.

PCBs - Polychlorinated Biphenyls.

**Table 5: Summary of Analytical Results for Wipe Samples Collected August 2006
New Bedford High School
New Bedford, Massachusetts**

Analysis	Sample ID:	TRC-WIPE-12	TRC-WIPE-13	TRC-WIPE-14	TRC-WIPE-15	TRC-WIPE-17	TRC-WIPE-18
	Sample Location:	A-105-2	CCP Lab (D-122)	CCP Lab (D-122)	B-240	Kitchen	Auditorium
	Description:	Supply Air Vent in Ceiling	Ceiling Return Air Duct	Ceiling Supply Air Duct	Top Surface - Bookcase	Internal Surface of Floor Drain	Top of Speaker Above Door
	Date sampled:	8/22/2006	8/22/2006	8/22/2006	8/23/2006	8/23/2006	8/23/2006
PCBs (ug/wipe)	Aroclor 1016	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U
	Aroclor 1221	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U
	Aroclor 1232	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U
	Aroclor 1242	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U
	Aroclor 1248	0.500 U	0.622 J	0.500 U	1.56	0.500 U	0.500 U
	Aroclor 1254	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U
	Aroclor 1260	0.500 U	2.26 J	0.436 J	0.500 U	0.500 U	0.419 J
	Total PCBs	0.500 U	2.882 J	0.436 J	1.56	0.500 U	0.419 J

Notes:

All units in ug/wipe unless otherwise specified.

ug/wipe - micrograms per wipe.

J - Estimated value.

UJ - Estimated nondetect.

U - Compound was not detected at specified quantitation limit.

PCBs - Polychlorinated Biphenyls.

**Table 5: Summary of Analytical Results for Wipe Samples Collected August 2006
New Bedford High School
New Bedford, Massachusetts**

Analysis	Sample ID:	TRC-WIPE-19	TRC-WIPE-20	TRC-WIPE-21	TRC-WIPE-22
	Sample Location:	West (Girls) Gym	Pool Locker Room	Auto shop (D-116)	Auto shop (D-116)
	Description:	Top Surface of Air Duct Second Floor	Bottom of Locker 22	Top of Wall Heating Vent	Top Surface of Air Duct
	Date sampled:	8/23/2006	8/23/2006	8/23/2006	8/23/2006
PCBs (ug/wipe)	Aroclor 1016	0.500 U	0.500 U	0.500 U	0.500 U
	Aroclor 1221	0.500 U	0.500 U	0.500 U	0.500 U
	Aroclor 1232	0.500 U	0.500 U	0.500 U	0.500 U
	Aroclor 1242	0.500 U	0.500 U	0.500 U	0.500 U
	Aroclor 1248	0.743 U	0.500 U	0.716 U	0.500 U
	Aroclor 1254	0.500 U	0.500 U	0.500 U	0.500 U
	Aroclor 1260	4.62 J	0.500 U	8.28 U	2.70 U
	Total PCBs	5.363 J	0.500 U	8.996 U	2.70 U

Notes:

All units in ug/wipe unless otherwise specified.

ug/wipe - micrograms per wipe.

J - Estimated value.

UJ - Estimated nondetect.

U - Compound was not detected at specified quantitation limit.

PCBs - Polychlorinated Biphenyls.

**Table 6: Summary of Analytical Results for Air Samples Collected August 2006
New Bedford High School
New Bedford, Massachusetts**

Analysis	CAS_#	Sample ID:	TRC-TO10A-1	TRC-TO10A-3	TRC-TO10A-4	TRC-TO10A-6
		Sample Location:	A-315-4	A-311-2	A-303-1	A-205-3
		Date sampled:	8/22/2006	8/22/2006	8/22/2006	8/22/2006
Analyte						
PCB	27323-18-8	Monochlorobiphenyls	0.00067 U	0.0015	0.00064 U	0.00068 U
Homologues	25512-42-9	Dichlorobiphenyls	0.021	0.042	0.012	0.012
(ug/m ³)	25323-68-6	Trichlorobiphenyls	0.035	0.055	0.019	0.035
	26914-33-0	Tetrachlorobiphenyls	0.0099	0.011	0.0035	0.012
	25429-29-2	Pentachlorobiphenyls	0.0013 U	0.0013 U	0.0013 U	0.0014 U
	26601-64-9	Hexachlorobiphenyls	0.0013 U	0.0013 U	0.0013 U	0.0014 U
	28655-71-2	Heptachlorobiphenyls	0.0013 U	0.0013 U	0.0013 U	0.0014 U
	55722-26-4	Octachlorobiphenyls	0.0020 U	0.0020 U	0.0019 U	0.0020 U
	53742-07-7	Nonachlorobiphenyls	0.0033 U	0.0033 U	0.0032 U	0.0034 U
	2051-24-3	Decachlorobiphenyl	0.0033 U	0.0033 U	0.0032 U	0.0034 U
	1336-36-3	<i>Total PCBs</i>	0.067	0.11	0.035	0.059

Notes:

All units in ug/m³ unless otherwise specified.

ug/m³ - micrograms per cubic meter.

J - Estimated value.

U - Compound was not detected at specified quantitation limit.

UJ - Estimated nondetect.

PCB Homologues - Polychlorinated Biphenyl Homologues.

(1) - Results are biased low due to a pump failure during the sampling event.

* Pump failure - Use results from duplicate sample TRC-TO10A-13

**Table 6: Summary of Analytical Results for Air Samples Collected August 2006
New Bedford High School
New Bedford, Massachusetts**

Analysis	CAS #	Sample ID:	TRC-TO10A-7	TRC-TO10A-8	TRC-TO10A-9	TRC-TO10A-10
		Sample Location:	A-227-2	B-242	B-240	B-288
		Date sampled:	8/22/2006	8/22/2006	8/22/2006	8/22/2006
Analyte						
PCB Homologues (ug/m ³)	27323-18-8	Monochlorobiphenyls	0.00071 U	0.00069 U	0.00069 U	0.00061 U
	25512-42-9	Dichlorobiphenyls	0.0040	0.0093	0.040	0.0080
	25323-68-6	Trichlorobiphenyls	0.010	0.019	0.14	0.012
	26914-33-0	Tetrachlorobiphenyls	0.0014 U	0.0015	0.13	0.0012 U
	25429-29-2	Pentachlorobiphenyls	0.0014 U	0.0014 U	0.011	0.0012 U
	26601-64-9	Hexachlorobiphenyls	0.0014 U	0.0014 U	0.0014 U	0.0012 U
	28655-71-2	Heptachlorobiphenyls	0.0014 U	0.0014 U	0.0014 U	0.0012 U
	55722-26-4	Octachlorobiphenyls	0.0021 U	0.0021 U	0.0021 U	0.0018 U
	53742-07-7	Nonachlorobiphenyls	0.0035 U	0.0034 U	0.0034 U	0.0031 U
	2051-24-3	Decachlorobiphenyl	0.0035 U	0.0034 U	0.0034 U	0.0031 U
1336-36-3	Total PCBs	0.014	0.030	0.31	0.020	

Notes:

All units in ug/m³ unless otherwise specified.

ug/m³ - micrograms per cubic meter.

I - Estimated value.

U - Compound was not detected at specified quantitation limit.

UJ - Estimated nondetect.

PCB Homologues - Polychlorinated Biphenyl Homologues.

(I) - Results are biased low due to a pump failure during the sampling event.

* Pump failure - Use results from duplicate sample TRC-TO10A-13

**Table 6: Summary of Analytical Results for Air Samples Collected August 2006
New Bedford High School
New Bedford, Massachusetts**

Analysis	CAS_#	Sample ID:	TRC-TO10A-11	TRC-TO10A-12	TRC-TO10A-13	TRC-TO10A-14
		Sample Location:	A-205-1	Hallway Locker 1579	Hallway Locker 1579*	Cafeteria (4-103)
		Date sampled:	8/22/2006	8/22/2006	8/22/2006	8/22/2006
Analyte				(1)	Field Dup of TRC-TO10A-12	
PCB Homologues (ug/m ³)	27323-18-8	Monochlorobiphenyls	0.00068 U	0.00085 UJ	0.00063 U	0.00063 U
	25512-42-9	Dichlorobiphenyls	0.0090	0.016 J	0.023	0.0059
	25323-68-6	Trichlorobiphenyls	0.029	0.038 J	0.052	0.017
	26914-33-0	Tetrachlorobiphenyls	0.0065	0.0074 J	0.020	0.0016
	25429-29-2	Pentachlorobiphenyls	0.0014 U	0.0017 UJ	0.0013 U	0.0013 U
	26601-64-9	Hexachlorobiphenyls	0.0014 U	0.0017 UJ	0.0013 U	0.0013 U
	28655-71-2	Heptachlorobiphenyls	0.0014 U	0.0017 UJ	0.0013 U	0.0013 U
	55722-26-4	Octachlorobiphenyls	0.0020 U	0.0025 UJ	0.0019 U	0.0019 U
	53742-07-7	Nonachlorobiphenyls	0.0034 U	0.0042 UJ	0.0032 U	0.0031 U
	2051-24-3	Decachlorobiphenyl	0.0034 U	0.0042 UJ	0.0032 U	0.0031 U
1336-36-3	<i>Total PCBs</i>	0.045	0.062 J	0.095	0.025	

Notes:

All units in ug/m³ unless otherwise specified.

ug/m³ - micrograms per cubic meter.

J - Estimated value.

U - Compound was not detected at specified quantitation limit.

UJ - Estimated nondetect.

PCB Homologues - Polychlorinated Biphenyl Homologues.

(1) - Results are biased low due to a pump failure during the sampling event.

* Pump failure - Use results from duplicate sample TRC-TO10A-13

**Table 6: Summary of Analytical Results for Air Samples Collected August 2006
New Bedford High School
New Bedford, Massachusetts**

Analysis	CAS_#	Sample ID:	TRC-TO10A-15	TRC-TO10A-16	TRC-TO10A-17	TRC-TO10A-18
		Sample Location:	A-110-4	A-110-4	A-114-3	A-105-2
		Date sampled:	8/22/2006	8/22/2006	8/22/2006	8/22/2006
Analyte		Field Dup of TRC-TO10A-15				
PCB	27323-18-8	Monochlorobiphenyls	0.00067 U	0.00065 U	0.00065 U	0.00065 U
Homologues	25512-42-9	Dichlorobiphenyls	0.013	0.013	0.057	0.012
(ug/m ³)	25323-68-6	Trichlorobiphenyls	0.031	0.029	0.12	0.028
	26914-33-0	Tetrachlorobiphenyls	0.015	0.016	0.075	0.0051
	25429-29-2	Pentachlorobiphenyls	0.0013 U	0.0013 U	0.0074	0.0013 U
	26601-64-9	Hexachlorobiphenyls	0.0013 U	0.0013 U	0.0013 U	0.0013 U
	28655-71-2	Heptachlorobiphenyls	0.0013 U	0.0013 U	0.0013 U	0.0013 U
	55722-26-4	Octachlorobiphenyls	0.0020 U	0.0020 U	0.0020 U	0.0019 U
	53742-07-7	Nonachlorobiphenyls	0.0034 U	0.0033 U	0.0033 U	0.0032 U
	2051-24-3	Decachlorobiphenyl	0.0034 U	0.0033 U	0.0033 U	0.0032 U
	1336-36-3	Total PCBs	0.059	0.058	0.26	0.046

Notes:

All units in ug/m³ unless otherwise specified.

ug/m³ - micrograms per cubic meter.

J - Estimated value.

U - Compound was not detected at specified quantitation limit.

UJ - Estimated nondetect.

PCB Homologues - Polychlorinated Biphenyl Homologues.

(I) - Results are biased low due to a pump failure during the sampling event.

* Pump failure - Use results from duplicate sample TRC-TO10A-13

**Table 6: Summary of Analytical Results for Air Samples Collected August 2006
New Bedford High School
New Bedford, Massachusetts**

Analysis	CAS_#	Sample ID:	TRC-TO10A-19	TRC-TO10A-20	TRC-TO10A-21	TRC-TO10A-22
		Sample Location:	A-117-1	Boiler Room (Upper Deck) (B-114)	Auditorium (D-237)	Girls Gym (E-117)
		Date sampled:	8/22/2006	8/22/2006	8/22/2006	8/22/2006
		Analyte				
PCB Homologues (ug/m ³)	27323-18-8	Monochlorobiphenyls	0.00070 U	0.00067 U	0.00072 U	0.00059 U
	25512-42-9	Dichlorobiphenyls	0.030	0.014	0.0015	0.0025
	25323-68-6	Trichlorobiphenyls	0.057	0.044	0.0038	0.0027
	26914-33-0	Tetrachlorobiphenyls	0.012	0.017	0.0014 U	0.0012 U
	25429-29-2	Pentachlorobiphenyls	0.0014 U	0.0013 U	0.0014 U	0.0012 U
	26601-64-9	Hexachlorobiphenyls	0.0014 U	0.0013 U	0.0014 U	0.0012 U
	28655-71-2	Heptachlorobiphenyls	0.0014 U	0.0013 U	0.0014 U	0.0012 U
	55722-26-4	Octachlorobiphenyls	0.0021 U	0.0020 U	0.0022 U	0.0018 U
	53742-07-7	Nonachlorobiphenyls	0.0035 U	0.0034 U	0.0036 U	0.0030 U
	2051-24-3	Decachlorobiphenyl	0.0035 U	0.0034 U	0.0036 U	0.0030 U
1336-36-3	Total PCBs	0.099	0.075	0.0053	0.0053	

Notes:

All units in ug/m³ unless otherwise specified.

ug/m³ - micrograms per cubic meter.

J - Estimated value.

U - Compound was not detected at specified quantitation limit.

UJ - Estimated nondetect.

PCB Homologues - Polychlorinated Biphenyl Homologues.

(1) - Results are biased low due to a pump failure during the sampling event.

* Pump failure - Use results from duplicate sample TRC-TO10A-13

**Table 6: Summary of Analytical Results for Air Samples Collected August 2006
New Bedford High School
New Bedford, Massachusetts**

Analysis	CAS_#	Sample ID:	TRC-TO10A-23	TRC-TO10A-24	TRC-TO10A-27	TRC-TO10A-BG-1
		Sample Location:	Auto Shop (D-116)	D-122 (CCP Lab)	B-113 Hallway	Playground (Outside background)
		Date sampled:	8/22/2006	8/22/2006	8/22/2006	8/22/2006
		Analyte				
PCB Homologues (ug/m ³)	27323-18-8	Monochlorobiphenyls	0.00062 U	0.00069 U	0.00069 U	0.00070 U
	25512-42-9	Dichlorobiphenyls	0.00070	0.0058	0.0055	0.00070 U
	25323-68-6	Trichlorobiphenyls	0.0017	0.044	0.0110	0.00070 U
	26914-33-0	Tetrachlorobiphenyls	0.0012 U	0.0054	0.0018	0.0014 U
	25429-29-2	Pentachlorobiphenyls	0.0012 U	0.0014 U	0.0014 U	0.0014 U
	26601-64-9	Hexachlorobiphenyls	0.0012 U	0.0014 U	0.0014 U	0.0014 U
	28655-71-2	Heptachlorobiphenyls	0.0012 U	0.0014 U	0.0014 U	0.0014 U
	55722-26-4	Octachlorobiphenyls	0.0018 U	0.0021 U	0.0014 U	0.0021 U
	53742-07-7	Nonachlorobiphenyls	0.0031 U	0.0035 U	0.0035 U	0.0035 U
	2051-24-3	Decachlorobiphenyl	0.0031 U	0.0035 U	0.0035 U	0.0035 U
	1336-36-3	Total PCBs	0.0024	0.056	0.023	0.0035 U

Notes:

All units in ug/m³ unless otherwise specified.

ug/m³ - micrograms per cubic meter.

J - Estimated value.

U - Compound was not detected at specified quantitation limit.

UJ - Estimated nondetect.

PCB Homologues - Polychlorinated Biphenyl Homologues.

(1) - Results are biased low due to a pump failure during the sampling event.

* Pump failure - Use results from duplicate sample TRC-TO10A-13

**Table 6: Summary of Analytical Results for Air Samples Collected August 2006
New Bedford High School
New Bedford, Massachusetts**

Analysis	CAS_#	Sample ID:	TRC-TO4A-BG-1-PF	TRC-TO4A-BG-1-PUF	TRC-TO4A-BG-2-PF	TRC-TO4A-BG-2-PUF
		Sample Location:	Playground (Outside background)	Playground (Outside background)	Front of Main Office (Outside background)	Front of Main Office (Outside background)
		Date sampled:	8/22/2006	8/22/2006	8/22/2006	8/22/2006
Analyte		Particulate Filter	PUF	Particulate Filter	PUF	
PCB	27323-18-8	Monochlorobiphenyls	0.000014 U	0.000014 U	0.000013 U	0.000013 U
Homologues	25512-42-9	Dichlorobiphenyls	0.000014 U	0.000012 U	0.000013 U	0.000072 U
(ug/m ³)	25323-68-6	Trichlorobiphenyls	0.000014 U	0.0010 U	0.000015 U	0.0021 U
	26914-33-0	Tetrachlorobiphenyls	0.000028 U	0.000030 U	0.000027 U	0.00100 U
	25429-29-2	Pentachlorobiphenyls	0.000028 U	0.000043 U	0.000027 U	0.00014 U
	26601-64-9	Hexachlorobiphenyls	0.000028 U	0.000037 U	0.000027 U	0.000048 U
	28655-71-2	Heptachlorobiphenyls	0.000028 U	0.000028 U	0.000027 U	0.000040 U
	55722-26-4	Octachlorobiphenyls	0.000043 U	0.000043 U	0.000040 U	0.000040 U
	53742-07-7	Nonachlorobiphenyls	0.000071 U	0.000071 U	0.000067 U	0.000067 U
	2051-24-3	Decachlorobiphenyl	0.000071 U	0.000071 U	0.000067 U	0.000067 U
	1336-36-3	Total PCBs	0.000071 U	0.0015 U	0.000015 U	0.0040 U

Notes:

All units in ug/m³ unless otherwise specified.

ug/m³ - micrograms per cubic meter.

J - Estimated value.

U - Compound was not detected at specified quantitation limit.

UJ - Estimated nondetect.

PCB Homologues - Polychlorinated Biphenyl Homologues.

(1) - Results are biased low due to a pump failure during the sampling event.

* Pump failure - Use results from duplicate sample TRC-TO10A-13

Table 7: Summary of Analytical Results for Bulk Samples Collected August 2006
 New Bedford High School
 New Bedford, Massachusetts

Analysis	CAS_#	Sample ID:	TRC-BULK-1	TRC-BULK-2	TRC-BULK-3	TRC-BULK-4	TRC-BULK-5	TRC-BULK-6
		Sample Location:	A-315-4 Return Air Vent Dust	A-307-J Return Air Vent Dust	A-303-1 Return Air Vent Dust	House 1 Base Molding Mastic Third Floor Hallway	A-212-4 Window Caulk -Classroom	A-212-4 Return Air Duct Dust
		Date sampled:	8/22/2006	8/22/2006	8/22/2006	8/22/2006	8/22/2006	8/22/2006
PCB (mg/kg)	12674-11-2	Aroclor 1016	0.218 U	0.145 U	0.108 U	0.561 UJ	2.05 U	1.22 UJ
	11104-28-2	Aroclor 1221	0.218 U	0.145 U	0.108 U	0.561 UJ	2.05 U	1.22 UJ
	11141-16-5	Aroclor 1232	0.218 U	0.145 U	0.108 U	0.561 UJ	2.05 U	1.22 UJ
	53469-21-9	Aroclor 1242	0.624	2.04	0.562	5.20 J	31.7	13.6 J
	12672-29-6	Aroclor 1248	0.218 U	0.145 U	0.108 U	0.561 UJ	2.05 U	1.22 UJ
	11097-69-1	Aroclor 1254	1.22	1.17	1.19 J	0.581 J	2.73	19.3 J
	11096-82-5	Aroclor 1260	1.57	1.34	1.05	0.561 UJ	2.05 U	3.62 J
	1336-36-3	Total PCBs	3.414	4.55	2.802 J	5.781 J	34.43	36.52 J

Notes:

All units in mg/kg unless otherwise specified.

mg/kg - milligrams per kilogram

J - Estimated value.

UJ - Estimated nondetect.

U - Compound was not detected at specified quantitation limit.

PCBs - Polychlorinated biphenyls.

Table 7: Summary of Analytical Results for Bulk Samples Collected August 2006
 New Bedford High School
 New Bedford, Massachusetts

Analysis	CAS_#	Sample ID:	TRC-BULK-7		TRC-BULK-8		TRC-BULK-9		TRC-BULK-10		TRC-BULK-11		TRC-BULK-12	
		Sample Location:	B-242 Floor Mastic - Closet Between B-242 & B240		B-242 Return Air Duct Dust		A-205-1 Polyurethane Foam - Chair Padding		House 4 Cafeteria Window Caulking		House 4 Cafeteria Sound-Absorbing Wall Tile		A-110-4 Return Air Vent Dust	
		Date sampled:	8/22/2006		8/22/2006		8/22/2006		8/22/2006		8/22/2006		8/22/2006	
PCB (mg/kg)	12674-11-2	Aroclor 1016	1.21	U	0.150	U	0.523	U	0.0943	U	0.196	U	0.103	UJ
	11104-28-2	Aroclor 1221	1.21	U	0.150	U	0.523	U	0.0943	U	0.196	U	0.103	UJ
	11141-16-5	Aroclor 1232	1.21	U	0.150	U	0.523	U	0.0943	U	0.196	U	0.103	UJ
	53469-21-9	Aroclor 1242	10.8		1.39		7.39		0.400		0.196	U	0.872	J
	12672-29-6	Aroclor 1248	1.21	U	0.150	U	0.523	U	0.0943	U	0.196	U	0.103	UJ
	11097-69-1	Aroclor 1254	5.66		1.35	J	2.76		0.324		0.196	U	1.36	J
	11096-82-5	Aroclor 1260	1.65		2.06		0.523	U	0.0281	J	0.196	U	2.21	J
	1336-36-3	Total PCBs	18.11		4.80	J	10.15		0.7521	J	0.196	U	4.442	J

Notes:

All units in mg/kg unless otherwise specified.

mg/kg - milligrams per kilogram

J - Estimated value.

UJ - Estimated nondetect.

U - Compound was not detected at specified quantitation limit.

PCBs - Polychlorinated biphenyls.

Table 7: Summary of Analytical Results for Bulk Samples Collected August 2006
 New Bedford High School
 New Bedford, Massachusetts

Analysis	CAS_#	Sample ID:	TRC-BULK-13	TRC-BULK-14	TRC-BULK-15	TRC-BULK-16	TRC-BULK-17	TRC-BULK-18
		Sample Location:	House 3 Cafeteria Base Molding Mastic	A-114-3 Return Air Duct Dust	CCP Lab (D-122) Wall Paint	A-205-3 Return Air Duct Dust	House 4 Cafeteria Wall Paint (Above Ceiling Tile)	Kitchen, Floor Paint
		Date sampled:	8/22/2006	8/22/2006	8/22/2006	8/22/2006	8/23/2006	8/23/2006
PCB (mg/kg)	12674-11-2	Aroclor 1016	0.233 U	0.100 UJ	1.43 U	0.303 U	0.630 U	0.150 U
	11104-28-2	Aroclor 1221	0.233 U	0.100 UJ	1.43 U	0.303 U	0.630 U	0.150 U
	11141-16-5	Aroclor 1232	0.233 U	0.100 UJ	1.43 U	0.303 U	0.630 U	0.150 U
	53469-21-9	Aroclor 1242	0.254 J	1.38 J	1.88 J	1.86 J	0.630 U	0.871 J
	12672-29-6	Aroclor 1248	0.233 U	0.100 UJ	1.43 U	0.303 U	0.630 U	0.150 U
	11097-69-1	Aroclor 1254	0.680 J	0.913 J	0.489 J	2.14 J	0.268 J	0.254 J
	11096-82-5	Aroclor 1260	0.105 J	2.03 J	1.43 U	1.37 J	0.179 J	0.150 U
	1336-36-3	Total PCBs	1.039 J	4.323 J	2.369 J	5.37 J	0.447 J	1.125 J

Notes:

All units in mg/kg unless otherwise specified.
 mg/kg - milligrams per kilogram
 J - Estimated value.
 UJ - Estimated nondetect.
 U - Compound was not detected at specified quantitation limit.
 PCBs - Polychlorinated biphenyls.

Table 7: Summary of Analytical Results for Bulk Samples Collected August 2006
 New Bedford High School
 New Bedford, Massachusetts

Analysis	CAS_#	Sample ID:	TRC-BULK-19	TRC-BULK-20	TRC-BULK-21	TRC-BULK-22	TRC-BULK-23	TRC-BULK-24
		Sample Location:	Boiler Room Floor Paint	Boiler Room Door Jamb Caulking	West (Girls) Gym Filter Media and Dust - Second Floor Air Vent	West Gym Storage Room Polyurethane Foam - Gym Mat	West Gym Storage Room Floor Paint	West Gym Storage Room Ceiling Vent Dust
		Date sampled:	8/23/2006	8/23/2006	8/23/2006	8/23/2006	8/23/2006	8/23/2006
PCB (mg/kg)	12674-11-2	Aroclor 1016	0.0500 U	0.225 U	0.0722 U	0.111 U	0.733 U	0.0504 UJ
	11104-28-2	Aroclor 1221	0.0500 U	0.225 U	0.0722 U	0.111 U	0.733 U	0.0504 UJ
	11141-16-5	Aroclor 1232	0.0500 U	0.225 U	0.0722 U	0.111 U	0.733 U	0.0504 UJ
	53469-21-9	Aroclor 1242	1.86	1.68	0.0722 U	1.31	1.36	0.0529 J
	12672-29-6	Aroclor 1248	0.0500 U	0.225 U	0.0722 U	0.111 U	0.733 U	0.0504 UJ
	11097-69-1	Aroclor 1254	0.978	0.861 J	0.0722 U	1.38	0.444 J	0.236 J
	11096-82-5	Aroclor 1260	0.532	0.172 J	0.0722 U	0.162 J	0.733 U	0.495 J
	1336-36-3	Total PCBs	3.370	2.713 J	0.0722 U	2.852 J	1.804 J	0.7839 J

Notes:

All units in mg/kg unless otherwise specified.

mg/kg - milligrams per kilogram

J - Estimated value.

UJ - Estimated nondetect.

U - Compound was not detected at specified quantitation limit.

PCBs - Polychlorinated biphenyls.

Table 7: Summary of Analytical Results for Bulk Samples Collected August 2006
 New Bedford High School
 New Bedford, Massachusetts

Analysis	CAS_#	Sample ID:	TRC-BULK-25	TRC-BULK-26	TRC-BULK-27	TRC-BULK-28	TRC-BULK-29	TRC-BULK-30
		Sample Location:	Pool Locker Room Wall Tile Mastic	Auto Shop (D-116) Air Compressor Oil	Auto Shop (D-116) Oil/Water from Lift Sump	Auto Shop (D-116) Floor Drain Contents	Auto Shop (D-116) Floor Paint	Auto Shop (D-116) Ceiling Tile
		Date sampled:	8/23/2006	8/23/2006	8/23/2006	8/23/2006	8/23/2006	8/23/2006
PCB (mg/kg)	12674-11-2	Aroclor 1016	0.125 U	1.00 U	1.00 U	0.050 U	0.125 U	0.050 U
	11104-28-2	Aroclor 1221	0.125 U	1.00 U	1.00 U	0.050 U	0.125 U	0.050 U
	11141-16-5	Aroclor 1232	0.125 U	1.00 U	1.00 U	0.050 U	0.125 U	0.050 U
	53469-21-9	Aroclor 1242	0.0950 J	1.00 U	4.80 U	0.210 U	1.26 U	0.168 U
	12672-29-6	Aroclor 1248	0.125 U	1.00 U	1.00 U	0.050 U	0.125 U	0.050 U
	11097-69-1	Aroclor 1254	0.0807 J	1.00 U	5.23 U	0.314 U	2.15 U	0.594 J
	11096-82-5	Aroclor 1260	0.125 U	1.00 U	0.841 J	0.519 U	1.08 U	1.48 J
	1336-36-3	Total PCBs	0.1757 J	1.00 U	10.870 J	1.043 U	4.49 U	2.242 J

Notes:

All units in mg/kg unless otherwise specified.

mg/kg - milligrams per kilogram

J - Estimated value.

UJ - Estimated nondetect.

U - Compound was not detected at specified quantitation limit.

PCBs - Polychlorinated biphenyls.

Table 7: Summary of Analytical Results for Bulk Samples Collected August 2006
 New Bedford High School
 New Bedford, Massachusetts

Analysis	CAS #	Sample ID:	TRC-BULK-31		TRC-BULK-32		TRC-BULK-33	
		Sample Location:	Plant Engineer Office Exterior Window Glazing		Plant Engineer Office Floor Tile Mastic		Plant Engineer Office Exterior Caulking (Between Stone Sill and brick)	
		Date sampled:	8/23/2006		8/23/2006		8/23/2006	
PCB (mg/kg)	12674-11-2	Aroclor 1016	0.0873	U	6.58	U	0.106	U
	11104-28-2	Aroclor 1221	0.0873	U	6.58	U	0.106	U
	11141-16-5	Aroclor 1232	0.0873	U	6.58	U	0.106	U
	53469-21-9	Aroclor 1242	0.0873	U	6.58	U	0.106	U
	12672-29-6	Aroclor 1248	0.0873	U	6.58	U	0.106	U
	11097-69-1	Aroclor 1254	0.0873	U	6.58	U	0.106	U
	11096-82-5	Aroclor 1260	0.0873	U	6.58	U	0.106	U
	1336-36-3	Total PCBs	0.0873	U	6.58	U	0.106	U

Notes:

All units in mg/kg unless otherwise specified.

mg/kg - milligrams per kilogram

J - Estimated value.

UJ - Estimated nondetect.

U - Compound was not detected at specified quantitation limit.

PCBs - Polychlorinated biphenyls.

Table 8

Comparison of NBHS Ambient Air PCB Background with Select Available Literature Values for Urban/New Bedford Background

**New Bedford High School
New Bedford, Massachusetts**

Background Location	Concentrations	Reference/Source
Urban Areas (Late 1980s-Early 1990s)	0.001 to 0.010 $\mu\text{g}/\text{m}^3$	Eisenreich et al, 1992
Global Urban Background	0.0019 to 0.103 $\mu\text{g}/\text{m}^3$	Hunt, 1986
New Bedford Background Reference	0.0001 to 0.0082 $\mu\text{g}/\text{m}^3$	Vorhees et al, 1997
Global Urban Background	0.00002 to 0.00064 $\mu\text{g}/\text{m}^3$	Pozo et al., 2006
KMS Background (Aug/Sept 2006)	0.0006 to 0.0099 $\mu\text{g}/\text{m}^3$	BETA, 2006
NBHS Ambient Background	0.0015 to 0.0040 $\mu\text{g}/\text{m}^3$	Collected by TRC August 2006

Appendix A
Laboratory Analytical Data Reports on Compact Disk

Appendix B
Data Validation Memoranda

Memo

To: David Sullivan
From: Elizabeth Denly
CC:
Date: 10/13/06
Re: Data Validation Review: Air Samples: New Bedford High School/New Bedford, MA: SDGs 06080220 and 06080221

SUMMARY

Limited (Tier II) validation was performed on the data for 28 air samples collected at the New Bedford High School Site in New Bedford, Massachusetts. The samples were collected on August 22, 2006 and submitted to Northeast Analytical, Inc. (NEA) in Schenectady, New York for analysis. All samples were collected on polyurethane foam (PUF) cartridges in accordance with EPA method TO-10A; the background samples were also collected on particulate filters and PUF cartridges in accordance with EPA method TO-4A in order to demonstrate comparability with the TO-10A methodology. The samples were analyzed for polychlorinated biphenyl (PCB) homologues using EPA method 680. NEA reported the results under job numbers 06080220 and 06080221.

The sample results were assessed using the *EPA New England Data Validation Functional Guidelines for Evaluating Environmental Analyses*, revised December 1996. Modification of these guidelines was performed to accommodate the non-CLP methodology.

In general, the data appear to be valid as reported and may be used for decision-making purposes. The results of sample TRC-TO10A-12 are biased low due to a pump failure sometime during the sampling period. The results of the collocated sample collected at this location (TRC-TO10A-13) should be used for decision-making purposes.

SAMPLES

Samples included in this review are listed below:

TRC-TO10A-1	TRC-TO10A-3	TRC-TO10A-4
TRC-TO10A-6	TRC-TO10A-7	TRC-TO10A-8
TRC-TO10A-9	TRC-TO10A-10	TRC-TO10A-11
TRC-TO10A-12	TRC-TO10A-13 (1)	TRC-TO10A-14
TRC-TO10A-15	TRC-TO10A-16 (2)	TRC-TO10A-17
TRC-TO10A-18	TRC-TO10A-19	TRC-TO10A-20

TRC-TO10A-21	TRC-TO10A-22	TRC-TO10A-23
TRC-TO10A-24	TRC-TO10A-27	TRC-TO10A-BG-1
TRC-TO10A-FB (field blank)	TRC-TO4A-BG-1-PF	TRC-TO4A-BG-1-PUF
TRC-TO4A-BG-2-PF	TRC-TO4A-BG-2-PUF	
TRC-TO4A-BG-FB-PF (field blank)		
TRC-TO4A-BG-FB-PUF (field blank)		

- (1) Field duplicate of TRC-TO10A-12
- (2) Field duplicate of TRC-TO10A-15

REVIEW ELEMENTS

Sample data were reviewed for the following parameters:

- Agreement of analyses conducted with TRC requests
- Holding times and sample preservation
- Gas chromatography/mass spectrometry (GC/MS) tunes
- Initial and continuing calibrations
- Method blanks
- Surrogate spike recoveries
- Laboratory control sample (LCS) results
- Internal standard performance
- Field duplicate results
- Quantitation limits and sample results

DISCUSSION

Agreement of Analyses Conducted with TRC Requests

Sample reports were checked to verify that the results corresponded to analytical requests as designated on the chain-of-custody and any correspondence between TRC and the laboratory. There were no discrepancies noted.

Holding Times and Sample Preservation

All samples were extracted and analyzed within the method-specified holding time. The cooler temperature was at the proper temperature upon receipt at the laboratory.

GC/MS Tunes

The frequency and abundance of all decafluorotriphenylphosphine (DFTPP) tunes were within the acceptance criteria. The samples were analyzed within 12 hours from the DFTPP tunes. Window defining mixtures were analyzed following each DFTPP tune.

Initial and Continuing Calibrations

The %RSDs and %Ds of all PCB congeners used in the initial and continuing calibrations were within the acceptance criteria.

Method Blanks

Target compounds were not detected in the laboratory method blanks or field blanks associated with the PCB homologue analyses.

Surrogate Spike Recoveries

Select samples exhibited recoveries of the surrogate tetrachloro-m-xylene (TCMX) which were outside the acceptance criteria of 60-140%. In all cases, recovery of the other surrogate (decachloro-C13 biphenyl [DCB]) was within the acceptance criteria (see table below). The following table summarizes the surrogate recoveries in the affected samples.

Sample ID	TCMX	DCB
LCS (06080220)	54%	85%
LCSD (06080220)	52%	98%
TRC-TO10A-8	59%	66%
TRC-TO10A-12	54%	74%
TRC-TO10A-15	55%	80%
TRC-TO10A-18	58%	72%
LCS (TO10A-8/23/06)	54%	68%
LCSD (TO10A-8/23/06)	52%	89%
Blank (TO10A-8/24/06)	59%	75%
LCSD (TO10A-8/24/06)	59%	94%
Blank (TO4A-8/24/06)	55%	79%
LCSD (TO4A-9/24/06)	56%	83%
TRC-TO10A-21	58%	69%
TRC-TO4A-BG-1-PF	55%	67%
TRC-TO4A-BG-FB-PUF	56%	70%
TRC-TO10A-FB	59%	76%

The results of the LCSs (six samples listed above) were within the acceptance criteria for the PCB congener spikes even with slightly low recovery of TCMX; this implies that the sample data were not adversely affected by these slightly low recoveries. Therefore, it was the opinion of the validator that qualification of the data was not required due to the recovery nonconformances listed above.

LCS Results

An LCS was extracted and analyzed with each extraction batch. The recoveries of the spiked congeners were within the acceptance criteria for all eight LCS samples.

Internal Standard Performance

Internal standards were within the acceptance criteria in all sample analyses.

Field Duplicate Results

Samples TRC-TO10A-12/TRC-TO10A-13 and TRC-TO10A-15/TRC-TO10A-16 were submitted as the field duplicate (collocated) pairs with this sample set. As discussed in the Quantitation Limits and Sample Results section below, the results of sample TRC-TO10A-12 are biased low due to a pump failure. Due to this pump failure, results of this field duplicate pair could not be properly evaluated. The following table summarizes the relative percent differences (RPDs) of the detected homologues in the other field duplicate pair, all of which were within the acceptance criteria.

Homologues	TRC-TO10A-15 ($\mu\text{g}/\text{m}^3$)	TRC-TO10A-16 ($\mu\text{g}/\text{m}^3$)	RPD (%)
Dichlorobiphenyls	0.013	0.013	0
Trichlorobiphenyls	0.031	0.029	6.7
Tetrachlorobiphenyls	0.015	0.016	6.4
Total PCBs	0.059	0.058	1.7

Quantitation Limits and Sample Results

There were no dilutions performed on any samples in this data set. The quantitation limits met the requirements in the Sampling Plan for this program.

Sample TRC-TO10A-12 exhibited a pump failure which was observed at the time of recovery of the sample media. The exact time of this failure is unknown. Therefore, the subsequent volume for this sample is estimated. The positive and nondetect results for this sample were qualified as estimated (J/UJ). These results are biased low due to the pump failure. The results of the collocated sample collected at this location (TRC-TO10A-13) should therefore be used for decision-making purposes.



CERTIFICATE OF ANALYSIS

08/28/2006

TRC ENVIRONMENTAL
 BOOTT MILLS SOUTH
 116 JOHN STREET
 LOWELL, MA 01852

CONTACT: ELIZABETH DENLY

CUSTOMER ID: TRC-TO10A-1

NEA ID: AJ10807 NEA LRF: 06080220-01

MATRIX: AIR

DATE SAMPLED: 08/22/2006 TIME: N/A

DATE RECEIVED: 08/23/2006 TIME: 18:55

PROJECT: 53567 NBHS

SAMPLED BY: N/A

LOCATION: NEW BEDFORD, MA

CUSTOMER PO: N/A

LAB ELAP#: 11078

METHOD: EPA 680

DATE ANALYZED: 08/25/2006

HOMOLOG GROUP	CAS NUMBER	AMOUNT	PQL	UNITS	WEIGHT PERCENT
Monochlorobiphenyl	27323-18-8	ND	0.00067	ug/m3	ND
Dichlorobiphenyl	25512-42-9	0.021	0.00067	ug/m3	32
Trichlorobiphenyl	25323-68-6	0.035	0.00067	ug/m3	53
Tetrachlorobiphenyl	26914-33-0	0.0099	0.0013	ug/m3	15
Pentachlorobiphenyl	25429-29-2	ND	0.0013	ug/m3	ND
Hexachlorobiphenyl	26601-64-9	ND	0.0013	ug/m3	ND
Heptachlorobiphenyl	28655-71-2	ND	0.0013	ug/m3	ND
Octachlorobiphenyl	55722-26-4	ND	0.0020	ug/m3	ND
Nonachlorobiphenyl	53742-07-7	ND	0.0033	ug/m3	ND
Decachlorobiphenyl	2051-24-3	ND	0.0033	ug/m3	ND
Total PCB	1336-36-3	0.067			

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
 PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

AUTHORIZED SIGNATURE:

Northeast Analytical, Inc.
 Robert E. Wagner, Laboratory Director

William A. Kotas
 Quality Assurance Officer



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TRC ENVIRONMENTAL
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CONTACT: ELIZABETH DENLY

CUSTOMER ID: TRC-TO10A-3 NEA ID: AJ10808 NEA LRF: 06080220-02
MATRIX: AIR DATE SAMPLED: 08/22/2006 TIME: N/A
DATE RECEIVED: 08/23/2006 TIME: 18:55 PROJECT: 53567 NBHS
SAMPLED BY: N/A LOCATION: NEW BEDFORD, MA
CUSTOMER PO: N/A LAB ELAP#: 11078
METHOD: EPA 680 DATE ANALYZED: 08/25/2006

HOMOLOG GROUP	CAS NUMBER	AMOUNT	PQL	UNITS	WEIGHT PERCENT
Monochlorobiphenyl	27323-18-8	0.0015	0.00065	ug/m3	1.4
Dichlorobiphenyl	25512-42-9	0.042	0.00065	ug/m3	39
Trichlorobiphenyl	25323-68-6	0.055	0.00065	ug/m3	50
Tetrachlorobiphenyl	26914-33-0	0.011	0.0013	ug/m3	9.7
Pentachlorobiphenyl	25429-29-2	ND	0.0013	ug/m3	ND
Hexachlorobiphenyl	26601-64-9	ND	0.0013	ug/m3	ND
Heptachlorobiphenyl	28655-71-2	ND	0.0013	ug/m3	ND
Octachlorobiphenyl	55722-26-4	ND	0.0020	ug/m3	ND
Nonachlorobiphenyl	53742-07-7	ND	0.0033	ug/m3	ND
Decachlorobiphenyl	2051-24-3	ND	0.0033	ug/m3	ND
Total PCB	1336-36-3	0.11			

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

AUTHORIZED SIGNATURE:

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CUSTOMER ID: TRC-TO10A-4 NEA ID: AJ10809 NEA LRF: 06080220-03
MATRIX: AIR DATE SAMPLED: 08/22/2006 TIME: N/A
DATE RECEIVED: 08/23/2006 TIME: 18:55 PROJECT: 53567 NBHS
SAMPLED BY: N/A LOCATION: NEW BEDFORD, MA
CUSTOMER PO: N/A LAB ELAP#: 11078
METHOD: EPA 680 DATE ANALYZED: 08/25/2006

HOMOLOG GROUP	CAS NUMBER	AMOUNT	PQL	UNITS	WEIGHT PERCENT
Monochlorobiphenyl	27323-18-8	ND	0.00064	ug/m3	ND
Dichlorobiphenyl	25512-42-9	0.012	0.00064	ug/m3	35
Trichlorobiphenyl	25323-68-6	0.019	0.00064	ug/m3	55
Tetrachlorobiphenyl	26914-33-0	0.0035	0.0013	ug/m3	10
Pentachlorobiphenyl	25429-29-2	ND	0.0013	ug/m3	ND
Hexachlorobiphenyl	26601-64-9	ND	0.0013	ug/m3	ND
Heptachlorobiphenyl	28655-71-2	ND	0.0013	ug/m3	ND
Octachlorobiphenyl	55722-26-4	ND	0.0019	ug/m3	ND
Nonachlorobiphenyl	53742-07-7	ND	0.0032	ug/m3	ND
Decachlorobiphenyl	2051-24-3	ND	0.0032	ug/m3	ND
Total PCB	1336-36-3	0.035			

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

AUTHORIZED SIGNATURE:

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Robert E. Wagner, Laboratory Director

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CONTACT: ELIZABETH DENLY

CUSTOMER ID: TRC-TO10A-6 NEA ID: AJ10810 NEA LRF: 06080220-04
MATRIX: AIR DATE SAMPLED: 08/22/2006 TIME: N/A
DATE RECEIVED: 08/23/2006 TIME: 18:55 PROJECT: 53567 NBHS
SAMPLED BY: N/A LOCATION: NEW BEDFORD, MA
CUSTOMER PO: N/A LAB ELAP#: 11078
METHOD: EPA 680 DATE ANALYZED: 08/25/2006

HOMOLOG GROUP	CAS NUMBER	AMOUNT	PQL	UNITS	WEIGHT PERCENT
Monochlorobiphenyl	27323-18-8	ND	0.00068	ug/m3	ND
Dichlorobiphenyl	25512-42-9	0.012	0.00068	ug/m3	21
Trichlorobiphenyl	25323-68-6	0.035	0.00068	ug/m3	59
Tetrachlorobiphenyl	26914-33-0	0.012	0.0014	ug/m3	20
Pentachlorobiphenyl	25429-29-2	ND	0.0014	ug/m3	ND
Hexachlorobiphenyl	26601-64-9	ND	0.0014	ug/m3	ND
Heptachlorobiphenyl	28655-71-2	ND	0.0014	ug/m3	ND
Octachlorobiphenyl	55722-26-4	ND	0.0020	ug/m3	ND
Nonachlorobiphenyl	53742-07-7	ND	0.0034	ug/m3	ND
Decachlorobiphenyl	2051-24-3	ND	0.0034	ug/m3	ND
Total PCB	1336-36-3	0.059			

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

AUTHORIZED SIGNATURE:

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Robert E. Wagner, Laboratory Director

William A. Kosas
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08/28/2006
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CONTACT: ELIZABETH DENLY

CUSTOMER ID: TRC-TO10A-7 NEA ID: AJ10811 NEA LRF: 06080220-05
MATRIX: AIR DATE SAMPLED: 08/22/2006 TIME: N/A
DATE RECEIVED: 08/23/2006 TIME: 18:55 PROJECT: 53567 NBHS
SAMPLED BY: N/A LOCATION: NEW BEDFORD, MA
CUSTOMER PO: N/A LAB ELAP#: 11078
METHOD: EPA 680 DATE ANALYZED: 08/25/2006

HOMOLOG GROUP	CAS NUMBER	AMOUNT	PQL	UNITS	WEIGHT PERCENT
Monochlorobiphenyl	27323-18-8	ND	0.00071	ug/m3	ND
Dichlorobiphenyl	25512-42-9	0.0040	0.00071	ug/m3	28
Trichlorobiphenyl	25323-68-6	0.010	0.00071	ug/m3	72
Tetrachlorobiphenyl	26914-33-0	ND	0.0014	ug/m3	ND
Pentachlorobiphenyl	25429-29-2	ND	0.0014	ug/m3	ND
Hexachlorobiphenyl	26601-64-9	ND	0.0014	ug/m3	ND
Heptachlorobiphenyl	28655-71-2	ND	0.0014	ug/m3	ND
Octachlorobiphenyl	55722-26-4	ND	0.0021	ug/m3	ND
Nonachlorobiphenyl	53742-07-7	ND	0.0035	ug/m3	ND
Decachlorobiphenyl	2051-24-3	ND	0.0035	ug/m3	ND
Total PCB	1336-36-3	0.014			

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

AUTHORIZED SIGNATURE:

Northeast Analytical, Inc.
Robert E. Wagner, Laboratory Director

William A. Kotus
Quality Assurance Officer



CERTIFICATE OF ANALYSIS

08/28/2006

TRC ENVIRONMENTAL

BOOTT MILLS SOUTH

116 JOHN STREET

LOWELL, MA 01852

CONTACT: ELIZABETH DENLY

CUSTOMER ID: TRC-TO10A-8

NEA ID: AJ10812

NEA LRF: 06080220-06

MATRIX: AIR

DATE SAMPLED: 08/22/2006

TIME: N/A

DATE RECEIVED: 08/23/2006 TIME: 18:55

PROJECT: 53567 NBHS

SAMPLED BY: N/A

LOCATION: NEW BEDFORD, MA

CUSTOMER PO: N/A

LAB ELAP#: 11078

METHOD: EPA 680

DATE ANALYZED: 08/25/2006

HOMOLOG GROUP	CAS NUMBER	AMOUNT	PQL	UNITS	WEIGHT PERCENT
Monochlorobiphenyl	27323-18-8	ND	0.00069	ug/m3	ND
Dichlorobiphenyl	25512-42-9	0.0093	0.00069	ug/m3	31
Trichlorobiphenyl	25323-68-6	0.019	0.00069	ug/m3	64
Tetrachlorobiphenyl	26914-33-0	0.0015	0.0014	ug/m3	5.0
Pentachlorobiphenyl	25429-29-2	ND	0.0014	ug/m3	ND
Hexachlorobiphenyl	26601-64-9	ND	0.0014	ug/m3	ND
Heptachlorobiphenyl	28655-71-2	ND	0.0014	ug/m3	ND
Octachlorobiphenyl	55722-26-4	ND	0.0021	ug/m3	ND
Nonachlorobiphenyl	53742-07-7	ND	0.0034	ug/m3	ND
Decachlorobiphenyl	2051-24-3	ND	0.0034	ug/m3	ND
Total PCB	1336-36-3	0.030			

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

AUTHORIZED SIGNATURE:

Northeast Analytical, Inc.
Robert E. Wagner, Laboratory Director

William A. Kotz
Quality Assurance Officer

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Page 1 of 1

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CERTIFICATE OF ANALYSIS
08/28/2006
TRC ENVIRONMENTAL
BOOTT MILLS SOUTH
116 JOHN STREET
LOWELL, MA 01852
CONTACT: ELIZABETH DENLY

CUSTOMER ID: TRC-TO10A-9 NEA ID: AJ10813 NEA LRF: 06080220-07
MATRIX: AIR DATE SAMPLED: 08/22/2006 TIME: N/A
DATE RECEIVED: 08/23/2006 TIME: 18:55 PROJECT: 53567 NBHS
SAMPLED BY: N/A LOCATION: NEW BEDFORD, MA
CUSTOMER PO: N/A LAB ELAP#: 11078
METHOD: EPA 680 DATE ANALYZED: 08/25/2006

HOMOLOG GROUP	CAS NUMBER	AMOUNT	PQL	UNITS	WEIGHT PERCENT
Monochlorobiphenyl	27323-18-8	ND	0.00069	ug/m3	ND
Dichlorobiphenyl	25512-42-9	0.040	0.00069	ug/m3	13
Trichlorobiphenyl	25323-68-6	0.14	0.00069	ug/m3	43
Tetrachlorobiphenyl	26914-33-0	0.13	0.0014	ug/m3	40
Pentachlorobiphenyl	25429-29-2	0.011	0.0014	ug/m3	3.7
Hexachlorobiphenyl	26601-64-9	ND	0.0014	ug/m3	ND
Heptachlorobiphenyl	28655-71-2	ND	0.0014	ug/m3	ND
Octachlorobiphenyl	55722-26-4	ND	0.0021	ug/m3	ND
Nonachlorobiphenyl	53742-07-7	ND	0.0034	ug/m3	ND
Decachlorobiphenyl	2051-24-3	ND	0.0034	ug/m3	ND
Total PCB	1336-36-3	0.31			

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

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CERTIFICATE OF ANALYSIS
08/28/2006
TRC ENVIRONMENTAL
BOOT MILLS SOUTH
116 JOHN STREET
LOWELL, MA 01852
CONTACT: ELIZABETH DENLY

CUSTOMER ID: TRC-TO10A-10 NEA ID: AJ10814 NEA LRF: 06080220-08
MATRIX: AIR DATE SAMPLED: 08/22/2006 TIME: N/A
DATE RECEIVED: 08/23/2006 TIME: 18:55 PROJECT: 53567 NBHS
SAMPLED BY: N/A LOCATION: NEW BEDFORD, MA
CUSTOMER PO: N/A LAB ELAP#: 11078
METHOD: EPA 680 DATE ANALYZED: 08/25/2006

HOMOLOG GROUP	CAS NUMBER	AMOUNT	PQL	UNITS	WEIGHT PERCENT
Monochlorobiphenyl	27323-18-8	ND	0.00061	ug/m3	ND
Dichlorobiphenyl	25512-42-9	0.0080	0.00061	ug/m3	40
Trichlorobiphenyl	25323-68-6	0.012	0.00061	ug/m3	60
Tetrachlorobiphenyl	26914-33-0	ND	0.0012	ug/m3	ND
Pentachlorobiphenyl	25429-29-2	ND	0.0012	ug/m3	ND
Hexachlorobiphenyl	26601-64-9	ND	0.0012	ug/m3	ND
Heptachlorobiphenyl	28655-71-2	ND	0.0012	ug/m3	ND
Octachlorobiphenyl	55722-26-4	ND	0.0018	ug/m3	ND
Nonachlorobiphenyl	53742-07-7	ND	0.0031	ug/m3	ND
Decachlorobiphenyl	2051-24-3	ND	0.0031	ug/m3	ND
Total PCB	1336-36-3	0.020			

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

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CERTIFICATE OF ANALYSIS
08/28/2006
TRC ENVIRONMENTAL
BOOTT MILLS SOUTH
116 JOHN STREET
LOWELL, MA 01852
CONTACT: ELIZABETH DENLY

CUSTOMER ID: TRC-TO10A-11 NEA ID: AJ10815 NEA LRF: 06080220-09
MATRIX: AIR DATE SAMPLED: 08/22/2006 TIME: N/A
DATE RECEIVED: 08/23/2006 TIME: 18:55 PROJECT: 53567 NBHS
SAMPLED BY: N/A LOCATION: NEW BEDFORD, MA
CUSTOMER PO: N/A LAB ELAP#: 11078
METHOD: EPA 680 DATE ANALYZED: 08/25/2006

HOMOLOG GROUP	CAS NUMBER	AMOUNT	PQL	UNITS	WEIGHT PERCENT
Monochlorobiphenyl	27323-18-8	ND	0.00068	ug/m3	ND
Dichlorobiphenyl	25512-42-9	0.0090	0.00068	ug/m3	20
Trichlorobiphenyl	25323-68-6	0.029	0.00068	ug/m3	65
Tetrachlorobiphenyl	26914-33-0	0.0065	0.0014	ug/m3	15
Pentachlorobiphenyl	25429-29-2	ND	0.0014	ug/m3	ND
Hexachlorobiphenyl	26601-64-9	ND	0.0014	ug/m3	ND
Heptachlorobiphenyl	28655-71-2	ND	0.0014	ug/m3	ND
Octachlorobiphenyl	55722-26-4	ND	0.0020	ug/m3	ND
Nonachlorobiphenyl	53742-07-7	ND	0.0034	ug/m3	ND
Decachlorobiphenyl	2051-24-3	ND	0.0034	ug/m3	ND
Total PCB	1336-36-3	0.045			

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

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08/28/2006
TRC ENVIRONMENTAL
BOOTT MILLS SOUTH
116 JOHN STREET
LOWELL, MA 01852
CONTACT: ELIZABETH DENLY

CUSTOMER ID: TRC-TO10A-13 NEA ID: AJ10817 NEA LRF: 06080220-11
MATRIX: AIR DATE SAMPLED: 08/22/2006 TIME: N/A
DATE RECEIVED: 08/23/2006 TIME: 18:55 PROJECT: 53567 NBHS
SAMPLED BY: N/A LOCATION: NEW BEDFORD, MA
CUSTOMER PO: N/A LAB ELAP#: 11078
METHOD: EPA 680 DATE ANALYZED: 08/25/2006

HOMOLOG GROUP	CAS NUMBER	AMOUNT	PQL	UNITS	WEIGHT PERCENT
Monochlorobiphenyl	27323-18-8	ND	0.00063	ug/m3	ND
Dichlorobiphenyl	25512-42-9	0.023	0.00063	ug/m3	24
Trichlorobiphenyl	25323-68-6	0.052	0.00063	ug/m3	55
Tetrachlorobiphenyl	26914-33-0	0.020	0.0013	ug/m3	21
Pentachlorobiphenyl	25429-29-2	ND	0.0013	ug/m3	ND
Hexachlorobiphenyl	26601-64-9	ND	0.0013	ug/m3	ND
Heptachlorobiphenyl	28655-71-2	ND	0.0013	ug/m3	ND
Octachlorobiphenyl	55722-26-4	ND	0.0019	ug/m3	ND
Nonachlorobiphenyl	53742-07-7	ND	0.0032	ug/m3	ND
Decachlorobiphenyl	2051-24-3	ND	0.0032	ug/m3	ND
Total PCB	1336-36-3	0.095			

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

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 08/28/2006
TRC ENVIRONMENTAL
BOOTT MILLS SOUTH
 116 JOHN STREET
 LOWELL, MA 01852
CONTACT: ELIZABETH DENLY

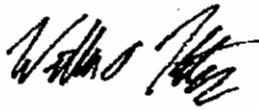
CUSTOMER ID: TRC-TO10A-12 MATRIX: AIR DATE RECEIVED: 08/23/2006 TIME: 18:55 SAMPLED BY: N/A CUSTOMER PO: N/A METHOD: EPA 680	NEA ID: AJ10816 NEA LRF: 06080220-10 DATE SAMPLED: 08/22/2006 TIME: N/A PROJECT: 53567 NBHS LOCATION: NEW BEDFORD, MA LAB ELAP#: 11078 DATE ANALYZED: 08/25/2006
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HOMOLOG GROUP	CAS NUMBER	AMOUNT	PQL	UNITS	WEIGHT PERCENT
Monochlorobiphenyl	27323-18-8	ND <i>US</i>	0.00085	ug/m3	ND
Dichlorobiphenyl	25512-42-9	0.016 <i>S</i>	0.00085	ug/m3	26
Trichlorobiphenyl	25323-68-6	0.038 <i>S</i>	0.00085	ug/m3	62
Tetrachlorobiphenyl	26914-33-0	0.0074 <i>S</i>	0.0017	ug/m3	12
Pentachlorobiphenyl	25429-29-2	ND <i>US</i>	0.0017	ug/m3	ND
Hexachlorobiphenyl	26601-64-9	ND	0.0017	ug/m3	ND
Heptachlorobiphenyl	28655-71-2	ND	0.0017	ug/m3	ND
Octachlorobiphenyl	55722-26-4	ND	0.0025	ug/m3	ND
Nonachlorobiphenyl	53742-07-7	ND	0.0042	ug/m3	ND
Decachlorobiphenyl	2051-24-3	ND	0.0042	ug/m3	ND
Total PCB	1336-36-3	0.062 <i>S</i>			

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
 PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

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08/28/2006

TRC ENVIRONMENTAL

BOOTT MILLS SOUTH

116 JOHN STREET

LOWELL, MA 01852

CONTACT: ELIZABETH DENLY

CUSTOMER ID: TRC-TO10A-14

NEA ID: AJ10818 NEA LRF: 06080220-12

MATRIX: AIR

DATE SAMPLED: 08/22/2006 TIME: N/A

DATE RECEIVED: 08/23/2006 TIME: 18:55

PROJECT: 53567 NBHS

SAMPLED BY: N/A

LOCATION: NEW BEDFORD, MA

CUSTOMER PO: N/A

LAB ELAP#: 11078

METHOD: EPA 680

DATE ANALYZED: 08/25/2006

HOMOLOG GROUP	CAS NUMBER	AMOUNT	PQL	UNITS	WEIGHT PERCENT
Monochlorobiphenyl	27323-18-8	ND	0.00063	ug/m3	ND
Dichlorobiphenyl	25512-42-9	0.0059	0.00063	ug/m3	24
Trichlorobiphenyl	25323-68-6	0.017	0.00063	ug/m3	70
Tetrachlorobiphenyl	26914-33-0	0.0016	0.0013	ug/m3	6.5
Pentachlorobiphenyl	25429-29-2	ND	0.0013	ug/m3	ND
Hexachlorobiphenyl	26601-64-9	ND	0.0013	ug/m3	ND
Heptachlorobiphenyl	28655-71-2	ND	0.0013	ug/m3	ND
Octachlorobiphenyl	55722-26-4	ND	0.0019	ug/m3	ND
Nonachlorobiphenyl	53742-07-7	ND	0.0031	ug/m3	ND
Decachlorobiphenyl	2051-24-3	ND	0.0031	ug/m3	ND
Total PCB	1336-36-3	0.025			

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

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08/28/2006
TRC ENVIRONMENTAL
BOOTT MILLS SOUTH
116 JOHN STREET
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CONTACT: ELIZABETH DENLY

CUSTOMER ID: TRC-TO10A-15 NEA ID: AJ10819 NEA LRF: 06080220-13
MATRIX: AIR DATE SAMPLED: 08/22/2006 TIME: N/A
DATE RECEIVED: 08/23/2006 TIME: 18:55 PROJECT: 53567 NBHS
SAMPLED BY: N/A LOCATION: NEW BEDFORD, MA
CUSTOMER PO: N/A LAB ELAP#: 11078
METHOD: EPA 680 DATE ANALYZED: 08/26/2006

HOMOLOG GROUP	CAS NUMBER	AMOUNT	PQL	UNITS	WEIGHT PERCENT
Monochlorobiphenyl	27323-18-8	ND	0.00067	ug/m3	ND
Dichlorobiphenyl	25512-42-9	0.013	0.00067	ug/m3	23
Trichlorobiphenyl	25323-68-6	0.031	0.00067	ug/m3	52
Tetrachlorobiphenyl	26914-33-0	0.015	0.0013	ug/m3	26
Pentachlorobiphenyl	25429-29-2	ND	0.0013	ug/m3	ND
Hexachlorobiphenyl	26601-64-9	ND	0.0013	ug/m3	ND
Heptachlorobiphenyl	28655-71-2	ND	0.0013	ug/m3	ND
Octachlorobiphenyl	55722-26-4	ND	0.0020	ug/m3	ND
Nonachlorobiphenyl	53742-07-7	ND	0.0034	ug/m3	ND
Decachlorobiphenyl	2051-24-3	ND	0.0034	ug/m3	ND
Total PCB	1336-36-3	0.059			

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

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CERTIFICATE OF ANALYSIS
 08/28/2006
TRC ENVIRONMENTAL
BOOTT MILLS SOUTH
116 JOHN STREET
LOWELL, MA 01852
CONTACT: ELIZABETH DENLY

CUSTOMER ID: TRC-TO10A-16 MATRIX: AIR DATE RECEIVED: 08/23/2006 TIME: 18:55 SAMPLED BY: N/A CUSTOMER PO: N/A METHOD: EPA 680	NEA ID: AJ10820 NEA LRF: 06080220-14 DATE SAMPLED: 08/22/2006 TIME: N/A PROJECT: 53567 NBHS LOCATION: NEW BEDFORD, MA LAB ELAP#: 11078 DATE ANALYZED: 08/28/2006
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HOMOLOG GROUP	CAS NUMBER	AMOUNT	PQL	UNITS	WEIGHT PERCENT
Monochlorobiphenyl	27323-18-8	ND	0.00065	ug/m3	ND
Dichlorobiphenyl	25512-42-9	0.013	0.00065	ug/m3	22
Trichlorobiphenyl	25323-68-6	0.029	0.00065	ug/m3	50
Tetrachlorobiphenyl	26914-33-0	0.016	0.0013	ug/m3	28
Pentachlorobiphenyl	25429-29-2	ND	0.0013	ug/m3	ND
Hexachlorobiphenyl	26601-64-9	ND	0.0013	ug/m3	ND
Heptachlorobiphenyl	28655-71-2	ND	0.0013	ug/m3	ND
Octachlorobiphenyl	55722-26-4	ND	0.0020	ug/m3	ND
Nonachlorobiphenyl	53742-07-7	ND	0.0033	ug/m3	ND
Decachlorobiphenyl	2051-24-3	ND	0.0033	ug/m3	ND
Total PCB	1336-36-3	0.058			

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
 PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

AUTHORIZED SIGNATURE:

Northeast Analytical, Inc.
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CERTIFICATE OF ANALYSIS
08/28/2006
TRC ENVIRONMENTAL
BOOTT MILLS SOUTH
116 JOHN STREET
LOWELL, MA 01852
CONTACT: ELIZABETH DENLY

CUSTOMER ID: TRC-TO10A-17 NEA ID: AJ10821 NEA LRF: 06080220-15
MATRIX: AIR DATE SAMPLED: 08/22/2006 TIME: N/A
DATE RECEIVED: 08/23/2006 TIME: 18:55 PROJECT: 53567 NBHS
SAMPLED BY: N/A LOCATION: NEW BEDFORD, MA
CUSTOMER PO: N/A LAB ELAP#: 11078
METHOD: EPA 680 DATE ANALYZED: 08/26/2006

HOMOLOG GROUP	CAS NUMBER	AMOUNT	PQL	UNITS	WEIGHT PERCENT
Monochlorobiphenyl	27323-18-8	ND	0.00065	ug/m3	ND
Dichlorobiphenyl	25512-42-9	0.057	0.00065	ug/m3	22
Trichlorobiphenyl	25323-68-6	0.12	0.00065	ug/m3	47
Tetrachlorobiphenyl	26914-33-0	0.075	0.0013	ug/m3	29
Pentachlorobiphenyl	25429-29-2	0.0074	0.0013	ug/m3	2.8
Hexachlorobiphenyl	26601-64-9	ND	0.0013	ug/m3	ND
Heptachlorobiphenyl	28655-71-2	ND	0.0013	ug/m3	ND
Octachlorobiphenyl	55722-26-4	ND	0.0020	ug/m3	ND
Nonachlorobiphenyl	53742-07-7	ND	0.0033	ug/m3	ND
Decachlorobiphenyl	2051-24-3	ND	0.0033	ug/m3	ND
Total PCB	1336-36-3	0.26			

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

AUTHORIZED SIGNATURE:

Northeast Analytical, Inc.
Robert E. Wagaer, Laboratory Director

William A. Kotis
Quality Assurance Officer



CERTIFICATE OF ANALYSIS

08/28/2006

**TRC ENVIRONMENTAL
BOOTT MILLS SOUTH
116 JOHN STREET
LOWELL, MA 01852**

CONTACT: ELIZABETH DENLY

CUSTOMER ID: TRC-TO10A-18

NEA ID: AJ10822 **NEA LRF:** 06080220-16

MATRIX: AIR

DATE SAMPLED: 08/22/2006 **TIME:** N/A

DATE RECEIVED: 08/23/2006 **TIME:** 18:55

PROJECT: 53567 NBHS

SAMPLED BY: N/A

LOCATION: NEW BEDFORD, MA

CUSTOMER PO: N/A

LAB ELAP#: 11078

METHOD: EPA 680

DATE ANALYZED: 08/26/2006

HOMOLOG GROUP	CAS NUMBER	AMOUNT	PQL	UNITS	WEIGHT PERCENT
Monochlorobiphenyl	27323-18-8	ND	0.00065	ug/m3	ND
Dichlorobiphenyl	25512-42-9	0.012	0.00065	ug/m3	27
Trichlorobiphenyl	25323-68-6	0.028	0.00065	ug/m3	62
Tetrachlorobiphenyl	26914-33-0	0.0051	0.0013	ug/m3	11
Pentachlorobiphenyl	25429-29-2	ND	0.0013	ug/m3	ND
Hexachlorobiphenyl	26601-64-9	ND	0.0013	ug/m3	ND
Heptachlorobiphenyl	28655-71-2	ND	0.0013	ug/m3	ND
Octachlorobiphenyl	55722-26-4	ND	0.0019	ug/m3	ND
Nonachlorobiphenyl	53742-07-7	ND	0.0032	ug/m3	ND
Decachlorobiphenyl	2051-24-3	ND	0.0032	ug/m3	ND
Total PCB	1336-36-3	0.046			

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

AUTHORIZED SIGNATURE:

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CERTIFICATE OF ANALYSIS
08/28/2006
TRC ENVIRONMENTAL
BOOTT MILLS SOUTH
116 JOHN STREET
LOWELL, MA 01852
CONTACT: ELIZABETH DENLY

CUSTOMER ID: TRC-TO10A-27 NEA ID: AJ10823 NEA LRF: 06080221-01
MATRIX: AIR DATE SAMPLED: 08/22/2006 TIME: N/A
DATE RECEIVED: 08/23/2006 TIME: 18:55 PROJECT: 53567 NBHS
SAMPLED BY: N/A LOCATION: NEW BEDFORD, MA
CUSTOMER PO: N/A LAB ELAP#: 11078
METHOD: EPA 680 DATE ANALYZED: 08/24/2006

HOMOLOG GROUP	CAS NUMBER	AMOUNT	PQL	UNITS	WEIGHT PERCENT
Monochlorobiphenyl	27323-18-8	ND	0.00069	ug/m3	ND
Dichlorobiphenyl	25512-42-9	0.0055	0.00069	ug/m3	24
Trichlorobiphenyl	25323-68-6	0.016	0.00069	ug/m3	68
Tetrachlorobiphenyl	26914-33-0	0.0018	0.0014	ug/m3	7.7
Pentachlorobiphenyl	25429-29-2	ND	0.0014	ug/m3	ND
Hexachlorobiphenyl	26601-64-9	ND	0.0014	ug/m3	ND
Heptachlorobiphenyl	28655-71-2	ND	0.0014	ug/m3	ND
Octachlorobiphenyl	55722-26-4	ND	0.0021	ug/m3	ND
Nonachlorobiphenyl	53742-07-7	ND	0.0035	ug/m3	ND
Decachlorobiphenyl	2051-24-3	ND	0.0035	ug/m3	ND
Total PCB	1336-36-3	0.023			

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

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08/28/2006

TRC ENVIRONMENTAL
 BOOTT MILLS SOUTH
 116 JOHN STREET
 LOWELL, MA 01852

CONTACT: ELIZABETH DENLY

CUSTOMER ID:	TRC-TO10A-19	NEA ID:	AJ10824	NEA LRF:	06080221-02
MATRIX:	AIR	DATE SAMPLED:	08/22/2006	TIME:	N/A
DATE RECEIVED:	08/23/2006	TIME:	18:55	PROJECT:	53567 NBHS
SAMPLED BY:	N/A	LOCATION:	NEW BEDFORD, MA		
CUSTOMER PO:	N/A	LAB ELAP#:	11078		
METHOD:	EPA 680	DATE ANALYZED:	08/28/2006		

HOMOLOG GROUP	CAS NUMBER	AMOUNT	PQL	UNITS	WEIGHT PERCENT
Monochlorobiphenyl	27323-18-8	ND	0.00070	ug/m3	ND
Dichlorobiphenyl	25512-42-9	0.030	0.00070	ug/m3	30
Trichlorobiphenyl	25323-68-6	0.057	0.00070	ug/m3	58
Tetrachlorobiphenyl	26914-33-0	0.012	0.0014	ug/m3	12
Pentachlorobiphenyl	25429-29-2	ND	0.0014	ug/m3	ND
Hexachlorobiphenyl	26601-64-9	ND	0.0014	ug/m3	ND
Heptachlorobiphenyl	28655-71-2	ND	0.0014	ug/m3	ND
Octachlorobiphenyl	55722-26-4	ND	0.0021	ug/m3	ND
Nonachlorobiphenyl	53742-07-7	ND	0.0035	ug/m3	ND
Decachlorobiphenyl	2051-24-3	ND	0.0035	ug/m3	ND
Total PCB	1336-36-3	0.099			

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
 PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

AUTHORIZED SIGNATURE:

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 Robert E. Wagner, Laboratory Director

William A. Kotas
 Quality Assurance Officer



CERTIFICATE OF ANALYSIS
08/28/2006
TRC ENVIRONMENTAL
BOOTT MILLS SOUTH
116 JOHN STREET
LOWELL, MA 01852
CONTACT: ELIZABETH DENLY

CUSTOMER ID: TRC-TO10A-20 MATRIX: AIR DATE RECEIVED: 08/23/2006 TIME: 18:55 SAMPLED BY: N/A CUSTOMER PO: N/A METHOD: EPA 680	NEA ID: AJ10825 NEA LRF: 06080221-03 DATE SAMPLED: 08/22/2006 TIME: N/A PROJECT: 53567 NBHS LOCATION: NEW BEDFORD, MA LAB ELAP#: 11078 DATE ANALYZED: 08/28/2006
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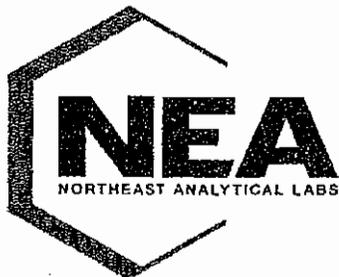
HOMOLOG GROUP	CAS NUMBER	AMOUNT	PQL	UNITS	WEIGHT PERCENT
Monochlorobiphenyl	27323-18-8	ND	0.00067	ug/m3	ND
Dichlorobiphenyl	25512-42-9	0.014	0.00067	ug/m3	18
Trichlorobiphenyl	25323-68-6	0.044	0.00067	ug/m3	58
Tetrachlorobiphenyl	26914-33-0	0.017	0.0013	ug/m3	23
Pentachlorobiphenyl	25429-29-2	ND	0.0013	ug/m3	ND
Hexachlorobiphenyl	26601-64-9	ND	0.0013	ug/m3	ND
Heptachlorobiphenyl	28655-71-2	ND	0.0013	ug/m3	ND
Octachlorobiphenyl	55722-26-4	ND	0.0020	ug/m3	ND
Nonachlorobiphenyl	53742-07-7	ND	0.0034	ug/m3	ND
Decachlorobiphenyl	2051-24-3	ND	0.0034	ug/m3	ND
Total PCB	1336-36-3	0.075			

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
 PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

AUTHORIZED SIGNATURE:

Northeast Analytical, Inc.
 Robert E. Wagner, Laboratory Director

William A. Kotas
 Quality Assurance Officer



CERTIFICATE OF ANALYSIS
08/28/2006
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CONTACT: ELIZABETH DENLY

CUSTOMER ID: TRC-TO10A-21 NEA ID: AJ10826 NEA LRF: 06080221-04
MATRIX: AIR DATE SAMPLED: 08/22/2006 TIME: N/A
DATE RECEIVED: 08/23/2006 TIME: 18:55 PROJECT: 53567 NBHS
SAMPLED BY: N/A LOCATION: NEW BEDFORD, MA
CUSTOMER PO: N/A LAB ELAP#: 11078
METHOD: EPA 680 DATE ANALYZED: 08/28/2006

HOMOLOG GROUP	CAS NUMBER	AMOUNT	PQL	UNITS	WEIGHT PERCENT
Monochlorobiphenyl	27323-18-8	ND	0.00072	ug/m3	ND
Dichlorobiphenyl	25512-42-9	0.0015	0.00072	ug/m3	28
Trichlorobiphenyl	25323-68-6	0.0038	0.00072	ug/m3	72
Tetrachlorobiphenyl	26914-33-0	ND	0.0014	ug/m3	ND
Pentachlorobiphenyl	25429-29-2	ND	0.0014	ug/m3	ND
Hexachlorobiphenyl	26601-64-9	ND	0.0014	ug/m3	ND
Heptachlorobiphenyl	28655-71-2	ND	0.0014	ug/m3	ND
Octachlorobiphenyl	55722-26-4	ND	0.0022	ug/m3	ND
Nonachlorobiphenyl	53742-07-7	ND	0.0036	ug/m3	ND
Decachlorobiphenyl	2051-24-3	ND	0.0036	ug/m3	ND
Total PCB	1336-36-3	0.0053			

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

AUTHORIZED SIGNATURE:

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CUSTOMER ID: TRC-TO10A-22 MATRIX: AIR DATE RECEIVED: 08/23/2006 TIME: 18:55 SAMPLED BY: N/A CUSTOMER PO: N/A METHOD: EPA 680	NEA ID: AJ10827 NEA LRF: 06080221-05 DATE SAMPLED: 08/22/2006 TIME: N/A PROJECT: 53567 NBHS LOCATION: NEW BEDFORD, MA LAB ELAP#: 11078 DATE ANALYZED: 08/28/2006
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HOMOLOG GROUP	CAS NUMBER	AMOUNT	PQL	UNITS	WEIGHT PERCENT
Monochlorobiphenyl	27323-18-8	ND	0.00059	ug/m3	ND
Dichlorobiphenyl	25512-42-9	0.0025	0.00059	ug/m3	48
Trichlorobiphenyl	25323-68-6	0.0027	0.00059	ug/m3	52
Tetrachlorobiphenyl	26914-33-0	ND	0.0012	ug/m3	ND
Pentachlorobiphenyl	25429-29-2	ND	0.0012	ug/m3	ND
Hexachlorobiphenyl	26601-64-9	ND	0.0012	ug/m3	ND
Heptachlorobiphenyl	28655-71-2	ND	0.0012	ug/m3	ND
Octachlorobiphenyl	55722-26-4	ND	0.0018	ug/m3	ND
Nonachlorobiphenyl	53742-07-7	ND	0.0030	ug/m3	ND
Decachlorobiphenyl	2051-24-3	ND	0.0030	ug/m3	ND
Total PCB	1336-36-3	0.0053			

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
 PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

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CUSTOMER ID: TRC-TO10A-23 MATRIX: AIR DATE RECEIVED: 08/23/2006 TIME: 18:55 SAMPLED BY: N/A CUSTOMER PO: N/A METHOD: EPA 680	NEA ID: AJ10828 NEA LRF: 06080221-06 DATE SAMPLED: 08/22/2006 TIME: N/A PROJECT: 53567 NBHS LOCATION: NEW BEDFORD, MA LAB ELAP#: 11078 DATE ANALYZED: 08/28/2006
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HOMOLOG GROUP	CAS NUMBER	AMOUNT	PQL	UNITS	WEIGHT PERCENT
Monochlorobiphenyl	27323-18-8	ND	0.00062	ug/m3	ND
Dichlorobiphenyl	25512-42-9	0.00070	0.00062	ug/m3	29
Trichlorobiphenyl	25323-68-6	0.0017	0.00062	ug/m3	71
Tetrachlorobiphenyl	26914-33-0	ND	0.0012	ug/m3	ND
Pentachlorobiphenyl	25429-29-2	ND	0.0012	ug/m3	ND
Hexachlorobiphenyl	26601-64-9	ND	0.0012	ug/m3	ND
Heptachlorobiphenyl	28655-71-2	ND	0.0012	ug/m3	ND
Octachlorobiphenyl	55722-26-4	ND	0.0018	ug/m3	ND
Nonachlorobiphenyl	53742-07-7	ND	0.0031	ug/m3	ND
Decachlorobiphenyl	2051-24-3	ND	0.0031	ug/m3	ND
Total PCB	1336-36-3	0.0024			

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
 PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

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CUSTOMER ID: TRC-TO10A-24 NEA ID: AJ10829 NEA LRF: 06080221-07
MATRIX: AIR DATE SAMPLED: 08/22/2006 TIME: N/A
DATE RECEIVED: 08/23/2006 TIME: 18:55 PROJECT: 53567 NBHS
SAMPLED BY: N/A LOCATION: NEW BEDFORD, MA
CUSTOMER PO: N/A LAB ELAP#: 11078
METHOD: EPA 680 DATE ANALYZED: 08/28/2006

HOMOLOG GROUP	CAS NUMBER	AMOUNT	PQL	UNITS	WEIGHT PERCENT
Monochlorobiphenyl	27323-18-8	ND	0.00069	ug/m3	ND
Dichlorobiphenyl	25512-42-9	0.0058	0.00069	ug/m3	10
Trichlorobiphenyl	25323-68-6	0.044	0.00069	ug/m3	80
Tetrachlorobiphenyl	26914-33-0	0.0054	0.0014	ug/m3	9.6
Pentachlorobiphenyl	25429-29-2	ND	0.0014	ug/m3	ND
Hexachlorobiphenyl	26601-64-9	ND	0.0014	ug/m3	ND
Heptachlorobiphenyl	28655-71-2	ND	0.0014	ug/m3	ND
Octachlorobiphenyl	55722-26-4	ND	0.0021	ug/m3	ND
Nonachlorobiphenyl	53742-07-7	ND	0.0035	ug/m3	ND
Decachlorobiphenyl	2051-24-3	ND	0.0035	ug/m3	ND
Total PCB	1336-36-3	0.056			

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

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CUSTOMER ID: TRC-TO10A-BG-1 NEA ID: AJ10830 NEA LRF: 06080221-08
MATRIX: AIR DATE SAMPLED: 08/22/2006 TIME: N/A
DATE RECEIVED: 08/23/2006 TIME: 18:55 PROJECT: 53567 NBHS
SAMPLED BY: N/A LOCATION: NEW BEDFORD, MA
CUSTOMER PO: N/A LAB ELAP#: 11078
METHOD: EPA 680 DATE ANALYZED: 08/25/2006

HOMOLOG GROUP	CAS NUMBER	AMOUNT	PQL	UNITS	WEIGHT PERCENT
Monochlorobiphenyl	27323-18-8	ND	0.00070	ug/m3	ND
Dichlorobiphenyl	25512-42-9	ND	0.00070	ug/m3	ND
Trichlorobiphenyl	25323-68-6	ND	0.00070	ug/m3	ND
Tetrachlorobiphenyl	26914-33-0	ND	0.0014	ug/m3	ND
Pentachlorobiphenyl	25429-29-2	ND	0.0014	ug/m3	ND
Hexachlorobiphenyl	26601-64-9	ND	0.0014	ug/m3	ND
Heptachlorobiphenyl	28655-71-2	ND	0.0014	ug/m3	ND
Octachlorobiphenyl	55722-26-4	ND	0.0021	ug/m3	ND
Nonachlorobiphenyl	53742-07-7	ND	0.0035	ug/m3	ND
Decachlorobiphenyl	2051-24-3	ND	0.0035	ug/m3	ND
Total PCB	1336-36-3	ND			ND

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

AUTHORIZED SIGNATURE:

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CUSTOMER ID: TRC-TO4A-BG-1-PF MATRIX: AIR DATE RECEIVED: 08/23/2006 TIME: 18:55 SAMPLED BY: N/A CUSTOMER PO: N/A METHOD: EPA 680	NEA ID: AJ10831 NEA LRF: 06080221-09 DATE SAMPLED: 08/22/2006 TIME: N/A PROJECT: 53567 NBHS LOCATION: NEW BEDFORD, MA LAB ELAP#: 11078 DATE ANALYZED: 08/26/2006
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HOMOLOG GROUP	CAS NUMBER	AMOUNT	PQL	UNITS	WEIGHT PERCENT
Monochlorobiphenyl	27323-18-8	ND	0.000014	ug/m3	ND
Dichlorobiphenyl	25512-42-9	ND	0.000014	ug/m3	ND
Trichlorobiphenyl	25323-68-6	ND	0.000014	ug/m3	ND
Tetrachlorobiphenyl	26914-33-0	ND	0.000028	ug/m3	ND
Pentachlorobiphenyl	25429-29-2	ND	0.000028	ug/m3	ND
Hexachlorobiphenyl	26601-64-9	ND	0.000028	ug/m3	ND
Heptachlorobiphenyl	28655-71-2	ND	0.000043	ug/m3	ND
Octachlorobiphenyl	55722-26-4	ND	0.000043	ug/m3	ND
Nonachlorobiphenyl	53742-07-7	ND	0.000071	ug/m3	ND
Decachlorobiphenyl	2051-24-3	ND	0.000071	ug/m3	ND
Total PCB	1336-36-3	ND			ND

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
 PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

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CUSTOMER ID: TRC-TO4A-BG-1-PUF NEA ID: AJ10832 NEA LRF: 06080221-10
MATRIX: AIR DATE SAMPLED: 08/22/2006 TIME: N/A
DATE RECEIVED: 08/23/2006 TIME: 18:55 PROJECT: 53567 NBHS
SAMPLED BY: N/A LOCATION: NEW BEDFORD, MA
CUSTOMER PO: N/A LAB ELAP#: 11078
METHOD: EPA 680 DATE ANALYZED: 08/26/2006

HOMOLOG GROUP	CAS NUMBER	AMOUNT	PQL	UNITS	WEIGHT PERCENT
Monochlorobiphenyl	27323-18-8	ND	0.000014	ug/m3	ND
Dichlorobiphenyl	25512-42-9	0.00012	0.000014	ug/m3	7.5
Trichlorobiphenyl	25323-68-6	0.0010	0.000014	ug/m3	68
Tetrachlorobiphenyl	26914-33-0	0.00030	0.000028	ug/m3	19
Pentachlorobiphenyl	25429-29-2	0.000043	0.000028	ug/m3	2.8
Hexachlorobiphenyl	26601-64-9	0.000037	0.000028	ug/m3	2.4
Heptachlorobiphenyl	28655-71-2	ND	0.000028	ug/m3	ND
Octachlorobiphenyl	55722-26-4	ND	0.000043	ug/m3	ND
Nonachlorobiphenyl	53742-07-7	ND	0.000071	ug/m3	ND
Decachlorobiphenyl	2051-24-3	ND	0.000071	ug/m3	ND
Total PCB	1336-36-3	0.0015			

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

AUTHORIZED SIGNATURE:

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CUSTOMER ID: TRC-TO4A-BG-2-PF MATRIX: AIR DATE RECEIVED: 08/23/2006 TIME: 18:55 SAMPLED BY: N/A CUSTOMER PO: N/A METHOD: EPA 680	NEA ID: AJ10833 NEA LRF: 06080221-11 DATE SAMPLED: 08/22/2006 TIME: N/A PROJECT: 53567 NBHS LOCATION: NEW BEDFORD, MA LAB ELAP#: 11078 DATE ANALYZED: 08/26/2006
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HOMOLOG GROUP	CAS NUMBER	AMOUNT	PQL	UNITS	WEIGHT PERCENT
Monochlorobiphenyl	27323-18-8	ND	0.000013	ug/m3	ND
Dichlorobiphenyl	25512-42-9	ND	0.000013	ug/m3	ND
Trichlorobiphenyl	25323-68-6	0.000015	0.000013	ug/m3	100
Tetrachlorobiphenyl	26914-33-0	ND	0.000027	ug/m3	ND
Pentachlorobiphenyl	25429-29-2	ND	0.000027	ug/m3	ND
Hexachlorobiphenyl	26601-64-9	ND	0.000027	ug/m3	ND
Heptachlorobiphenyl	28655-71-2	ND	0.000040	ug/m3	ND
Octachlorobiphenyl	55722-26-4	ND	0.000040	ug/m3	ND
Nonachlorobiphenyl	53742-07-7	ND	0.000067	ug/m3	ND
Decachlorobiphenyl	2051-24-3	ND	0.000067	ug/m3	ND
Total PCB	1336-36-3	0.000015			

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
 PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

AUTHORIZED SIGNATURE:

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William A. Kotas
 Quality Assurance Officer

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CONTACT: ELIZABETH DENLY

CUSTOMER ID: TRC-TO4A-BG-2-PUF MATRIX: AIR DATE RECEIVED: 08/23/2006 TIME: 18:55 SAMPLED BY: N/A CUSTOMER PO: N/A METHOD: EPA 680	NEA ID: AJ10834 NEA LRF: 06080221-12 DATE SAMPLED: 08/22/2006 TIME: N/A PROJECT: 53567 NBHS LOCATION: NEW BEDFORD, MA LAB ELAP#: 11078 DATE ANALYZED: 08/27/2006
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HOMOLOG GROUP	CAS NUMBER	AMOUNT	PQL	UNITS	WEIGHT PERCENT
Monochlorobiphenyl	27323-18-8	ND	0.000013	ug/m3	ND
Dichlorobiphenyl	25512-42-9	0.00072	0.000013	ug/m3	18
Trichlorobiphenyl	25323-68-6	0.0021	0.000013	ug/m3	53
Tetrachlorobiphenyl	26914-33-0	0.00100	0.000027	ug/m3	25
Pentachlorobiphenyl	25429-29-2	0.00014	0.000027	ug/m3	3.5
Hexachlorobiphenyl	26601-64-9	0.000048	0.000027	ug/m3	1.2
Heptachlorobiphenyl	28655-71-2	ND	0.000040	ug/m3	ND
Octachlorobiphenyl	55722-26-4	ND	0.000040	ug/m3	ND
Nonachlorobiphenyl	53742-07-7	ND	0.000067	ug/m3	ND
Decachlorobiphenyl	2051-24-3	ND	0.000067	ug/m3	ND
Total PCB	1336-36-3	0.0040			

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
 PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

AUTHORIZED SIGNATURE:

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CUSTOMER ID: TRC-TO4A-BG-FB-PF NEA ID: AJ10835 NEA LRF: 06080221-13
MATRIX: AIR DATE SAMPLED: 08/22/2006 TIME: N/A
DATE RECEIVED: 08/23/2006 TIME: 18:55 PROJECT: 53567 NBHS
SAMPLED BY: N/A LOCATION: NEW BEDFORD, MA
CUSTOMER PO: N/A LAB ELAP#: 11078
METHOD: EPA 680 DATE ANALYZED: 08/28/2006

HOMOLOG GROUP	CAS NUMBER	AMOUNT	PQL	UNITS	WEIGHT PERCENT
Monochlorobiphenyl	27323-18-8	ND	0.0050	ug	ND
Dichlorobiphenyl	25512-42-9	ND	0.0050	ug	ND
Trichlorobiphenyl	25323-68-6	ND	0.0050	ug	ND
Tetrachlorobiphenyl	26914-33-0	ND	0.010	ug	ND
Pentachlorobiphenyl	25429-29-2	ND	0.010	ug	ND
Hexachlorobiphenyl	26601-64-9	ND	0.010	ug	ND
Heptachlorobiphenyl	28655-71-2	ND	0.015	ug	ND
Octachlorobiphenyl	55722-26-4	ND	0.015	ug	ND
Nonachlorobiphenyl	53742-07-7	ND	0.025	ug	ND
Decachlorobiphenyl	2051-24-3	ND	0.025	ug	ND
Total PCB	1336-36-3	ND			ND

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

AUTHORIZED SIGNATURE:

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CONTACT: ELIZABETH DENLY

CUSTOMER ID: TRC-TO4A-BG-FB-PUF MATRIX: AIR DATE RECEIVED: 08/23/2006 TIME: 18:55 SAMPLED BY: N/A CUSTOMER PO: N/A METHOD: EPA 680	NEA ID: AJ10836 NEA LRF: 06080221-14 DATE SAMPLED: 08/22/2006 TIME: N/A PROJECT: 53567 NBHS LOCATION: NEW BEDFORD, MA LAB ELAP#: 11078 DATE ANALYZED: 08/28/2006
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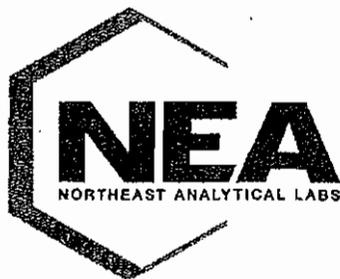
HOMOLOG GROUP	CAS NUMBER	AMOUNT	PQL	UNITS	WEIGHT PERCENT
Monochlorobiphenyl	27323-18-8	ND	0.0050	ug	ND
Dichlorobiphenyl	25512-42-9	ND	0.0050	ug	ND
Trichlorobiphenyl	25323-68-6	ND	0.0050	ug	ND
Tetrachlorobiphenyl	26914-33-0	ND	0.010	ug	ND
Pentachlorobiphenyl	25429-29-2	ND	0.010	ug	ND
Hexachlorobiphenyl	26601-64-9	ND	0.010	ug	ND
Heptachlorobiphenyl	28655-71-2	ND	0.015	ug	ND
Octachlorobiphenyl	55722-26-4	ND	0.015	ug	ND
Nonachlorobiphenyl	53742-07-7	ND	0.025	ug	ND
Decachlorobiphenyl	2051-24-3	ND	0.025	ug	ND
Total PCB	1336-36-3	ND			ND

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
 PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

AUTHORIZED SIGNATURE:

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CUSTOMER ID: TRC-TO10A-FB NEA ID: AJ10837 NEA LRF: 06080221-15
MATRIX: AIR DATE SAMPLED: 08/22/2006 TIME: N/A
DATE RECEIVED: 08/23/2006 TIME: 18:55 PROJECT: 53567 NBHS
SAMPLED BY: N/A LOCATION: NEW BEDFORD, MA
CUSTOMER PO: N/A LAB ELAP#: 11078
METHOD: EPA 680 DATE ANALYZED: 08/28/2006

HOMOLOG GROUP	CAS NUMBER	AMOUNT	PQL	UNITS	WEIGHT PERCENT
Monochlorobiphenyl	27323-18-8	ND	0.0050	ug	ND
Dichlorobiphenyl	25512-42-9	ND	0.0050	ug	ND
Trichlorobiphenyl	25323-68-6	ND	0.0050	ug	ND
Tetrachlorobiphenyl	26914-33-0	ND	0.010	ug	ND
Pentachlorobiphenyl	25429-29-2	ND	0.010	ug	ND
Hexachlorobiphenyl	26601-64-9	ND	0.010	ug	ND
Heptachlorobiphenyl	28655-71-2	ND	0.015	ug	ND
Octachlorobiphenyl	55722-26-4	ND	0.015	ug	ND
Nonachlorobiphenyl	53742-07-7	ND	0.025	ug	ND
Decachlorobiphenyl	2051-24-3	ND	0.025	ug	ND
Total PCB	1336-36-3	ND			ND

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

AUTHORIZED SIGNATURE:

Northeast Analytical, Inc.
Robert E. Wagner, Laboratory Director

William A. Kotes
Quality Assurance Officer

Memo

To: Dave Sullivan
From: Lorie MacKinnon
CC: Elizabeth Denly
Date: 10/19/06
Re: Organic Data Validation Review: Wipe Samples: New Bedford High School/ New Bedford, MA: Job 06080222

SUMMARY

Limited (Tier II) validation was performed on the data for 18 wipe samples collected at the New Bedford High School Site in New Bedford, Massachusetts. The samples were collected on August 22 and 23, 2006 and submitted to Northeast Analytical Laboratories (NEA) in Schenectady, New York for analysis. The samples were analyzed for polychlorinated biphenyl (PCB) Aroclors using SW-846 method 8082. NEA reported the results under job number 06080222.

The sample results were assessed using the *EPA New England Data Validation Functional Guidelines for Evaluating Environmental Analyses*, revised December 1996. Modification of the Functional Guidelines was done to accommodate the non-CLP methodologies.

In general, the data appear to be valid as reported and may be used for decision-making purposes. Selected data points were qualified as estimated because of nonconformance of certain QC criteria.

SAMPLES

Samples included in this review are listed below:

TRC-WIPE-1, TRC-WIPE-2, TRC-WIPE-3, TRC-WIPE-4, TRC-WIPE-5, TRC-WIPE-6, TRC-WIPE-7, TRC-WIPE-8, TRC-WIPE-9, TRC-WIPE-10, TRC-WIPE-11, TRC-WIPE-12, TRC-WIPE-13, TRC-WIPE-14, TRC-WIPE-15, TRC-WIPE-16, TRC-WIPE-17, TRC-WIPE-18

REVIEW ELEMENTS

Sample data were reviewed for the following parameters:

- Agreement of analyses conducted with TRC requests
- Holding times and sample preservation
- Initial and continuing calibrations

- Method blanks
- Surrogate spike recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) results
- Laboratory control sample (LCS) results
- Field duplicate results
- Quantitation limits and sample results

DISCUSSION

Agreement of Analyses Conducted with TRC Requests

Sample reports were checked to verify that the results corresponded to analytical requests as designated on the chain-of-custody and any correspondence between TRC and the laboratory. There were no discrepancies noted.

Holding Times and Sample Preservation

All samples were extracted and analyzed within the method-specified holding time.

Initial and Continuing Calibrations

The percent relative standard deviations (%RSDs) and percent differences (%Ds) of all PCBs used in the initial and continuing calibrations were within the acceptance criteria.

Method Blanks

Target compounds were not detected in the laboratory method blanks associated with the PCB analyses.

It should be noted that field blanks were not submitted with the wipe samples, as per the sampling plan. Since method blanks were prepared using wipes from the same lot as samples, there was no adverse effect to the data usability. No validation action was required on this basis.

Surrogate Spike Recoveries

The following table summarizes the surrogate recoveries which were outside the laboratory acceptance criteria of 70 -130%.

Sample ID	TCMX ZB-1	TCMX ZB-5	DCB ZB-1	DCB ZB-5	Validation Actions
TRC-WIPE-10	28.8%	34.8%	26.0%	32.0%	Estimate (J/UJ) the positive and nondetect results.
TRC-WIPE-13	48.0%	57.7%	45.7%	55.2%	Estimate (J/UJ) the positive and nondetect results.

- Within control limits

TCMX- Tetrachloro-m-Xylene

DCB – Decachlorobiphenyl

The positive and nondetect results in samples TRC-WIPE-10 and TRC-WIPE-13 were qualified as estimated (J/UJ) due to low surrogate recoveries.

MS/MSD Results

MS/MSD analyses were not performed on any samples in this data set.

LCS Results

An LCS was extracted and analyzed with each batch of samples. The recovery of the spiked Aroclor was within the acceptance criteria in each LCS.

Field Duplicate Results

Samples TRC-WIPE-6 and TRC-WIPE-16 were submitted as the field duplicate pair with this sample group. PCB Aroclors were not detected in either sample.

Quantitation Limits and Sample Results

There were no dilutions performed on any samples in this data set. Quantitation limits for wipe samples met the project requirement.

Select PCB results were detected below the laboratory reporting limit and flagged by the laboratory with a "J". The "J" qualifier indicated that this value is estimated.

All reported results were within the retention time windows. The following table summarizes the dual column relative percent differences (RPDs) which were outside of the acceptance criteria. These results were qualified as estimated (J).

Sample	Compound	RPD (%)
TRC-WIPE-8	Aroclor 1248	59.0
TRC-WIPE-10	Aroclor 1248	46.7
TRC-WIPE 11	Aroclor 1248	59.7

It should be noted that positive results were reported for select Aroclors in select samples which were not confirmed on the second column. During validation, the laboratory was requested to re-examine these results. Subsequently, the laboratory submitted revised results for these samples with the affected Aroclors reported as nondetects. The following results were affected: Aroclor 1254 in sample TRC-WIPE-2 and Aroclor 1248 in samples TRC-WIPE-6, TRC-WIPE-14, TRC-WIPE-16, and TRC-WIPE-17.

Positive results for total PCBs were also qualified as estimated (J) if any of the individual Aroclors were qualified as estimated, as discussed in this memorandum.



CERTIFICATE OF ANALYSIS

08/29/2006

**TRC ENVIRONMENTAL
BOOTT MILLS SOUTH
116 JOHN STREET
LOWELL, MA 01852**

CONTACT: ELIZABETH DENLY

CUSTOMER ID: TRC-WIPE-1
MATRIX: WIPE
DATE RECEIVED: 08/23/2006 **TIME:** 18:55
SAMPLED BY: N/A
CUSTOMER PO: N/A

NEA ID: AJ10838 **NEA LRF:** 06080222-01
DATE SAMPLED: 08/22/2006 **TIME:** N/A
PROJECT: 53567 NBHS
LOCATION: NEW BEDFORD, MA
LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1221	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1232	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1242	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1248	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1254	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1260	ND	0.500	ug/Wipe	08/25/2006	U
Total PCB's	ND				U

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

AUTHORIZED SIGNATURE:

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Robert E. Wagner, Laboratory Director

William A. Kotas
Quality Assurance Officer



CERTIFICATE OF ANALYSIS

10/10/2006

TRC ENVIRONMENTAL

BOOTT MILLS SOUTH

116 JOHN STREET

LOWELL, MA 01852

CONTACT: ELIZABETH DENLY

CUSTOMER ID: TRC-WIPE-2

MATRIX: WIPE

DATE RECEIVED: 08/23/2006 **TIME:** 18:55

SAMPLED BY: N/A

CUSTOMER PO: N/A

NEA ID: AJ10839 **NEA LRF:** 06080222-02

DATE SAMPLED: 08/22/2006 **TIME:** N/A

PROJECT: 53567 NBHS

LOCATION: NEW BEDFORD, MA

LAB ELAP#: 11078

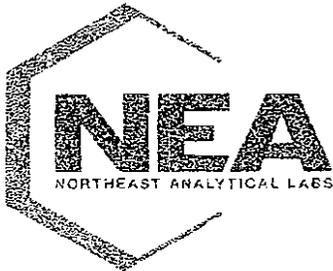
PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1221	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1232	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1242	0.549	0.500	ug/Wipe	08/25/2006	AD
Aroclor 1248	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1254	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1260	ND	0.500	ug/Wipe	08/25/2006	U
Total PCB's	0.549				

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.
AD-Aroclor 1242 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

AUTHORIZED SIGNATURE:

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William A. Kotis
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CERTIFICATE OF ANALYSIS
08/29/2006
TRC ENVIRONMENTAL
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CONTACT: ELIZABETH DENLY

CUSTOMER ID: TRC-WIPE-3
MATRIX: WIPE
DATE RECEIVED: 08/23/2006 TIME: 18:55
SAMPLED BY: N/A
CUSTOMER PO: N/A

NEA ID: AJ10840 NEA LRF: 06080222-03
DATE SAMPLED: 08/22/2006 TIME: N/A
PROJECT: 53567 NBHS
LOCATION: NEW BEDFORD, MA
LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1221	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1232	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1242	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1248	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1254	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1260	ND	0.500	ug/Wipe	08/25/2006	U
Total PCB's	ND				U

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

AUTHORIZED SIGNATURE:

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CONTACT: ELIZABETH DENLY

CUSTOMER ID: TRC-WIPE-4
MATRIX: WIPE
DATE RECEIVED: 08/23/2006 TIME: 18:55
SAMPLED BY: N/A
CUSTOMER PO: N/A

NEA ID: AJ10841 NEA LRF: 06080222-04
DATE SAMPLED: 08/22/2006 TIME: N/A
PROJECT: 53567 NBHS
LOCATION: NEW BEDFORD, MA
LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1221	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1232	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1242	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1248	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1254	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1260	ND	0.500	ug/Wipe	08/25/2006	U
Total PCB's	ND				U

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

AUTHORIZED SIGNATURE:

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08/29/2006

TRC ENVIRONMENTAL

BOOTT MILLS SOUTH

116 JOHN STREET

LOWELL, MA 01852

CONTACT: ELIZABETH DENLY

CUSTOMER ID: TRC-WIPE-5

MATRIX: WIPE

DATE RECEIVED: 08/23/2006 **TIME:** 18:55

SAMPLED BY: N/A

CUSTOMER PO: N/A

NEA ID: AJ10842 **NEA LRF:** 06080222-05

DATE SAMPLED: 08/22/2006 **TIME:** N/A

PROJECT: 53567 NBHS

LOCATION: NEW BEDFORD, MA

LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1221	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1232	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1242	0.575	0.500	ug/Wipe	08/25/2006	AD
Aroclor 1248	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1254	0.361 J ✓	0.500	ug/Wipe	08/25/2006	AF,J
Aroclor 1260	0.204 J ✓	0.500	ug/Wipe	08/25/2006	PG,J
Total PCB's	1.140 J				

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

J-Indicates an estimated value. The analyte was detected in the sample at a concentration greater than the Method Detection Limit (MDL) but less than the Practical Quantitation Limit (PQL).

AD-Aroclor 1242 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

AF-Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

PG-Aroclor 1260 is being used to report an altered PCB pattern exhibited by the sample. Actual Aroclor 1260 is not present in the sample, but is reported to more accurately quantify PCB present in sample that has undergone environmental alteration.

AUTHORIZED SIGNATURE:

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CUSTOMER ID: TRC-WIPE-6
MATRIX: WIPE
DATE RECEIVED: 08/23/2006 TIME: 18:55
SAMPLED BY: N/A
CUSTOMER PO: N/A

NEA ID: AJ10843 NEA LRF: 06080222-06
DATE SAMPLED: 08/22/2006 TIME: N/A
PROJECT: 53567 NBHS
LOCATION: NEW BEDFORD, MA
LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1221	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1232	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1242	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1248	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1254	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1260	ND	0.500	ug/Wipe	08/25/2006	U
Total PCB's	ND				U

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

AUTHORIZED SIGNATURE:

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CONTACT: ELIZABETH DENLY

CUSTOMER ID: TRC-WIPE-7
MATRIX: WIPE
DATE RECEIVED: 08/23/2006 **TIME:** 18:55
SAMPLED BY: N/A
CUSTOMER PO: N/A

NEA ID: AJ10844 **NEA LRF:** 06080222-07
DATE SAMPLED: 08/22/2006 **TIME:** N/A
PROJECT: 53567 NBHS
LOCATION: NEW BEDFORD, MA
LAB ELAP#: 11078

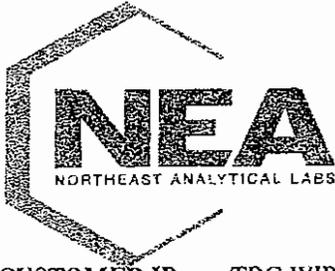
PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1221	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1232	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1242	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1248	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1254	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1260	ND	0.500	ug/Wipe	08/25/2006	U
Total PCB's	ND				U

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
 PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

AUTHORIZED SIGNATURE:

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CONTACT: ELIZABETH DENLY

CUSTOMER ID: TRC-WIPE-8
MATRIX: WIPE
DATE RECEIVED: 08/23/2006 **TIME:** 18:55
SAMPLED BY: N/A
CUSTOMER PO: N/A

NEA ID: AJ10845 **NEA LRF:** 06080222-08
DATE SAMPLED: 08/22/2006 **TIME:** N/A
PROJECT: 53567 NBHS
LOCATION: NEW BEDFORD, MA
LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1221	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1232	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1242	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1248	0.472 J ✓	0.500	ug/Wipe	08/25/2006	PE,J
Aroclor 1254	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1260	ND	0.500	ug/Wipe	08/25/2006	U
Total PCB's	0.472 J ✓				J

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
 PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.
 J-Indicates an estimated value. The analyte was detected in the sample at a concentration greater than the Method Detection Limit (MDL) but less than the Practical Quantitation Limit (PQL).
 PE-Aroclor 1248 is being used to report an altered PCB pattern exhibited by the sample. Actual Aroclor 1248 is not present in the sample, but is reported to more accurately quantify PCB present in sample that has undergone environmental alteration.

AUTHORIZED SIGNATURE:

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 Robert E. Wagner, Laboratory Director

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CERTIFICATE OF ANALYSIS
 08/29/2006
TRC ENVIRONMENTAL
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116 JOHN STREET
LOWELL, MA 01852
CONTACT: ELIZABETH DENLY

CUSTOMER ID: TRC-WIPE-9	NEA ID: AJ10846	NEA LRF: 06080222-09
MATRIX: WIPE	DATE SAMPLED: 08/22/2006	TIME: N/A
DATE RECEIVED: 08/23/2006	TIME: 18:55	PROJECT: 53567 NBHS
SAMPLED BY: N/A	LOCATION: NEW BEDFORD, MA	
CUSTOMER PO: N/A	LAB ELAP#: 11078	

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1221	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1232	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1242	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1248	0.770	0.500	ug/Wipe	08/25/2006	PE
Aroclor 1254	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1260	ND	0.500	ug/Wipe	08/25/2006	U
Total PCB's	0.770				

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
 PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.
 PE-Aroclor 1248 is being used to report an altered PCB pattern exhibited by the sample. Actual Aroclor 1248 is not present in the sample, but is reported to more accurately quantify PCB present in sample that has undergone environmental alteration.

AUTHORIZED SIGNATURE:

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08/29/2006
TRC ENVIRONMENTAL
BOOTT MILLS SOUTH
116 JOHN STREET
LOWELL, MA 01852
CONTACT: ELIZABETH DENLY

CUSTOMER ID: TRC-WIPE-10
MATRIX: WIPE
DATE RECEIVED: 08/23/2006 **TIME:** 18:55
SAMPLED BY: N/A
CUSTOMER PO: N/A

NEA ID: AJ10847 **NEA LRF:** 06080222-10
DATE SAMPLED: 08/22/2006 **TIME:** N/A
PROJECT: 53567 NBHS
LOCATION: NEW BEDFORD, MA
LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND UJ	0.500	ug/Wipe	08/25/2006	U
Aroclor 1221	ND UJ	0.500	ug/Wipe	08/25/2006	U
Aroclor 1232	ND UJ	0.500	ug/Wipe	08/25/2006	U
Aroclor 1242	ND UJ	0.500	ug/Wipe	08/25/2006	U
Aroclor 1248	0.436 J	0.500	ug/Wipe	08/25/2006	PE,J
Aroclor 1254	ND UJ	0.500	ug/Wipe	08/25/2006	U
Aroclor 1260	1.34 J	0.500	ug/Wipe	08/25/2006	AG
Total PCB's	1.776 J				

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
 PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.
 J-Indicates an estimated value. The analyte was detected in the sample at a concentration greater than the Method Detection Limit (MDL) but less than the Practical Quantitation Limit (PQL).
 AG-Aroclor 1260 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
 PE-Aroclor 1248 is being used to report an altered PCB pattern exhibited by the sample. Actual Aroclor 1248 is not present in the sample, but is reported to more accurately quantify PCB present in sample that has undergone environmental alteration.

AUTHORIZED SIGNATURE:

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 Robert L. Wagner, Laboratory Director

William A. Kotas
 Quality Assurance Officer

✓



CERTIFICATE OF ANALYSIS

08/29/2006

**TRC ENVIRONMENTAL
BOOTT MILLS SOUTH
116 JOHN STREET
LOWELL, MA 01852**

CONTACT: ELIZABETH DENLY

CUSTOMER ID: TRC-WIPE-11
MATRIX: WIPE
DATE RECEIVED: 08/23/2006 **TIME:** 18:55
SAMPLED BY: N/A
CUSTOMER PO: N/A

NEA ID: AJ10848 **NEA LRF:** 06080222-11
DATE SAMPLED: 08/22/2006 **TIME:** N/A
PROJECT: 53567 NBHS
LOCATION: NEW BEDFORD, MA
LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1221	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1232	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1242	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1248	0.670 J ✓	0.500	ug/Wipe	08/25/2006	PE
Aroclor 1254	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1260	ND	0.500	ug/Wipe	08/25/2006	U
Total PCB's	0.670 J ✓				

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.
PE-Aroclor 1248 is being used to report an altered PCB pattern exhibited by the sample. Actual Aroclor 1248 is not present in the sample, but is reported to more accurately quantify PCB present in sample that has undergone environmental alteration.

AUTHORIZED SIGNATURE:

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08/29/2006
TRC ENVIRONMENTAL
BOOTT MILLS SOUTH
116 JOHN STREET
LOWELL, MA 01852
CONTACT: ELIZABETH DENLY

CUSTOMER ID: TRC-WIPE-12	NEA ID: AJ10849	NEA LRF: 06080222-12
MATRIX: WIPE	DATE SAMPLED: 08/22/2006	TIME: N/A
DATE RECEIVED: 08/23/2006	TIME: 18:55	PROJECT: 53567 NBHS
SAMPLED BY: N/A	LOCATION: NEW BEDFORD, MA	
CUSTOMER PO: N/A	LAB ELAP#: 11078	

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1221	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1232	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1242	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1248	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1254	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1260	ND	0.500	ug/Wipe	08/25/2006	U
Total PCB's	ND				U

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reponsible for the sample.

AUTHORIZED SIGNATURE:

Northeast Analytical, Inc.
Robert E. Winger, Laboratory Director

William A. Kotas
Quality Assurance Officer



CERTIFICATE OF ANALYSIS
 08/29/2006
TRC ENVIRONMENTAL
BOOTT MILLS SOUTH
116 JOHN STREET
LOWELL, MA 01852
CONTACT: ELIZABETH DENLY

CUSTOMER ID: TRC-WIPE-13
MATRIX: WIPE
DATE RECEIVED: 08/23/2006 **TIME:** 18:55
SAMPLED BY: N/A
CUSTOMER PO: N/A

NEA ID: AJ10850 **NEA LRF:** 06080222-13
DATE SAMPLED: 08/22/2006 **TIME:** N/A
PROJECT: 53567 NBHS
LOCATION: NEW BEDFORD, MA
LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND UJ	0.500	ug/Wipe	08/25/2006	U
Aroclor 1221	ND ↓	0.500	ug/Wipe	08/25/2006	U
Aroclor 1232	ND ↓	0.500	ug/Wipe	08/25/2006	U
Aroclor 1242	ND UJ	0.500	ug/Wipe	08/25/2006	U
Aroclor 1248	0.622 J	0.500	ug/Wipe	08/25/2006	AE
Aroclor 1254	ND UJ	0.500	ug/Wipe	08/25/2006	U
Aroclor 1260	2.26 J	0.500	ug/Wipe	08/25/2006	AG
Total PCB's	2.882 J				

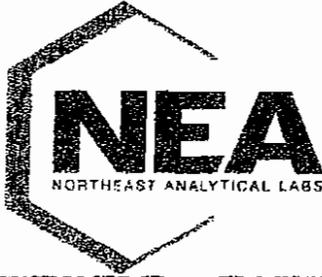
Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
 PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.
 AE-Aroclor 1248 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
 AG-Aroclor 1260 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

AUTHORIZED SIGNATURE:

Northeast Analytical, Inc.
 Robert E. Wagner, Laboratory Director

William A. Kotas
 Quality Assurance Officer

✓



CERTIFICATE OF ANALYSIS
10/10/2006
TRC ENVIRONMENTAL
BOOTT MILLS SOUTH
116 JOHN STREET
LOWELL, MA 01852
CONTACT: ELIZABETH DENLY

CUSTOMER ID: TRC-WIPE-14
MATRIX: WIPE
DATE RECEIVED: 08/23/2006 **TIME:** 18:55
SAMPLED BY: N/A
CUSTOMER PO: N/A

NEA ID: AJ10851 **NEA LRF:** 06080222-14
DATE SAMPLED: 08/22/2006 **TIME:** N/A
PROJECT: 53567 NBHS
LOCATION: NEW BEDFORD, MA
LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	0.500	ug/Wipe	08/26/2006	U
Aroclor 1221	ND	0.500	ug/Wipe	08/26/2006	U
Aroclor 1232	ND	0.500	ug/Wipe	08/26/2006	U
Aroclor 1242	ND	0.500	ug/Wipe	08/26/2006	U
Aroclor 1248	ND	0.500	ug/Wipe	08/26/2006	U
Aroclor 1254	ND	0.500	ug/Wipe	08/26/2006	U
Aroclor 1260	0.436 J ✓	0.500	ug/Wipe	08/26/2006	AG,J
Total PCB's	0.436 J ✓				J

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
 PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.
 J-Indicates an estimated value. The analyte was detected in the sample at a concentration greater than the Method Detection Limit (MDL) but less than the Practical Quantitation Limit (PQL).
 AG-Aroclor 1260 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

AUTHORIZED SIGNATURE:

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William A. Kniss
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 08/29/2006
TRC ENVIRONMENTAL
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116 JOHN STREET
LOWELL, MA 01852
CONTACT: ELIZABETH DENLY

CUSTOMER ID: TRC-WIPE-15	NEA ID: AJ10852	NEA LRF: 06080222-15
MATRIX: WIPE	DATE SAMPLED: 08/23/2006	TIME: N/A
DATE RECEIVED: 08/23/2006	TIME: 18:55	PROJECT: 53567 NBHS
SAMPLED BY: N/A	LOCATION: NEW BEDFORD, MA	
CUSTOMER PO: N/A	LAB ELAP#: 11078	

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	0.500	ug/Wipe	08/26/2006	U
Aroclor 1221	ND	0.500	ug/Wipe	08/26/2006	U
Aroclor 1232	ND	0.500	ug/Wipe	08/26/2006	U
Aroclor 1242	ND	0.500	ug/Wipe	08/26/2006	U
Aroclor 1248	1.56	0.500	ug/Wipe	08/26/2006	PE
Aroclor 1254	ND	0.500	ug/Wipe	08/26/2006	U
Aroclor 1260	ND	0.500	ug/Wipe	08/26/2006	U
Total PCB's	1.56				

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
 PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.
 PE-Aroclor 1248 is being used to report an altered PCB pattern exhibited by the sample. Actual Aroclor 1248 is not present in the sample, but is reported to more accurately quantify PCB present in sample that has undergone environmental alteration.

AUTHORIZED SIGNATURE:

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10/10/2006
TRC ENVIRONMENTAL
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LOWELL, MA 01852
CONTACT: ELIZABETH DENLY

CUSTOMER ID: TRC-WIPE-16
MATRIX: WIPE
DATE RECEIVED: 08/23/2006 **TIME:** 18:55
SAMPLED BY: N/A
CUSTOMER PO: N/A

NEA ID: AJ10853 **NEA LRF:** 06080222-16
DATE SAMPLED: 08/23/2006 **TIME:** N/A
PROJECT: 53567 NBHS
LOCATION: NEW BEDFORD, MA
LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	0.500	ug/Wipe	08/26/2006	U
Aroclor 1221	ND	0.500	ug/Wipe	08/26/2006	U
Aroclor 1232	ND	0.500	ug/Wipe	08/26/2006	U
Aroclor 1242	ND	0.500	ug/Wipe	08/26/2006	U
Aroclor 1248	ND	0.500	ug/Wipe	08/26/2006	U
Aroclor 1254	ND	0.500	ug/Wipe	08/26/2006	U
Aroclor 1260	ND	0.500	ug/Wipe	08/26/2006	U
Total PCB's	ND				U

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

AUTHORIZED SIGNATURE:

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LOWELL, MA 01852
CONTACT: ELIZABETH DENLY

CUSTOMER ID: TRC-WIPE-17
MATRIX: WIPE
DATE RECEIVED: 08/23/2006 **TIME:** 18:55
SAMPLED BY: N/A
CUSTOMER PO: N/A

NEA ID: AJ10854 **NEA LRF:** 06080222-17
DATE SAMPLED: 08/23/2006 **TIME:** N/A
PROJECT: 53567 NBHS
LOCATION: NEW BEDFORD, MA
LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	0.500	ug/Wipe	08/26/2006	U
Aroclor 1221	ND	0.500	ug/Wipe	08/26/2006	U
Aroclor 1232	ND	0.500	ug/Wipe	08/26/2006	U
Aroclor 1242	ND	0.500	ug/Wipe	08/26/2006	U
Aroclor 1248	ND	0.500	ug/Wipe	08/26/2006	U
Aroclor 1254	ND	0.500	ug/Wipe	08/26/2006	U
Aroclor 1260	ND	0.500	ug/Wipe	08/26/2006	U
Total PCB's	ND				U

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

AUTHORIZED SIGNATURE:

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Robert L. Wagner, Laboratory Director

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08/29/2006

**TRC ENVIRONMENTAL
BOOTT MILLS SOUTH
116 JOHN STREET
LOWELL, MA 01852**

CONTACT: ELIZABETH DENLY

CUSTOMER ID: TRC-WIPE-18
MATRIX: WIPE
DATE RECEIVED: 08/23/2006 **TIME:** 18:55
SAMPLED BY: N/A
CUSTOMER PO: N/A

NEA ID: AJ10855 **NEA LRF:** 06080222-18
DATE SAMPLED: 08/23/2006 **TIME:** N/A
PROJECT: 53567 NBHS
LOCATION: NEW BEDFORD, MA
LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	0.500	ug/Wipe	08/26/2006	U
Aroclor 1221	ND	0.500	ug/Wipe	08/26/2006	U
Aroclor 1232	ND	0.500	ug/Wipe	08/26/2006	U
Aroclor 1242	ND	0.500	ug/Wipe	08/26/2006	U
Aroclor 1248	ND	0.500	ug/Wipe	08/26/2006	U
Aroclor 1254	ND	0.500	ug/Wipe	08/26/2006	U
Aroclor 1260	0.419 J ✓	0.500	ug/Wipe	08/26/2006	AG,J
Total PCB's	0.419 J ✓				J

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.
J-Indicates an estimated value. The analyte was detected in the sample at a concentration greater than the Method Detection Limit (MDL) but less than the Practical Quantitation Limit (PQL).
AG-Aroclor 1260 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

AUTHORIZED SIGNATURE:

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Robert P. Wagner, Laboratory Director

William A. Kolar
Quality Assurance Officer

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Page 1 of 1

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Memo

To: Dave Sullivan
From: Lorie MacKinnon
CC: Elizabeth Denly
Date: 10/19/06
Re: Organic Data Validation Review: Wipe and Bulk Samples: New Bedford High School/ New Bedford, MA: Job 06080223

SUMMARY

Limited (Tier II) validation was performed on the data for four wipe and 20 bulk samples collected at the New Bedford High School Site in New Bedford, Massachusetts. The samples were collected on August 22 and 23, 2006 and submitted to Northeast Analytical Laboratories (NEA) in Schenectady, New York for analysis. The samples were analyzed for polychlorinated biphenyl (PCB) Aroclors using SW-846 method 8082. NEA reported the results under job number 06080223.

The sample results were assessed using the *EPA New England Data Validation Functional Guidelines for Evaluating Environmental Analyses*, revised December 1996. Modification of the Functional Guidelines was done to accommodate the non-CLP methodologies.

In general, the data appear to be valid as reported and may be used for decision-making purposes. Selected data points were qualified as estimated because of nonconformance of certain QC criteria.

SAMPLES

Samples included in this review are listed below:

TRC-WIPE-19, TRC-WIPE-20, TRC-WIPE-21, TRC-WIPE-22, TRC-BULK-1, TRC-BULK-2, TRC-BULK-3, TRC-BULK-4, TRC-BULK-5, TRC-BULK-6, TRC-BULK-7, TRC-BULK-8, TRC-BULK-9, TRC-BULK-10, TRC-BULK-11, TRC-BULK-12, TRC-BULK-13, TRC-BULK-14, TRC-BULK-15, TRC-BULK-16, TRC-BULK-17, TRC-BULK-18, TRC-BULK-19, TRC-BULK-20

REVIEW ELEMENTS

Sample data were reviewed for the following parameters:

- Agreement of analyses conducted with TRC requests
- Holding times and sample preservation

- Initial and continuing calibrations
- Method blanks
- Surrogate spike recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) results
- Laboratory control sample (LCS) results
- Field duplicate results
- Quantitation limits and sample results

DISCUSSION

Agreement of Analyses Conducted with TRC Requests

Sample reports were checked to verify that the results corresponded to analytical requests as designated on the chain-of-custody and any correspondence between TRC and the laboratory. There were no discrepancies noted.

Holding Times and Sample Preservation

All samples were extracted and analyzed within the method-specified holding time.

Initial and Continuing Calibrations

The percent relative standard deviations (%RSDs) and percent differences (%Ds) of all PCBs used in the initial and continuing calibrations were within the acceptance criteria.

Method Blanks

Target compounds were not detected in the laboratory method blanks associated with the PCB analyses.

It should be noted that field blanks were not submitted with the wipe samples, as per the sampling plan. Since method blanks were prepared using wipes from the same lot as samples, there was no adverse effect to the data usability. No validation action was required on this basis.

Surrogate Spike Recoveries

The following table summarizes the surrogate recoveries which were outside the laboratory acceptance criteria of 70 -130%.

Sample ID	TGMX ZB-1	TGMX ZB-5	DGB ZB-1	DGB ZB-5	Validation Action
LCS 57	-	-	55.8%	-	Validation actions were not required.
TRC-BULK-4	-	-	65.7%	54.5%	Estimate (J/UJ) the positive and nondetect results.
TRC-BULK-5	34.4%	-	-	-	Validation actions were not required as the surrogate recovery was within control limits on the alternate column.
TRC-BULK-6	36.2%	-	46.4%	-	Estimate (J/UJ) the positive and nondetect results as the results were reported from the ZB-1 column analysis.
TRC-BULK-12	65.9%	69.0%	53.2%	55.1%	Estimate (J/UJ) the positive and nondetect results.
TRC-BULK-14	54.8%	-	44.9%	49.9%	Estimate (J/UJ) the positive and nondetect results.
LCS 53	-	-	60.1%	-	Validation actions were not required.
TRC-BULK-3	-	-	-	63.6%	Validation actions were not required as the surrogate recovery was within control limits on the alternate column.
LCS 55	-	-	68.3%	-	Validation actions were not required.
TRC-BULK-18	68.7%	-	-	-	Validation actions were not required as the surrogate

Sample ID	TCMX ZB-1	TCMX ZB-5	DCB ZB-1	DCB ZB-5	Validation/Actions
					recovery was within control limits on the alternate column.

- Within control limits
TCMX- Tetrachloro-m-Xylene
DCB – Decachlorobiphenyl

The positive and nondetect results in samples TRC-BULK-6, TRC-BULK-12, and TRC-BULK-14 were qualified as estimated (J/UJ) due to low surrogate recoveries.

MS/MSD Results

MS/MSD analyses were performed on sample TRC-BULK-18. The recoveries and relative percent difference (RPD) of Aroclor 1242 were within control limits on the ZB-1 column analysis. The recoveries of Aroclor 1242 were acceptable in the ZB-5 column analysis. The RPD for Aroclor 1242 (22%) exceeded the control limit of 20 in the ZB-5 column analysis. Validation action was not taken as all results for sample TRC-BULK-18 were reported from the analysis performed on the ZB-1 column.

LCS Results

An LCS was extracted and analyzed with each batch of samples. The recovery of the spiked Aroclor was within the acceptance criteria in all LCS analyses.

Field Duplicate Results

A field duplicate pair was not submitted with this data set. No validation action was required on this basis.

Quantitation Limits and Sample Results

The following table lists the dilutions performed due to concentrations of PCB Aroclors which would have exceeded the calibration range if not diluted. The sample quantitation limits were elevated accordingly by the laboratory for results which were nondetect. The quantitation limits for wipe samples and the remaining bulk samples met the project requirements.

Sample	Dilution	Detected Results
TRC-BULK-5	10-fold	Aroclor 1242 and Aroclor 1254
TRC-BULK-6	10-fold	Aroclor 1242, Aroclor 1254, and Aroclor 1260
TRC-BULK-7	2-fold	Aroclor 1242, Aroclor 1254, and Aroclor 1260
TRC-BULK-8	3-fold	Aroclor 1242, Aroclor 1254, and Aroclor 1260
TRC-BULK-14	2-fold	Aroclor 1242, Aroclor 1254, and Aroclor 1260
TRC-BULK-18	3-fold	Aroclor 1242 and Aroclor 1254
TRC-BULK-3	2-fold	Aroclor 1242, Aroclor 1254, and Aroclor 1260

Select PCB results were detected below the laboratory reporting limit and flagged by the laboratory with a "J". The "J" qualifier indicated that this value is estimated.

All reported results were within the retention time windows. The following table summarizes the dual column RPDs which were outside of the method acceptance criteria of 40. These results were qualified as estimated (J).

Sample	Compound	RPD (%)
TRC-WIPE-19	Aroclor 1260	46.4
TRC-BULK-3	Aroclor 1254	68.9
TRC-BULK-4	Aroclor 1254	45.7
TRC-BULK-8	Aroclor 1254	51.0
TRC-BULK-12	Aroclor 1254	47.8
TRC-BULK-13	Aroclor 1260	48.2
TRC-BULK-14	Aroclor 1254	52.6
TRC-BULK-15	Aroclor 1254	66.8
TRC-BULK-17	Aroclor 1254	46.2
TRC-BULK-20	Aroclor 1254	51.0

It should be noted that positive results were reported for select Aroclors in select samples which were not confirmed on the second column. During validation, the laboratory was requested to re-examine these results. Subsequently, the laboratory submitted revised results for these samples with the affected Aroclors reported as nondetects. The following results were affected: Aroclor 1260 in sample TRC-BULK-15 and Aroclor 1242 in sample TRC-BULK-17.

Positive results for total PCBs were also qualified as estimated (J) if any of the individual Aroclors were qualified as estimated, as discussed in this memorandum.



CERTIFICATE OF ANALYSIS

08/29/2006

TRC ENVIRONMENTAL

BOOTT MILLS SOUTH

116 JOHN STREET

LOWELL, MA 01852

CONTACT: ELIZABETH DENLY

CUSTOMER ID: TRC-WIPE-19

MATRIX: WIPE

DATE RECEIVED: 08/23/2006 TIME: 18:55

SAMPLED BY: N/A

CUSTOMER PO: N/A

NEA ID: AJ10856 NEA LRF: 06080223-01

DATE SAMPLED: 08/23/2006 TIME: N/A

PROJECT: 53567 NBHS

LOCATION: NEW BEDFORD, MA

LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1221	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1232	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1242	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1248	0.743	0.500	ug/Wipe	08/25/2006	PE
Aroclor 1254	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1260	4.62	0.500	ug/Wipe	08/25/2006	AG
Total PCB's	5.363				

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

AG-Aroclor 1260 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

PE-Aroclor 1248 is being used to report an altered PCB pattern exhibited by the sample. Actual Aroclor 1248 is not present in the sample, but is reported to more accurately quantify PCB present in sample that has undergone environmental alteration.

AUTHORIZED SIGNATURE:

Northeast Analytical, Inc.
Robert E. Wagner, Laboratory Director

William A. Kinax
Quality Assurance Officer



CERTIFICATE OF ANALYSIS
08/29/2006
TRC ENVIRONMENTAL
BOOTT MILLS SOUTH
116 JOHN STREET
LOWELL, MA 01852
CONTACT: ELIZABETH DENLY

CUSTOMER ID: TRC-WIPE-20
MATRIX: WIPE
DATE RECEIVED: 08/23/2006 TIME: 18:55
SAMPLED BY: N/A
CUSTOMER PO: N/A

NEA ID: AJ10857 NEA LRF: 06080223-02
DATE SAMPLED: 08/23/2006 TIME: N/A
PROJECT: 53567 NBHS
LOCATION: NEW BEDFORD, MA
LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1221	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1232	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1242	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1248	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1254	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1260	ND	0.500	ug/Wipe	08/25/2006	U
Total PCB's	ND				U

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

AUTHORIZED SIGNATURE:

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Quality Assurance Officer



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08/29/2006
TRC ENVIRONMENTAL
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116 JOHN STREET
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CONTACT: ELIZABETH DENLY

CUSTOMER ID: TRC-WIPE-21 NEA ID: AJ10858 NEA LRF: 06080223-03
MATRIX: WIPE DATE SAMPLED: 08/23/2006 TIME: N/A
DATE RECEIVED: 08/23/2006 TIME: 18:55 PROJECT: 53567 NBHS
SAMPLED BY: N/A LOCATION: NEW BEDFORD, MA
CUSTOMER PO: N/A LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1221	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1232	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1242	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1248	0.716	0.500	ug/Wipe	08/25/2006	PE
Aroclor 1254	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1260	8.28	0.500	ug/Wipe	08/25/2006	AJ
Total PCB's	8.996				

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.
PE-Aroclor 1248 is being used to report an altered PCB pattern exhibited by the sample. Actual Aroclor 1248 is not present in the sample, but is reported to more accurately quantify PCB present in sample that has undergone environmental alteration.
AJ-Sample exhibited a chromatographic pattern indicating both Aroclor 1242 and Aroclor 1248 to be present. The Aroclor reported was based on selecting the Aroclor that exhibited the higher concentration.

AUTHORIZED SIGNATURE:

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Robert E. Wagner, Laboratory Director

William A. Kutas
Quality Assurance Officer



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08/29/2006
TRC ENVIRONMENTAL
BOOTT MILLS SOUTH
116 JOHN STREET
LOWELL, MA 01852
CONTACT: ELIZABETH DENLY

CUSTOMER ID: TRC-WIPE-22 **NEA ID:** AJ10859 **NEA LRF:** 06080223-04
MATRIX: WIPE **DATE SAMPLED:** 08/23/2006 **TIME:** N/A
DATE RECEIVED: 08/23/2006 **TIME:** 18:55 **PROJECT:** 53567 NBHS
SAMPLED BY: N/A **LOCATION:** NEW BEDFORD, MA
CUSTOMER PO: N/A **LAB ELAP#:** 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1221	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1232	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1242	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1248	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1254	ND	0.500	ug/Wipe	08/25/2006	U
Aroclor 1260	2.70	0.500	ug/Wipe	08/25/2006	AG
Total PCB's	2.70				

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.
AG-Aroclor 1260 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

AUTHORIZED SIGNATURE:

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William A. Kotas
Quality Assurance Officer



CERTIFICATE OF ANALYSIS
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CONTACT: ELIZABETH DENLY

CUSTOMER ID: TRC-BULK-1	NEA ID: AJ10860	NEA LRF: 06080223-05
MATRIX: SOLID	DATE SAMPLED: 08/22/2006	TIME: N/A
DATE RECEIVED: 08/23/2006	TIME: 18:55	PROJECT: 53567 NBHS
SAMPLED BY: N/A	LOCATION: NEW BEDFORD, MA	
CUSTOMER PO: N/A	LAB ELAP#: 11078	

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	0.218	ug/g	08/26/2006	U
Aroclor 1221	ND	0.218	ug/g	08/26/2006	U
Aroclor 1232	ND	0.218	ug/g	08/26/2006	U
Aroclor 1242	0.624	0.218	ug/g	08/26/2006	AD
Aroclor 1248	ND	0.218	ug/g	08/26/2006	U
Aroclor 1254	1.22	0.218	ug/g	08/26/2006	AF
Aroclor 1260	1.57	0.218	ug/g	08/26/2006	AG
Total PCB Amount > Reporting Limit	3.414				

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.
AD-Aroclor 1242 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
AF-Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
AG-Aroclor 1260 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

AUTHORIZED SIGNATURE:

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CUSTOMER ID: TRC-BULK-2 NEA ID: AJ10861 NEA LRF: 06080223-06
MATRIX: SOLID DATE SAMPLED: 08/22/2006 TIME: N/A
DATE RECEIVED: 08/23/2006 TIME: 18:55 PROJECT: 53567 NBHS
SAMPLED BY: N/A LOCATION: NEW BEDFORD, MA
CUSTOMER PO: N/A LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	0.145	ug/g	08/26/2006	U
Aroclor 1221	ND	0.145	ug/g	08/26/2006	U
Aroclor 1232	ND	0.145	ug/g	08/26/2006	U
Aroclor 1242	2.04	0.145	ug/g	08/26/2006	AD
Aroclor 1248	ND	0.145	ug/g	08/26/2006	U
Aroclor 1254	1.17	0.145	ug/g	08/26/2006	AF
Aroclor 1260	1.34	0.145	ug/g	08/26/2006	AG
Total PCB Amount > Reporting Limit	4.55				

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.
AD-Aroclor 1242 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
AF-Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
AG-Aroclor 1260 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

AUTHORIZED SIGNATURE:

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CUSTOMER ID: TRC-BULK-3	NEA ID: AJ10862	NEA LRF: 06080223-07
MATRIX: SOLID	DATE SAMPLED: 08/22/2006	TIME: N/A
DATE RECEIVED: 08/23/2006	TIME: 18:55	PROJECT: 53567 NBHS
SAMPLED BY: N/A	LOCATION: NEW BEDFORD, MA	
CUSTOMER PO: N/A	LAB ELAP#: 11078	

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	0.108	ug/g	08/26/2006	U
Aroclor 1221	ND	0.108	ug/g	08/26/2006	U
Aroclor 1232	ND	0.108	ug/g	08/26/2006	U
Aroclor 1242	0.562	0.108	ug/g	08/26/2006	AD
Aroclor 1248	ND	0.108	ug/g	08/26/2006	U
Aroclor 1254	1.19 J ✓	0.108	ug/g	08/26/2006	AF
Aroclor 1260	1.05	0.108	ug/g	08/26/2006	AG
Total PCB Amount > Reporting Limit	2.802 S				

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.
AD-Aroclor 1242 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
AF-Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
AG-Aroclor 1260 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

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CUSTOMER ID: TRC-BULK-4	NEA ID: AJ10863	NEA LRF: 06080223-08
MATRIX: SOLID	DATE SAMPLED: 08/22/2006	TIME: N/A
DATE RECEIVED: 08/23/2006	TIME: 18:55	PROJECT: 53567 NBHS
SAMPLED BY: N/A	LOCATION: NEW BEDFORD, MA	
CUSTOMER PO: N/A	LAB ELAP#: 11078	

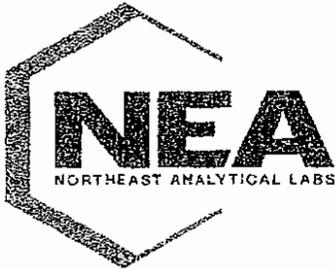
PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND <i>us</i>	0.561	ug/g	08/27/2006	U
Aroclor 1221	ND <i>us</i>	0.561	ug/g	08/27/2006	U
Aroclor 1232	ND <i>us</i>	0.561	ug/g	08/27/2006	U
Aroclor 1242	5.20 <i>J</i>	0.561	ug/g	08/27/2006	AD
Aroclor 1248	ND <i>us</i>	0.561	ug/g	08/27/2006	U
Aroclor 1254	0.581 <i>J</i>	0.561	ug/g	08/27/2006	AF
Aroclor 1260	ND <i>us</i>	0.561	ug/g	08/27/2006	U
Total PCB Amount > Reporting Limit	5.781 <i>J</i>				

Notes: ND (Not Detected). Denotes analyte *not detected* at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.
AD-Aroclor 1242 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
AF-Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

AUTHORIZED SIGNATURE:

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CUSTOMER ID: TRC-BULK-5
MATRIX: SOLID
DATE RECEIVED: 08/23/2006 **TIME:** 18:55
SAMPLED BY: N/A
CUSTOMER PO: N/A

NEA ID: AJ10864 **NEA LRF:** 06080223-09
DATE SAMPLED: 08/22/2006 **TIME:** N/A
PROJECT: 53567 NBHS
LOCATION: NEW BEDFORD, MA
LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	2.05	ug/g	08/27/2006	U
Aroclor 1221	ND	2.05	ug/g	08/27/2006	U
Aroclor 1232	ND	2.05	ug/g	08/27/2006	U
Aroclor 1242	31.7	2.05	ug/g	08/27/2006	AD
Aroclor 1248	ND	2.05	ug/g	08/27/2006	U
Aroclor 1254	2.73	2.05	ug/g	08/27/2006	AF
Aroclor 1260	ND	2.05	ug/g	08/27/2006	U
Total PCB Amount > Reporting Limit	34.43				

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
 PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.
 AD-Aroclor 1242 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
 AF-Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

AUTHORIZED SIGNATURE:

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CUSTOMER ID: TRC-BULK-6	NEA ID: AJ10865	NEA LRF: 06080223-10
MATRIX: SOLID	DATE SAMPLED: 08/22/2006	TIME: N/A
DATE RECEIVED: 08/23/2006	TIME: 18:55	PROJECT: 53567 NBHS
SAMPLED BY: N/A	LOCATION: NEW BEDFORD, MA	
CUSTOMER PO: N/A	LAB ELAP#: 11078	

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND UT	1.22	ug/g	08/26/2006	U
Aroclor 1221	ND UT	1.22	ug/g	08/26/2006	U
Aroclor 1232	ND UT	1.22	ug/g	08/26/2006	U
Aroclor 1242	13.6 J	1.22	ug/g	08/26/2006	AD
Aroclor 1248	ND UT	1.22	ug/g	08/26/2006	U
Aroclor 1254	19.3 J	1.22	ug/g	08/26/2006	AF
Aroclor 1260	3.62 J	1.22	ug/g	08/26/2006	AG
Total PCB Amount > Reporting Limit	36.52 J				

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
 PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.
 AD-Aroclor 1242 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
 AF-Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
 AG-Aroclor 1260 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

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CUSTOMER ID: TRC-BULK-7	NEA ID: AJ10866	NEA LRF: 06080223-11
MATRIX: SOLID	DATE SAMPLED: 08/22/2006	TIME: N/A
DATE RECEIVED: 08/23/2006	TIME: 18:55	PROJECT: 53567 NBHS
SAMPLED BY: N/A	LOCATION: NEW BEDFORD, MA	
CUSTOMER PO: N/A	LAB ELAP#: 11078	

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	1.21	ug/g	08/26/2006	U
Aroclor 1221	ND	1.21	ug/g	08/26/2006	U
Aroclor 1232	ND	1.21	ug/g	08/26/2006	U
Aroclor 1242	10.8	1.21	ug/g	08/26/2006	AD
Aroclor 1248	ND	1.21	ug/g	08/26/2006	U
Aroclor 1254	5.66	1.21	ug/g	08/26/2006	AF
Aroclor 1260	1.65	1.21	ug/g	08/26/2006	AG
Total PCB Amount > Reporting Limit	18.11				

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.
AD-Aroclor 1242 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
AF-Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
AG-Aroclor 1260 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

AUTHORIZED SIGNATURE:

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CONTACT: ELIZABETH DENLY

CUSTOMER ID: TRC-BULK-8
MATRIX: SOLID
DATE RECEIVED: 08/23/2006 **TIME:** 18:55
SAMPLED BY: N/A
CUSTOMER PO: N/A

NEA ID: AJ10867 **NEA LRF:** 06080223-12
DATE SAMPLED: 08/22/2006 **TIME:** N/A
PROJECT: 53567 NBHS
LOCATION: NEW BEDFORD, MA
LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	0.150	ug/g	08/26/2006	U
Aroclor 1221	ND	0.150	ug/g	08/26/2006	U
Aroclor 1232	ND	0.150	ug/g	08/26/2006	U
Aroclor 1242	1.39	0.150	ug/g	08/26/2006	AD
Aroclor 1248	ND	0.150	ug/g	08/26/2006	U
Aroclor 1254	1.35 J ✓	0.150	ug/g	08/26/2006	AF
Aroclor 1260	2.06	0.150	ug/g	08/26/2006	AG
Total PCB Amount > Reporting Limit	4.80 J				

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
 PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.
 AD-Aroclor 1242 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
 AF-Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
 AG-Aroclor 1260 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

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CUSTOMER ID: TRC-BULK-9
MATRIX: SOLID
DATE RECEIVED: 08/23/2006 **TIME:** 18:55
SAMPLED BY: N/A
CUSTOMER PO: N/A

NEA ID: AJ10868 **NEA LRF:** 06080223-13
DATE SAMPLED: 08/22/2006 **TIME:** N/A
PROJECT: 53567 NBHS
LOCATION: NEW BEDFORD, MA
LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	0.523	ug/g	08/26/2006	U
Aroclor 1221	ND	0.523	ug/g	08/26/2006	U
Aroclor 1232	ND	0.523	ug/g	08/26/2006	U
Aroclor 1242	7.39	0.523	ug/g	08/26/2006	AD
Aroclor 1248	ND	0.523	ug/g	08/26/2006	U
Aroclor 1254	2.76	0.523	ug/g	08/26/2006	AF
Aroclor 1260	ND	0.523	ug/g	08/26/2006	U
Total PCB Amount > Reporting Limit	10.15				

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
 PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.
 AD-Aroclor 1242 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
 AF-Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

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CUSTOMER ID: TRC-BULK-10	NEA ID: AJ10869	NEA LRF: 06080223-14
MATRIX: SOLID	DATE SAMPLED: 08/22/2006	TIME: N/A
DATE RECEIVED: 08/23/2006	TIME: 18:55	PROJECT: 53567 NBHS
SAMPLED BY: N/A	LOCATION: NEW BEDFORD, MA	
CUSTOMER PO: N/A	LAB ELAP#: 11078	

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	0.0943	ug/g	08/27/2006	U
Aroclor 1221	ND	0.0943	ug/g	08/27/2006	U
Aroclor 1232	ND	0.0943	ug/g	08/27/2006	U
Aroclor 1242	0.400	0.0943	ug/g	08/27/2006	AD
Aroclor 1248	ND	0.0943	ug/g	08/27/2006	U
Aroclor 1254	0.324	0.0943	ug/g	08/27/2006	AF
Aroclor 1260	0.0281 J	0.0943	ug/g	08/27/2006	AG,J
Total PCB Amount > Reporting Limit	0.7521 S				

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.
J-Indicates an estimated value. The analyte was detected in the sample at a concentration greater than the Method Detection Limit (MDL) but less than the Practical Quantitation Limit (PQL).
AD-Aroclor 1242 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
AF-Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
AG-Aroclor 1260 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

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CUSTOMER ID: TRC-BULK-11
MATRIX: SOLID
DATE RECEIVED: 08/23/2006 **TIME:** 18:55
SAMPLED BY: N/A
CUSTOMER PO: N/A

NEA ID: AJ10870 **NEA LRF:** 06080223-15
DATE SAMPLED: 08/22/2006 **TIME:** N/A
PROJECT: 53567 NBHS
LOCATION: NEW BEDFORD, MA
LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	0.196	ug/g	08/27/2006	U
Aroclor 1221	ND	0.196	ug/g	08/27/2006	U
Aroclor 1232	ND	0.196	ug/g	08/27/2006	U
Aroclor 1242	ND	0.196	ug/g	08/27/2006	U
Aroclor 1248	ND	0.196	ug/g	08/27/2006	U
Aroclor 1254	ND	0.196	ug/g	08/27/2006	U
Aroclor 1260	ND	0.196	ug/g	08/27/2006	U
Total PCB Amount > Reporting Limit	ND				U

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

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CUSTOMER ID: TRC-BULK-12	NEA ID: AJ10871	NEA LRF: 06080223-16
MATRIX: SOLID	DATE SAMPLED: 08/22/2006	TIME: N/A
DATE RECEIVED: 08/23/2006	TIME: 18:55	PROJECT: 53567 NBHS
SAMPLED BY: N/A	LOCATION: NEW BEDFORD, MA	
CUSTOMER PO: N/A	LAB ELAP#: 11078	

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND UJ	0.103	ug/g	08/26/2006	U
Aroclor 1221	ND UJ	0.103	ug/g	08/26/2006	U
Aroclor 1232	ND UJ	0.103	ug/g	08/26/2006	U
Aroclor 1242	0.872 J	0.103	ug/g	08/26/2006	AD
Aroclor 1248	ND UJ	0.103	ug/g	08/26/2006	U
Aroclor 1254	1.36 J	0.103	ug/g	08/26/2006	AF
Aroclor 1260	2.21 J	0.103	ug/g	08/26/2006	AG
Total PCB Amount > Reporting Limit	4.442 J				

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
 PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.
 AD-Aroclor 1242 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
 AF-Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
 AG-Aroclor 1260 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

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CONTACT: ELIZABETH DENLY

CUSTOMER ID: TRC-BULK-13	NEA ID: AJ10872	NEA LRF: 06080223-17
MATRIX: SOLID	DATE SAMPLED: 08/22/2006	TIME: N/A
DATE RECEIVED: 08/23/2006	TIME: 18:55	PROJECT: 53567 NBHS
SAMPLED BY: N/A	LOCATION: NEW BEDFORD, MA	
CUSTOMER PO: N/A	LAB ELAP#: 11078	

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	0.233	ug/g	08/27/2006	U
Aroclor 1221	ND	0.233	ug/g	08/27/2006	U
Aroclor 1232	ND	0.233	ug/g	08/27/2006	U
Aroclor 1242	0.254	0.233	ug/g	08/27/2006	AD
Aroclor 1248	ND	0.233	ug/g	08/27/2006	U
Aroclor 1254	0.680	0.233	ug/g	08/27/2006	AF
Aroclor 1260	0.105 J	0.233	ug/g	08/27/2006	AG,J
Total PCB Amount > Reporting Limit	1.039 J				

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
 PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.
 J-Indicates an estimated value. The analyte was detected in the sample at a concentration greater than the Method Detection Limit (MDL) but less than the Practical Quantitation Limit (PQL).
 AD-Aroclor 1242 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
 AF-Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
 AG-Aroclor 1260 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

AUTHORIZED SIGNATURE:

Northeast Analytical, Inc.
 Robert E. Wagner, Laboratory Director

William A. Kotas
 Quality Assurance Officer



CERTIFICATE OF ANALYSIS
08/29/2006
TRC ENVIRONMENTAL
BOOTT MILLS SOUTH
116 JOHN STREET
LOWELL, MA 01852
CONTACT: ELIZABETH DENLY

CUSTOMER ID: TRC-BULK-14 NEA ID: AJ10873 NEA LRF: 06080223-18
MATRIX: SOLID DATE SAMPLED: 08/22/2006 TIME: N/A
DATE RECEIVED: 08/23/2006 TIME: 18:55 PROJECT: 53567 NBHS
SAMPLED BY: N/A LOCATION: NEW BEDFORD, MA
CUSTOMER PO: N/A LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND UJ	0.100	ug/g	08/26/2006	U
Aroclor 1221	ND UJ	0.100	ug/g	08/26/2006	U
Aroclor 1232	ND UJ	0.100	ug/g	08/26/2006	U
Aroclor 1242	1.38 J	0.100	ug/g	08/26/2006	AD
Aroclor 1248	ND UJ	0.100	ug/g	08/26/2006	U
Aroclor 1254	0.913 J	0.100	ug/g	08/26/2006	AF
Aroclor 1260	2.03 J	0.100	ug/g	08/26/2006	AG
Total PCB Amount > Reporting Limit	4.323 J				

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.
AD-Aroclor 1242 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
AF-Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
AG-Aroclor 1260 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

AUTHORIZED SIGNATURE:

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CONTACT: ELIZABETH DENLY

CUSTOMER ID:	TRC-BULK-15	NEA ID:	AJ10874	NEA LRF:	06080223-19
MATRIX:	SOLID	DATE SAMPLED:	08/22/2006	TIME:	N/A
DATE RECEIVED:	08/23/2006	TIME:	18:55	PROJECT:	53567 NBHS
SAMPLED BY:	N/A	LOCATION:	NEW BEDFORD, MA		
CUSTOMER PO:	N/A	LAB ELAP#:	11078		

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	1.43	ug/g	08/27/2006	U
Aroclor 1221	ND	1.43	ug/g	08/27/2006	U
Aroclor 1232	ND	1.43	ug/g	08/27/2006	U
Aroclor 1242	1.88	1.43	ug/g	08/27/2006	AD
Aroclor 1248	ND	1.43	ug/g	08/27/2006	U
Aroclor 1254	0.489 J ✓	1.43	ug/g	08/27/2006	AF,J
Aroclor 1260	ND	1.43	ug/g	08/27/2006	U
Total PCB Amount > Reporting Limit	2.369 5				

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.
J-Indicates an estimated value. The analyte was detected in the sample at a concentration greater than the Method Detection Limit (MDL) but less than the Practical Quantitation Limit (PQL).
AD-Aroclor 1242 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
AF-Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

AUTHORIZED SIGNATURE:

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CONTACT: ELIZABETH DENLY

CUSTOMER ID: TRC-BULK-16	NEA ID: AJ10875	NEA LRF: 06080223-20
MATRIX: SOLID	DATE SAMPLED: 08/22/2006	TIME: N/A
DATE RECEIVED: 08/23/2006	TIME: 18:55	PROJECT: 53567 NBHS
SAMPLED BY: N/A	LOCATION: NEW BEDFORD, MA	
CUSTOMER PO: N/A	LAB ELAP#: 11078	

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	0.303	ug/g	08/26/2006	U
Aroclor 1221	ND	0.303	ug/g	08/26/2006	U
Aroclor 1232	ND	0.303	ug/g	08/26/2006	U
Aroclor 1242	1.86	0.303	ug/g	08/26/2006	AD
Aroclor 1248	ND	0.303	ug/g	08/26/2006	U
Aroclor 1254	2.14	0.303	ug/g	08/26/2006	AF
Aroclor 1260	1.37	0.303	ug/g	08/26/2006	AG
Total PCB Amount > Reporting Limit	5.37				

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
 PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.
 AD-Aroclor 1242 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
 AF-Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
 AG-Aroclor 1260 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

AUTHORIZED SIGNATURE:

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CONTACT: ELIZABETH DENLY

CUSTOMER ID: TRC-BULK-17	NEA ID: AJ10876	NEA LRF: 06080223-21
MATRIX: SOLID	DATE SAMPLED: 08/23/2006	TIME: N/A
DATE RECEIVED: 08/23/2006	TIME: 18:55	PROJECT: 53567 NBHS
SAMPLED BY: N/A	LOCATION: NEW BEDFORD, MA	
CUSTOMER PO: N/A	LAB ELAP#: 11078	

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	0.630	ug/g	08/27/2006	U
Aroclor 1221	ND	0.630	ug/g	08/27/2006	U
Aroclor 1232	ND	0.630	ug/g	08/27/2006	U
Aroclor 1242	ND	0.630	ug/g	08/27/2006	U
Aroclor 1248	ND	0.630	ug/g	08/27/2006	U
Aroclor 1254	0.268 J ✓	0.630	ug/g	08/27/2006	AF,J
Aroclor 1260	0.179 J ✓	0.630	ug/g	08/27/2006	AG,J
Total PCB Amount > Reporting Limit	0.447 J ✓				J

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.
J-Indicates an estimated value. The analyte was detected in the sample at a concentration greater than the Method Detection Limit (MDL) but less than the Practical Quantitation Limit (PQL).
AF-Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
AG-Aroclor 1260 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

AUTHORIZED SIGNATURE:

Northeast Analytical, Inc.
Robert E. Wagner, Laboratory Director

William A. Kotas
Quality Assurance Officer



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CUSTOMER ID: TRC-BULK-18
MATRIX: SOLID
DATE RECEIVED: 08/23/2006 **TIME:** 18:55
SAMPLED BY: N/A
CUSTOMER PO: N/A

NEA ID: AJ10877 **NEA LRF:** 06080223-22
DATE SAMPLED: 08/23/2006 **TIME:** N/A
PROJECT: 53567 NBHS
LOCATION: NEW BEDFORD, MA
LAB ELAP#: 11078

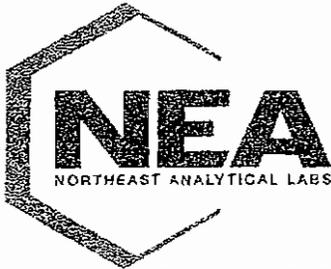
PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	0.150	ug/g	08/27/2006	U
Aroclor 1221	ND	0.150	ug/g	08/27/2006	U
Aroclor 1232	ND	0.150	ug/g	08/27/2006	U
Aroclor 1242	0.871 <i>✕ 100%</i>	0.150	ug/g	08/27/2006	AD
Aroclor 1248	ND	0.150	ug/g	08/27/2006	U
Aroclor 1254	0.254	0.150	ug/g	08/27/2006	AF
Aroclor 1260	ND	0.150	ug/g	08/27/2006	U
Total PCB Amount > Reporting Limit	1.125				

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.
AD-Aroclor 1242 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
AF-Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

AUTHORIZED SIGNATURE:

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CONTACT: ELIZABETH DENLY

CUSTOMER ID: TRC-BULK-19
MATRIX: SOLID
DATE RECEIVED: 08/23/2006 **TIME:** 18:55
SAMPLED BY: N/A
CUSTOMER PO: N/A

NEA ID: AJ10878 **NEA LRF:** 06080223-23
DATE SAMPLED: 08/23/2006 **TIME:** N/A
PROJECT: 53567 NBHS
LOCATION: NEW BEDFORD, MA
LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	0.0500	ug/g	08/27/2006	U
Aroclor 1221	ND	0.0500	ug/g	08/27/2006	U
Aroclor 1232	ND	0.0500	ug/g	08/27/2006	U
Aroclor 1242	1.86	0.0500	ug/g	08/27/2006	AD
Aroclor 1248	ND	0.0500	ug/g	08/27/2006	U
Aroclor 1254	0.978	0.0500	ug/g	08/27/2006	AF
Aroclor 1260	0.532	0.0500	ug/g	08/27/2006	AG
Total PCB Amount > Reporting Limit	3.370				

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
 PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.
 AD-Aroclor 1242 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
 AF-Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
 AG-Aroclor 1260 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

AUTHORIZED SIGNATURE:

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William A. Kotar
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CONTACT: ELIZABETH DENLY

CUSTOMER ID: TRC-BULK-20 MATRIX: SOLID DATE RECEIVED: 08/23/2006 TIME: 18:55 SAMPLED BY: N/A CUSTOMER PO: N/A	NEA ID: AJ10879 NEA LRF: 06080223-24 DATE SAMPLED: 08/23/2006 TIME: N/A PROJECT: 53567 NBHS LOCATION: NEW BEDFORD, MA LAB ELAP#: 11078
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PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	0.225	ug/g	08/27/2006	U
Aroclor 1221	ND	0.225	ug/g	08/27/2006	U
Aroclor 1232	ND	0.225	ug/g	08/27/2006	U
Aroclor 1242	1.68	0.225	ug/g	08/27/2006	AD
Aroclor 1248	ND	0.225	ug/g	08/27/2006	U
Aroclor 1254	0.861 J✓	0.225	ug/g	08/27/2006	AF
Aroclor 1260	0.172 J✓	0.225	ug/g	08/27/2006	AG,J
Total PCB Amount > Reporting Limit	2.713 S				

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
 PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.
 J-Indicates an estimated value. The analyte was detected in the sample at a concentration greater than the Method Detection Limit (MDL) but less than the Practical Quantitation Limit (PQL).
 AD-Aroclor 1242 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
 AF-Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
 AG-Aroclor 1260 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

AUTHORIZED SIGNATURE:

Northeast Analytical, Inc.
 Robert E. Wagner, Laboratory Director

William A. Katus
 Quality Assurance Officer

Memo

To: Dave Sullivan
From: Lorie MacKinnon
CC: Elizabeth Denly
Date: 10/22/06
Re: Organic Data Validation Review: Bulk Samples: New Bedford High School/ New Bedford, MA:
Job 06080224

SUMMARY

Limited (Tier 2) validation was performed on the data for 11 solid samples and two oil samples collected at the New Bedford High School Site in New Bedford, Massachusetts. The samples were collected on August 23, 2006 and submitted to Northeast Analytical Laboratories (NEA) in Schenectady, New York for analysis. The samples were analyzed for polychlorinated biphenyls (PCBs) using SW-846 method 8082. NEA reported the results under job number 06080224.

The sample results were assessed using the *EPA New England Data Validation Functional Guidelines for Evaluating Environmental Analyses*, revised December 1996. Modification of the Functional Guidelines was done to accommodate to the non-CLP methodologies.

In general, the data appear to be valid as reported and may be used for decision-making purposes. Selected data points were qualified as estimated because of nonconformance of certain QC criteria.

SAMPLES

Samples included in this review are listed below:

TRC-BULK-21, TRC-BULK-22, TRC-BULK-23, TRC-BULK-24, TRC-BULK-25, TRC-BULK-26, TRC-BULK-27, TRC-BULK-28, TRC-BULK-29, TRC-BULK-30, TRC-BULK-31, TRC-BULK-32, TRC-BULK-33

REVIEW ELEMENTS

Sample data were reviewed for the following parameters:

- Agreement of analyses conducted with TRC requests
- Holding times and sample preservation
- Initial and continuing calibrations

- Method blanks
- Surrogate spike recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) results
- Laboratory control sample (LCS) results
- Field duplicate results
- Quantitation limits and sample results

DISCUSSION

Agreement of Analyses Conducted with TRC Requests

Sample reports were checked to verify that the results corresponded to analytical requests as designated on the chain-of-custody and any correspondence between TRC and the laboratory. There were no discrepancies noted.

Holding Times and Sample Preservation

All samples were extracted and analyzed within the method-specified holding time.

Initial and Continuing Calibrations

The percent relative standard deviations (%RSDs) and percent differences (%Ds) of all PCBs used in the initial and continuing calibrations were within the acceptance criteria.

Method Blanks

Target compounds were not detected in the laboratory method blanks associated with the PCB analyses.

Surrogate Spike Recoveries

The following table summarizes the surrogate recoveries which were outside the laboratory acceptance criteria of 70-130.

Sample ID	TCMX ZB-1	TCMX ZB-5	DCB ZB-1	DCB ZB-5	Validation Actions
TRC-BULK-22	150%	-	-	-	Validation actions were not required as the surrogate recovery was within control limits on the alternate column.
TRC-BULK-24	53.0%	38.8%	27.7%	32.6%	Estimate (J/UJ) the positive and nondetect results.
TRC-BULK-25	-	-	58.1%	-	Validation actions were not required as the surrogate recovery was within control limits on the alternate column.
TRC-BULK-27	-	-	66.0%	-	Validation actions were not required as the surrogate recovery was within control limits on the alternate column.
TRC-BULK-28	-	-	-	69.7%	Validation actions were not required as the surrogate recovery was within control limits on the alternate column.
TRC-BULK-31	45.3%	-	-	66.7%	Validation actions were not required as the surrogate recovery was within control limits on the alternate column.

- Within control limits
 TCMX- Tetrachloro-m-Xylene
 DCB – Decachlorobiphenyl

The positive and nondetect results for sample TRC-BULK-24 were qualified as estimated (J/UJ) due to low surrogate recoveries.

MS/MSD Results

MS/MSD analyses were not performed on any samples in this data set.

LCS Results

An LCS was extracted and analyzed with each batch of samples. The recovery of the spiked Aroclor was within the acceptance criteria.

Field Duplicate Results

A field duplicate pair was not submitted with this data set. No validation action was required on this basis.

Quantitation Limits and Sample Results

There were no dilutions performed on any samples in this data set. The quantitation limits for the bulk samples met the project requirements.

Select PCB results were detected below the laboratory reporting limit and flagged by the laboratory with a "J". The "J" qualifier indicated that this value is estimated.

All reported results were within the retention time windows. The following table summarizes the dual column relative percent differences (RPDs) which were outside of the acceptance criteria of 40. These results were qualified as estimated (J).

Sample	Compound	RPD (%)
TRC-BULK-22	Aroclor 1260	53.1
TRC-BULK-24	Aroclor 1254	65.2
TRC-BULK-25	Aroclor 1242	78.6
	Aroclor 1254	51.0
TRC-BULK-27	Aroclor 1260	42.1
TRC-BULK-30	Aroclor 1254	85.9

It should be noted that the positive result for Aroclor 1248 was reported in sample TRC-BULK-25 but was not confirmed on the second column. Aroclor 1242 and Aroclor 1254 were reported to be detected on the second column for sample TRC-BULK-25. During validation, the laboratory was requested to re-examine these results. Subsequently, the laboratory submitted revised results for sample TRC-BULK-25 in which Aroclor 1242 and Aroclor 1254 were detected.

Positive results for total PCBs were also qualified as estimated (J) if any of the individual Aroclors were qualified as estimated, as discussed in the memorandum.



CERTIFICATE OF ANALYSIS

08/29/2006

**TRC ENVIRONMENTAL
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CONTACT: ELIZABETH DENLY

CUSTOMER ID: TRC-BULK-21
MATRIX: SOLID
DATE RECEIVED: 08/23/2006 **TIME:** 18:55
SAMPLED BY: N/A
CUSTOMER PO: N/A

NEA ID: AJ10880 **NEA LRF:** 06080224-01
DATE SAMPLED: 08/23/2006 **TIME:** N/A
PROJECT: 53567 NBHS
LOCATION: NEW BEDFORD, MA
LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	0.0722	ug/g	08/26/2006	U
Aroclor 1221	ND	0.0722	ug/g	08/26/2006	U
Aroclor 1232	ND	0.0722	ug/g	08/26/2006	U
Aroclor 1242	ND	0.0722	ug/g	08/26/2006	U
Aroclor 1248	ND	0.0722	ug/g	08/26/2006	U
Aroclor 1254	ND	0.0722	ug/g	08/26/2006	U
Aroclor 1260	ND	0.0722	ug/g	08/26/2006	U
Total PCB Amount > Reporting Limit	ND				U

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

AUTHORIZED SIGNATURE:

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CONTACT: ELIZABETH DENLY

CUSTOMER ID: TRC-BULK-22	NEA ID: AJ10881	NEA LRF: 06080224-02
MATRIX: SOLID	DATE SAMPLED: 08/23/2006	TIME: N/A
DATE RECEIVED: 08/23/2006	TIME: 18:55	PROJECT: 53567 NBHS
SAMPLED BY: N/A	LOCATION: NEW BEDFORD, MA	
CUSTOMER PO: N/A	LAB ELAP#: 11078	

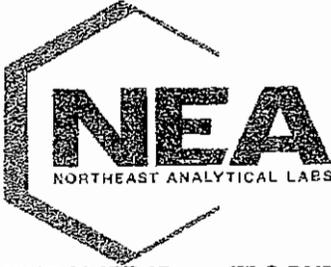
PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	0.111	ug/g	08/26/2006	U
Aroclor 1221	ND	0.111	ug/g	08/26/2006	U
Aroclor 1232	ND	0.111	ug/g	08/26/2006	U
Aroclor 1242	1.31	0.111	ug/g	08/26/2006	AD
Aroclor 1248	ND	0.111	ug/g	08/26/2006	U
Aroclor 1254	1.38	0.111	ug/g	08/26/2006	AF
Aroclor 1260	0.162	J ✓ 0.111	ug/g	08/26/2006	AG
Total PCB Amount > Reporting Limit	2.852	J ✓			

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.
AD-Aroclor 1242 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
AF-Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
AG-Aroclor 1260 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

AUTHORIZED SIGNATURE:

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Quality Assurance Officer



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CONTACT: ELIZABETH DENLY

CUSTOMER ID: TRC-BULK-23 MATRIX: SOLID DATE RECEIVED: 08/23/2006 TIME: 18:55 SAMPLED BY: N/A CUSTOMER PO: N/A	NEA ID: AJ10882 NEA LRF: 06080224-03 DATE SAMPLED: 08/23/2006 TIME: N/A PROJECT: 53567 NBHS LOCATION: NEW BEDFORD, MA LAB ELAP#: 11078
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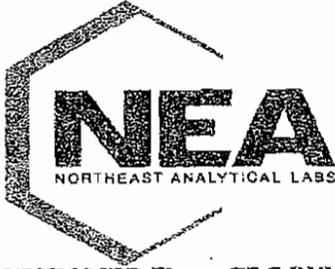
PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	0.733	ug/g	08/27/2006	U
Aroclor 1221	ND	0.733	ug/g	08/27/2006	U
Aroclor 1232	ND	0.733	ug/g	08/27/2006	U
Aroclor 1242	1.36	0.733	ug/g	08/27/2006	AD
Aroclor 1248	ND	0.733	ug/g	08/27/2006	U
Aroclor 1254	0.444 J J	0.733	ug/g	08/27/2006	AF,J
Aroclor 1260	ND	0.733	ug/g	08/27/2006	U
Total PCB Amount > Reporting Limit	1.804 J J				

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
 PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.
 J-Indicates an estimated value. The analyte was detected in the sample at a concentration greater than the Method Detection Limit (MDL) but less than the Practical Quantitation Limit (PQL).
 AD-Aroclor 1242 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
 AF-Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

AUTHORIZED SIGNATURE:

Northeast Analytical, Inc.
 Robert E. Wagner, Laboratory Director

William A. Kotas
 Quality Assurance Officer



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08/29/2006
TRC ENVIRONMENTAL
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LOWELL, MA 01852
CONTACT: ELIZABETH DENLY

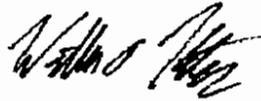
CUSTOMER ID: TRC-BULK-24	NEA ID: AJ10883	NEA LRF: 06080224-04
MATRIX: SOLID	DATE SAMPLED: 08/23/2006	TIME: N/A
DATE RECEIVED: 08/23/2006	TIME: 18:55	PROJECT: 53567 NBHS
SAMPLED BY: N/A	LOCATION: NEW BEDFORD, MA	
CUSTOMER PO: N/A	LAB ELAP#: 11078	

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND UJ	0.0504	ug/g	08/26/2006	U
Aroclor 1221	ND UJ	0.0504	ug/g	08/26/2006	U
Aroclor 1232	ND UJ	0.0504	ug/g	08/26/2006	U
Aroclor 1242	0.0529 J	0.0504	ug/g	08/26/2006	AD
Aroclor 1248	ND UJ	0.0504	ug/g	08/26/2006	U
Aroclor 1254	0.236 J	0.0504	ug/g	08/26/2006	AF
Aroclor 1260	0.495 J	0.0504	ug/g	08/26/2006	AG
Total PCB Amount > Reporting Limit	0.7839 J				

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.
AD-Aroclor 1242 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
AF-Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
AG-Aroclor 1260 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

AUTHORIZED SIGNATURE:

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CUSTOMER ID: TRC-BULK-25
MATRIX: OIL
DATE RECEIVED: 08/23/2006 **TIME:** 18:55
SAMPLED BY: N/A
CUSTOMER PO: N/A

NEA ID: AJ10884 **NEA LRF:** 06080224-05
DATE SAMPLED: 08/23/2006 **TIME:** N/A
PROJECT: 53567 NBHS
LOCATION: NEW BEDFORD, MA
LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	0.125	ug/g	08/27/2006	U
Aroclor 1221	ND	0.125	ug/g	08/27/2006	U
Aroclor 1232	ND	0.125	ug/g	08/27/2006	U
Aroclor 1242	0.0950 J ✓	0.125	ug/g	08/27/2006	AD,J
Aroclor 1248	ND	0.125	ug/g	08/27/2006	U
Aroclor 1254	0.0807 J ✓	0.125	ug/g	08/27/2006	AF,J
Aroclor 1260	ND	0.125	ug/g	08/27/2006	U
Total PCB Amount > Reporting Limit	0.1757 J J				

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
 PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.
 J-Indicates an estimated value. The analyte was detected in the sample at a concentration greater than the Method Detection Limit (MDL) but less than the Practical Quantitation Limit (PQL).
 AD-Aroclor 1242 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
 AF-Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

AUTHORIZED SIGNATURE:

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CUSTOMER ID: TRC-BULK-26 **NEA ID:** AJ10885 **NEA LRF:** 06080224-06
MATRIX: OIL **DATE SAMPLED:** 08/23/2006 **TIME:** N/A
DATE RECEIVED: 08/23/2006 **TIME:** 18:55 **PROJECT:** 53567 NBHS
SAMPLED BY: N/A **LOCATION:** NEW BEDFORD, MA
CUSTOMER PO: N/A **LAB ELAP#:** 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	1.00	ug/g	08/26/2006	U
Aroclor 1221	ND	1.00	ug/g	08/26/2006	U
Aroclor 1232	ND	1.00	ug/g	08/26/2006	U
Aroclor 1242	ND	1.00	ug/g	08/26/2006	U
Aroclor 1248	ND	1.00	ug/g	08/26/2006	U
Aroclor 1254	ND	1.00	ug/g	08/26/2006	U
Aroclor 1260	ND	1.00	ug/g	08/26/2006	U
Total PCB Amount > Reporting Limit	ND				U

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

AUTHORIZED SIGNATURE:

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CONTACT: ELIZABETH DENLY

CUSTOMER ID: TRC-BULK-27 **NEA ID:** AJ10886 **NEA LRF:** 06080224-07
MATRIX: OIL **DATE SAMPLED:** 08/23/2006 **TIME:** N/A
DATE RECEIVED: 08/23/2006 **TIME:** 18:55 **PROJECT:** 53567 NBHS
SAMPLED BY: N/A **LOCATION:** NEW BEDFORD, MA
CUSTOMER PO: N/A **LAB ELAP#:** 11078

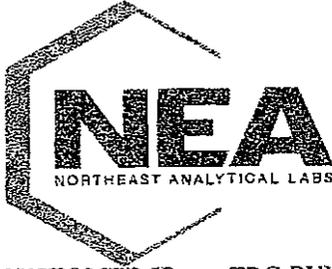
PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	1.00	ug/g	08/26/2006	U
Aroclor 1221	ND	1.00	ug/g	08/26/2006	U
Aroclor 1232	ND	1.00	ug/g	08/26/2006	U
Aroclor 1242	4.80	1.00	ug/g	08/26/2006	AD
Aroclor 1248	ND	1.00	ug/g	08/26/2006	U
Aroclor 1254	5.23	1.00	ug/g	08/26/2006	AF
Aroclor 1260	0.841 J ✓	1.00	ug/g	08/26/2006	PG,J
Total PCB Amount > Reporting Limit	10.870 J ✓				

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.
J-Indicates an estimated value. The analyte was detected in the sample at a concentration greater than the Method Detection Limit (MDL) but less than the Practical Quantitation Limit (PQL).
AD-Aroclor 1242 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
AF-Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
PG-Aroclor 1260 is being used to report an altered PCB pattern exhibited by the sample. Actual Aroclor 1260 is not present in the sample, but is reported to more accurately quantify PCB present in sample that has undergone environmental alteration.

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CONTACT: ELIZABETH DENLY

CUSTOMER ID: TRC-BULK-28 NEA ID: AJ10887 NEA LRF: 06080224-08
MATRIX: SOLID DATE SAMPLED: 08/23/2006 TIME: N/A
DATE RECEIVED: 08/23/2006 TIME: 18:55 PROJECT: 53567 NBHS
SAMPLED BY: N/A LOCATION: NEW BEDFORD, MA
CUSTOMER PO: N/A LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	0.0500	ug/g	08/26/2006	U
Aroclor 1221	ND	0.0500	ug/g	08/26/2006	U
Aroclor 1232	ND	0.0500	ug/g	08/26/2006	U
Aroclor 1242	0.210	0.0500	ug/g	08/26/2006	AD
Aroclor 1248	ND	0.0500	ug/g	08/26/2006	U
Aroclor 1254	0.314	0.0500	ug/g	08/26/2006	AF
Aroclor 1260	0.519	0.0500	ug/g	08/26/2006	AG
Total PCB Amount > Reporting Limit	1.043				

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.
AD-Aroclor 1242 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
AF-Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
AG-Aroclor 1260 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

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CUSTOMER ID: TRC-BULK-29 MATRIX: SOLID DATE RECEIVED: 08/23/2006 TIME: 18:55 SAMPLED BY: N/A CUSTOMER PO: N/A	NEA ID: AJ10888 NEA LRF: 06080224-09 DATE SAMPLED: 08/23/2006 TIME: N/A PROJECT: 53567 NBHS LOCATION: NEW BEDFORD, MA LAB ELAP#: 11078
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PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	0.125	ug/g	08/27/2006	U
Aroclor 1221	ND	0.125	ug/g	08/27/2006	U
Aroclor 1232	ND	0.125	ug/g	08/27/2006	U
Aroclor 1242	1.26	0.125	ug/g	08/27/2006	AD
Aroclor 1248	ND	0.125	ug/g	08/27/2006	U
Aroclor 1254	2.15	0.125	ug/g	08/27/2006	AF
Aroclor 1260	1.08	0.125	ug/g	08/27/2006	AG
Total PCB Amount > Reporting Limit	4.49				

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
 PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.
 AD-Aroclor 1242 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
 AF-Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
 AG-Aroclor 1260 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

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CONTACT: ELIZABETH DENLY

CUSTOMER ID: TRC-BULK-30	NEA ID: AJ10889	NEA LRF: 06080224-10
MATRIX: SOLID	DATE SAMPLED: 08/23/2006	TIME: N/A
DATE RECEIVED: 08/23/2006	TIME: 18:55	PROJECT: 53567 NBHS
SAMPLED BY: N/A	LOCATION: NEW BEDFORD, MA	
CUSTOMER PO: N/A	LAB ELAP#: 11078	

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	0.0500	ug/g	08/27/2006	U
Aroclor 1221	ND	0.0500	ug/g	08/27/2006	U
Aroclor 1232	ND	0.0500	ug/g	08/27/2006	U
Aroclor 1242	0.168	0.0500	ug/g	08/27/2006	AD
Aroclor 1248	ND	0.0500	ug/g	08/27/2006	U
Aroclor 1254	0.594 J J	0.0500	ug/g	08/27/2006	AF
Aroclor 1260	1.48	0.0500	ug/g	08/27/2006	AG
Total PCB Amount > Reporting Limit	2.242 J J				

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
 PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.
 AD-Aroclor 1242 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
 AF-Aroclor 1254 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.
 AG-Aroclor 1260 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

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CUSTOMER ID: TRC-BULK-31 NEA ID: AJ10890 NEA LRF: 06080224-11
MATRIX: SOLID DATE SAMPLED: 08/23/2006 TIME: N/A
DATE RECEIVED: 08/23/2006 TIME: 18:55 PROJECT: 53567 NBHS
SAMPLED BY: N/A LOCATION: NEW BEDFORD, MA
CUSTOMER PO: N/A LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	0.0873	ug/g	08/27/2006	U
Aroclor 1221	ND	0.0873	ug/g	08/27/2006	U
Aroclor 1232	ND	0.0873	ug/g	08/27/2006	U
Aroclor 1242	ND	0.0873	ug/g	08/27/2006	U
Aroclor 1248	ND	0.0873	ug/g	08/27/2006	U
Aroclor 1254	ND	0.0873	ug/g	08/27/2006	U
Aroclor 1260	ND	0.0873	ug/g	08/27/2006	U
Total PCB Amount > Reporting Limit	ND				U

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

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CUSTOMER ID: TRC-BULK-32
MATRIX: SOLID
DATE RECEIVED: 08/23/2006 TIME: 18:55
SAMPLED BY: N/A
CUSTOMER PO: N/A

NEA ID: AJ10891 NEA LRF: 06080224-12
DATE SAMPLED: 08/23/2006 TIME: N/A
PROJECT: 53567 NBHS
LOCATION: NEW BEDFORD, MA
LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	6.58	ug/g	08/27/2006	U
Aroclor 1221	ND	6.58	ug/g	08/27/2006	U
Aroclor 1232	ND	6.58	ug/g	08/27/2006	U
Aroclor 1242	ND	6.58	ug/g	08/27/2006	U
Aroclor 1248	ND	6.58	ug/g	08/27/2006	U
Aroclor 1254	ND	6.58	ug/g	08/27/2006	U
Aroclor 1260	ND	6.58	ug/g	08/27/2006	U
Total PCB Amount > Reporting Limit	ND				U

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

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CUSTOMER ID: TRC-BULK-33
MATRIX: SOLID
DATE RECEIVED: 08/23/2006 **TIME:** 18:55
SAMPLED BY: N/A
CUSTOMER PO: N/A

NEA ID: AJ10892 **NEA LRF:** 06080224-13
DATE SAMPLED: 08/23/2006 **TIME:** N/A
PROJECT: 53567 NBHS
LOCATION: NEW BEDFORD, MA
LAB ELAP#: 11078

PARAMETER PERFORMED	RESULTS	PQL	UNITS	DATE ANALYZED	FLAGS
SW-846 8082 (PCB)					
Aroclor 1016	ND	0.106	ug/g	08/27/2006	U
Aroclor 1221	ND	0.106	ug/g	08/27/2006	U
Aroclor 1232	ND	0.106	ug/g	08/27/2006	U
Aroclor 1242	ND	0.106	ug/g	08/27/2006	U
Aroclor 1248	ND	0.106	ug/g	08/27/2006	U
Aroclor 1254	ND	0.106	ug/g	08/27/2006	U
Aroclor 1260	ND	0.106	ug/g	08/27/2006	U
Total PCB Amount > Reporting Limit	ND				U

Notes: ND (Not Detected). Denotes analyte not detected at a concentration greater than the PQL.
PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

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