Polychlorinated Biphenyls Long-Term Monitoring and Maintenance Plan

Kent Memorial Library
50 North Main Street
Suffield, Connecticut

Town of Suffield

Suffield, Connecticut

April 26, 2019

Fuss & O'Neill, Inc.
146 Hartford Road
Manchester, CT 06040

Project No. 20151259.A60

FUSS & O'NEILL

April 26, 2019

Mr. Chris Matejek
Facilities Manager
Town of Suffield
230C Mountain Road
Suffield, CT 06078

Re: Polychlorinated Biphenyls Long-Term Monitoring and Maintenance Plan
Kent Memorial Library, 50 North Main Street, Suffield, CT
Fuss & O'Neill EnviroScience Project No. 20151259.A60

Dear Mr. Matejek:

Enclosed please find the Long-Term Monitoring and Maintenance Plan (LMMP) for the encapsulated polychlorinated biphenyl (PCB) containing materials at Kent Memorial Library located at 50 North Main Street in Suffield, Connecticut (the "Site").

The LMMP should be maintained at a central location available for staff and for vendors who may come in contact with the targeted building materials during maintenance and repair activities. The general intent and purpose of the LMMP is to ensure continued health and safety of the building occupants as well as maintenance staff and outside contractors.

Should you have any questions regarding this LMMP, please do not hesitate to call me at (860) 646-2469, ext. 5574. Thank you for this opportunity to have served your needs.

Sincerely,

Eduardo Miguel Marques
Senior Environmental Analyst

EMM/kr

Enclosure

cc: Kimberly Tisa, United States Environmental Protection Agency
Gary Trombly, Connecticut Department of Energy and Environmental Protection

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Kent Memorial Library, Suffield, Connecticut

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FUSS & O'NEILL

1 Purpose and Overview

1.1 Introduction

This Long-Term Monitoring and Maintenance Plan (LMMP) for polychlorinated biphenyls (PCBs) has been prepared by Fuss & O'Neill, Inc. (Fuss & O'Neill) for the Town of Suffield (the "Owner") to address comments by the United States Environmental Protection Agency (EPA) related to the PCBs Cleanup and Disposal Plan for Kent Memorial Library located at 50 North Main Street in Suffield, Connecticut (the "Site").

The LMMP describes communication, monitoring, and maintenance that will be employed after completion of PCB remediation activities and encapsulation of PCB containing joint caulking compounds, concrete waffle ceilings and beams, brick, concrete block and concrete walls and columns, exterior window sills, window and door headers, and columns as detailed in the Risk-Based Disposal Approval Plan, Modification No. 2 dated March 16, 2018, revised June 29, 2018.

The LMMP will remain in effect and monitoring will continue until such time that EPA approves, in writing, that LMMP activities are no longer necessary.

This LMMP has been developed to ensure that:

- Encapsulant products used to seal PCB Remedial Wastes are maintained consistent with manufacturer of such products and to document the continued effectiveness of the sealant utilized.
- A schedule and methods for continued monitoring and maintenance associated with remaining PCB Remedial Wastes at the site are implemented.
- Potential exposure to PCBs within indoor air shall be evaluated periodically and to comply with the indoor air concentration of 200 nanograms per cubic meter (ng/m^3) as a guideline established specific for the Site by the EPA, in accordance with the Risk-Based PCB Cleanup and Disposal Approval Plan, and Condition of Approval. This value shall be evaluated periodically to comply with the current EPA value at the time of each round of testing.
- Potential exposure to PCBs on encapsulated surfaces shall be controlled to comply with the criteria set forth in the approved Risk Based Disposal Approval Plan, of less than or equal to 1 microgram per 100 cubic centimeters (≤ 1 µg/100 cm^2) as a more stringent value than the current EPA value for high occupancy use of ≤ 10 µg/100 cm^2.
- Town of Suffield shall ensure that the program elements required herein are appropriately observed and ensure communications as required herein with affected outside vendors, staff, and any communications required of the EPA are maintained.
- Town of Suffield through the Central Administration Offices shall designate a PCB Coordinator to ensure compliance with the LMMP.
- PCB awareness training to assist in the proper implementation of this plan shall be provided to maintenance/custodial staff, and Town of Suffield Department of Public Works (DPW) staff.
- Precautionary measures to prevent contact with or disturbance of PCB Remedial Wastes shall be implemented which will include procedures for informing all staff, contractors, and outside vendors of the locations of PCBs remaining at the facility.

- An evaluation shall be made by the designated Environmental Consultant and the Town of Suffield PCB Coordinator to review proposed work or activity which could result in the disturbance of PCBs.
- Any observed condition or activity which has the potential to disturb PCBs shall be prevented and communicated to the Town of Suffield.
- If there is an accidental disturbance or release of PCBs it shall be reported immediately to the Town of Suffield PCB Coordinator by the entity or staff person observing such incident so that proper evaluation of the condition can be conducted.

1.2 Site Background Information

The Site consists of the Kent Memorial Library located at 50 North Main Street in Suffield, Connecticut. The Kent Memorial Library was constructed in 1972. The building is a two-story structure with approximately 15,000 SF. The building has a basement level and first floor level which is split into three distinct tiered levels including a lower level, intermediate and upper level. The building has a centralized courtyard. Please refer to *Appendix A* for Site Floor Plan.

Polychlorinated biphenyls (PCBs) were identified in several building materials. These materials included joint caulking compounds, concrete waffle ceilings and beams, brick, concrete block and concrete walls and columns, exterior window sills, window and door headers, and columns. PCB remediation was performed as detailed in the Risk-Based Disposal Approval Plan prepared to comply with the U.S. Environmental Protection Agency (EPA) requirements for notification in accordance with 40 CFR Part § 761.61(c)(1).

1.3 Remedial Activities

PCB remediation work was performed to ensure compliance with EPA Toxic Substance Control Act (TSCA) requirements and to protect both public health and the environment. Materials classified as PCB Bulk Product Waste and Bulk PCB Remediation Waste were properly remediated in accordance with 40 CFR Part § 761.61(c)(1) as indicated below:

PCB Bulk Product Waste (>50 PPM) and Remediation Waste

1. Existing exterior/interior window caulking (and associated non-porous metal window assemblies including glass, window panels, etc. and associated brick to a minimum of 9 inches from the caulk joint) was disposed of as PCB Bulk Product waste.
2. Existing caulking between roof panel joints and columns/beam associated with roof monitors was disposed of as presumed PCB Bulk Product Waste ≥ 50 ppm. Adjacent surfaces were encapsulated (see line item #9) and re-caulked.
3. PCB containing paint/sealants on concrete waffle slab ceilings and beams was removed from the substrates and disposed as PCB Bulk Product Waste ≥ 50 ppm. Porous surfaces were encapsulated (see line item #9).
4. PCB containing paint on painted brick, concrete block and concrete wall and columns was removed from the substrates and disposed as presumed PCB Bulk Product Waste ≥ 50 ppm. Porous surfaces were encapsulated (see line item #9).
5. Materials near floor or grade surface around doors and windows that were in contact with caulk were encapsulated (see line item #9).
6. PCB remediation waste with ≥1 ppm PCBs (i.e., soil, and brick surfaces within five feet of foundation to a depth of one foot below soil surface) was removed and disposal in accordance with 40 CFR § 761.61(a)(5)(i)(B) (2)(iii) as PCB Remediation Waste.
7. Remaining soil was tested and determined not to contain elevated concentrations of PCBs above 1 ppm, in accordance with 40 CFR § 761.61 Subpart O.
8. Non-porous surfaces (exterior steel beams/lintels) where in contact with caulking were cleaned to standard of ≤ 1 µg/100 cm^2 or in completely removed for disposal and replaced.
9. Porous PCB-contaminated surfaces (i.e. structural concrete, granite) were encapsulated with Sikagard 670W Clear water-based 100% acrylic coating. Post verification sampling to confirm the success of the encapsulation was performed using Sub-part P and compared to a standard of ≤ 1 µg/100 cm^2.

Upon completion of the remedial actions, the impacted brick, concrete block, concrete walls, ceilings and columns associated with windows and doors caulk, painted surfaces are not accessible to direct exposure having been encapsulated and will not pose a risk to building occupants unless the encapsulating coatings applied as part of the remediation is damaged or removed. This LMMP details procedures to assess and ensure the effectiveness of the encapsulant coatings to prevent this exposure pathway to PCBs which remain in porous concrete for the life of the building.

2 Elements of the LMMP

2.1 LMMP Management

Clearly defining the various program elements is critical to the success of the LMMP.

The main components of the LMMP are as follows:

- Roles and Responsibilities, Communication, and Training - Roles and responsibilities communication, and training protocols will be established to ensure occupants and contractors are familiar with the remedial measures and precautions required to avoid exposure to PCBs present in the building but covered with encapsulating coatings. To prevent potential exposure to maintenance and facility personnel, guidelines and procedures will be developed and implemented for any work being conducted in the library.

- Visual inspections - At the frequency described in the plan, visual inspections of exterior and interior encapsulated surfaces will be conducted on a regular basis for the remaining life of the building. The inspections will focus on the encapsulated building components that occupants might contact on a daily basis. Observations will be made to identify cracks and wear points in the encapsulant coatings.

- Surface Wipe Sampling - At the frequency described in the plan, surface wipe samples will be collected from the encapsulated surfaces. Wipe samples will be collected following the standard wipe test procedures described in 40 CFR 761.123.

- Indoor Air Sampling - At the frequency described in the plan, indoor air samples will be collected within the building. Air samples will be collected in accordance with EPA Compendium 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 (GCIMD)" and submitted for laboratory analysis of PCBs using homolog analysis and reporting.

- Quarterly/Seasonal Reporting - A report documenting the findings of the visual inspections, surface wipe sampling, and indoor air sampling will be prepared and submitted to EPA on a quarterly basis to capture each seasonal period. The monitoring results from sampling event will be evaluated as they become available and any exceedances of the compliance criteria established in the LMMP will be reported to the library, Town of Suffield, EPA, and CTDEEP within 48 hours of receiving the laboratory analytical results.

- Corrective Actions - If results of the quarterly sampling indicate PCB concentrations in excess of the project-specific action levels, corrective measures shall be taken. These measures may include the additional application of the protective coatings/barriers, increasing air flow through the buildings or other measures that would reduce the risk of exposure for building occupants and the surrounding community.

3 Roles and Responsibilities

3.1 LMMP Management

The Town of Suffield through the Department of Public Works office and Facility Manager shall define the departmental roles and responsibilities for implementation of the LMMP. Town of Suffield has the responsibility of notifying employees, contractors, and vendors who may work in areas with PCBs that these materials are present and managed as part of this LMMP.

3.1.1 PCB Program Coordinator

The Town of Suffield shall designate a PCB Program Coordinator as a responsible party for the following:

- Review on a quarterly basis the requirements of the program and document adherence to elements of the program and schedules.
- Maintain and update as required all documentation identifying locations of known PCBs remaining in the building.
- Participate and review, all potential work tasks which could impact encapsulated PCBs and PCB-related tasks being performed at the Kent Memorial Library. This will include events involving potential disturbance or release of PCBs.
- Arrange and document PCB awareness training for existing staff upon implementation of the LMMP and upon hire for any new staff that will work in the building. This will include maintenance/custodial staff and DPW staff.
- On an on-going basis review for compliance purposes policies and regulations of state and federal agencies as they pertain to PCBs and the management of PCBs at Kent Memorial Library.
- Schedule periodic surveillance for encapsulated PCB surfaces remaining in accordance with frequency detailed in this LMMP.
- Schedule indoor air and wipe sampling in order to document continued effectiveness of the encapsulation as required per this LMMP.

Review and maintain PCB-related documentation from the inspection and sampling activities and communicate the findings.

Facilities Maintenance & Department of Public Works Managers have the following responsibilities:

- Confirm that all tasks that may impact PCBs are conducted by maintenance and housekeeping is in compliance with this LMMP.
- Ensure maintenance and housekeeping employees receive proper training in PCB hazards and all activities are conducted consistent with this LMMP.
- Report any PCB materials that may be damaged or have the potential to be damaged to the PCB Program Coordinator.
- Manage all PCB-related tasks/responsibilities during routine and emergency operations and maintenance (O&M) activities.

- Ensure that outside contractors or vendors are aware of PCB policies and locations of PCBs prior to initiation of work. If workers have the potential to come in contact with or disturb PCBs, coordinate a review of such with the PCB Program Coordinator.
- Notify the PCB Program Coordinator prior to the initiation of all PCB-related work activities at Kent Memorial Library.
- Ensure all construction, renovation or repair projects potentially involving PCBs are coordinated with the PCB Program Coordinator.

Please refer to *Appendix B* for key contact information.

3.2 Operations and Maintenance Employees

The intent is that PCB related work shall be conducted only by a contractor with demonstrated prior experience in the field. Remedial work will be accomplished according to and will meet the requirements set forth by state and federal regulations. Operations and Maintenance employees of Town of Suffield are not expected to conduct work which would impact PCBs.

Any work related questions, requests, hazard recognition or other correspondence related to PCBs expressed by Operations and Maintenance employees will be directed to the PCB Program Coordinator.

Maintenance and custodial staff have the following responsibilities:

- Understanding the locations of PCB materials to prevent the disturbance or removal of PCB-containing materials.
- Informing the PCB Program Coordinator of any potentially damaged PCB materials.

3.3 Environmental Consultants

The Town of Suffield shall continuously engage an Environmental Consultant for purposes of the sampling and analytical reporting as required by this LMMP. The Environmental Consultant's responsibilities shall include the following:

- Conduct periodic visual inspections and perform indoor air and wipe sampling as required and as detailed in this LMMP. Air and wipe samples shall be analyzed at accredited laboratories to comply with industry guidelines, regulatory standards, and this LMMP.
- Conduct PCB inspections prior to construction, renovation or repair work that could potentially disturb PCBs within proposed project area based upon industry guidelines, regulatory standards, and this LMMP.
- Prepare written reports of all PCB inspection or sampling activities for submission to the PCB Program Coordinator for the Town of Suffield and EPA.

3.4 Contractors

The Town of Suffield is responsible for informing outside contractors about the locations of PCB-containing materials. The PCB Program Coordinator shall be responsible for having the LMMP available for review at a centralized location at the Town of Suffield Department of Public Works office and the Kent Memorial Library prior to any proposed renovation activity.

It is the contractor's responsibility to maintain a safe work environment during scheduled renovation projects. Contractors shall be aware of PCB-containing materials in the building and address proposed remediation work by using personnel demonstrated to have experience with PCB remediation.

The Contractor's responsibilities related to PCBs include:

- Notifying the PCB Program Coordinator for the Town of Suffield of any proposed work activities that may potentially disturb PCBs (e.g., renovation/demolition);
- Review proposed remedial actions with designated Environmental Consultant.

4 Communication

Remediation activities completed at the site included encapsulation of PCB contaminated interior brick, concrete block, concrete walls and columns, concrete waffle slab ceilings and beams, interior/exterior surfaces near floor/grade surface around doors and windows which were in contact with caulk, and exterior roof panel joints and columns/beams. Building occupants are not anticipated to be exposed to PCBs during routine building use, as long as the encapsulated surfaces are intact, undamaged, and effectively acting as a barrier to PCB migration. However, if renovations or repairs to the building are planned, such activities must take into account the underlying building materials that may contain residual concentrations of PCBs. Annual training will be provided for maintenance/custodial staff and Department of Public Works staff so they can identify renovation and maintenance activities that might result in disturbing underlying building materials that contain PCBs. In order to minimize the risk of exposure to PCBs that are present below encapsulated surfaces, site environmental conditions will be communicated to building occupants (library staff, patrons) maintenance/custodial staff, and outside contractors that may contact encapsulated surfaces. A copy of the LMMP shall be available for review in a central office of the building.

4.1 Communication with Library Patrons, Staff & Maintenance/Custodial Staff

As part of the communication plan with the library patrons, library staff, Town of Suffield shall make the LMMP available for review in the centralized office of the building. The PCB Program Coordinator shall distribute a letter notifying staff of the availability of the LMMP as noted.
Reporting of monitoring results for the building is addressed in *Section 8.0*.

4.2 Communication with Contractors

A copy of the LMMP shall be made available to outside contractors for review in the centralized office of the building prior to maintenance or repair work.

5 Training

Maintenance/custodial staff, Department of Public Works staff, and contractors who perform O&M activities in areas where PCBs are present shall receive general PCB awareness training. All outside contractors involved in work that may contact PCB encapsulated surfaces must have awareness training.

5.1 Training of Maintenance/Custodial Staff Department of Public Works staff, and Contractors

Maintenance/custodial staff, Department of Public Works staff, and contractors will undergo a PCB Awareness Training. This training will identify locations where encapsulated surfaces containing PCBs are known. The designated Environmental Consultant and PCB Program Coordinator for the Town of Suffield shall provide PCB awareness training annually (2 hours) to maintenance/ custodial staff and Department of Public Works staff who may perform housekeeping or maintenance activities in areas where encapsulated surfaces containing PCBs are present. The PCB awareness training shall cover the following topics:

- Health and safety hazards of PCBs;
- Location of PCBs at Kent Memorial Library;
- Recognition of damaged or deteriorated PCB-containing materials;
- Notification and response procedures;
- Review of the LMMP.

5.2 PCB Remediation Training Requirements

All project personnel engaged in PCB remediation work shall be trained in accordance with the Occupational Safety and Health Administration (OSHA) Regulations 29 CFR 1910.1000 and 29 CFR 1910.1200. The Remediation Contractor shall provide an On-site Project Supervisor having a minimum of eight (8) hours of supervisor training in hazardous waste site operations in accordance with the requirements of 29 CFR 1910. The supervisor must be on site at all times during remediation work. Documentation of OSHA 40-Hour HAZWOPER training for all employees and subcontractors and 8-Hour HAZWOPER Supervisor Training for the designated on-site Health and Safety Officer for the remediation work shall be provided to the Environmental Consultant and Town of Suffield PCB Program Coordinator prior to the commencement of related remediation work activities.

Information in regards to proposed remediation activities impacting PCB-containing materials at Kent Memorial Library shall be transmitted to the EPA.

6 Inspection Protocol

Visual inspections and air/wipe sampling will be conducted on a quarterly basis, during each seasonal period.

Inspections will be completed by the Environmental Consultant to observe areas of exterior/interior encapsulation. An inspection checklist will be used for routine monitoring. Refer to *Appendix B* for a copy of the periodic visual inspection form. The checklist will document the following:

- The name of the inspector;
- The date of the inspection;
- The areas inspected;
- Areas where encapsulation appears worn (exposing underlying encapsulating coatings of contrasting color);
- Areas where encapsulating coatings have been damaged; and
- Other observations that might indicate a potential for exposure of underlying building materials containing PCBs.

Representative indoor air sampling will be conducted on a quarterly basis. A total of 16 air samples (includes 1 duplicate and 1 blank) will be collected during the year (4 air samples per sampling event each quarter).

Representative wipe sampling will be conducted on a quarterly basis. A total of 20 wipe samples (includes 1 duplicate and 1 blank) will be collected during the year (5 wipe samples per sampling event each quarter).

Sampling times will be scheduled during periods of occupancy and will be coordinated with Kent Library staff in effort to minimize disruption to building occupants and library programs. Mechanical systems in the building will be operational to simulate occupied conditions and not be in a mode of setback. Ambient temperature and interior temperature will be measured during sampling.

6.1 Periodic Visual Inspections by Environmental Consultant

Periodic visual inspections will be performed on a quarterly basis by the environmental consultant using the designated checklist. These inspections will be conducted by a field scientist familiar with PCB remediation and trained in PCB sampling protocols. Please refer to *Appendix C* for copy of the Periodic Visual Inspection Checklist.

Each inspection will include all areas where encapsulation was applied. The inspection will focus on the exposed surfaces (encapsulated coating, paint, etc.) and the inspector will look for cracks, wear points, and other evidence of exposure of the underlying coating or paint. If previous inspections noted

concern for a specific area, those areas will be closely observed for evidence that might indicate a potential for exposure of the residual PCBs.

Reporting of inspections by the environmental consultant is outlined in *Section 9.0* Record Keeping.

7 Sampling Personnel, Methods, and Action Levels

The remedial alternative selected for the library included encapsulation of low level PCBs beneath two coats of chemically resistant two-part epoxy product (PPG Paints Amerlock Epoxy) that prevents human exposure to residual PCBs in building materials.

The encapsulated surfaces will be periodically inspected for damage and building indoor air will be monitored (see *Section 8.0* for sampling schedule) to confirm that the remedial actions remain protective of human health. Visual inspections will be conducted to identify wear and damage to encapsulated surfaces and surface wipe sampling will be performed to identify whether PCBs are penetrating the encapsulating coatings.

Air monitoring in the building will be performed to identify whether encapsulated PCBs are volatizing into the building interior. The sampling requirements and methods below will be followed to ensure the quality of the monitoring data.

7.1 Qualified Sampling Personnel

Only qualified personnel (designated Environmental Consultant) will conduct indoor air and wipe sampling identified in this LMMP. The environmental consultant will ensure each field scientist conducting the sampling is familiar with the sampling methods and techniques.

7.2 Wipe Sampling Methods

Wipe samples of the exterior/interior encapsulated surfaces will be collected in accordance with requirements at 40 CFR 761.123, as outlined below:

- Prior to sampling, wipes consisting of clean cotton gauze will be soaked with hexane and placed in clean wide mouthed sample jar.
- A 10 centimeter (cm) by 10 cm template will be used to define the sampling area on the selected surfaces. A flat surface will be selected for sampling.
- Samples will be collected on the exterior encapsulated surfaces where PCB-containing concrete and granite sills, heads, and columns associated with windows and doors at exterior base of windows and interior concrete block walls at two vertical walls in stairwells were encapsulated. The wipe will be dragged across the template area horizontally, then vertically and then diagonally;
- Samples will be collected on the interior encapsulated surfaces where PCB-containing concrete, concrete block, as well as brick of walls, ceilings and columns, also concrete ceilings and beams associated with roof monitors

- The wipe sample will then be placed in a separate glass sample jar labeled with the sample time, date, location and surface description;
- Samples will be transported to a laboratory in a cooler with ice. The chain of custody will indicate the surface area for each sample, along with the date, time and analysis requested;
- Samples will be delivered to an environmental testing laboratory that is certified to perform PCB analyses;
- Samples will be extracted from the wipe using EPA Method 3500B/3540C as outlined in SW-846 guidance for laboratory analyses;
- Sample extracts will be analyzed by EPA Method 8082 for PCBs.

Results will be reported in micrograms (µg) per 100 cm^2 by dividing the result in µg/wipe by the surface area of 100 square centimeters.

Representative wipe sampling will be conducted on a quarterly basis. A total of 20 wipe samples (includes 1 duplicate and 1 blank) will be collected during the year (5 wipe samples per sampling event each quarter).

7.3 Indoor Air Sampling Methods

As required by the EPA indoor air samples will be collected in accordance with EPA Compendium 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 (GCIMD)" and submitted for laboratory analysis of PCBs, as outlined below:

- Appropriate sampling media will be prepared prior to the sampling event. Sampling media will consist of glass tubes (30-mm x 70- mm tubes) filled with pre-cleaned open-cell polyurethane foam (PUF);
- Sample collection tubes will be situated with the inlet in a downward facing position at a height of one meter from ground on a sampling stand or similar apparatus that will be used to secure the sampler;
- An active low volume air-flow pump, capable of unattended 4-24-hours of operation (battery or direct power) will be used to provide a flow of 1.0 to 5.0 liters per minute (LPM) through the PUF sample media;
- Pump flow rates at the beginning of sampling and again at the completion of the sampling period will be recorded along with pump start and stop times;
- For each sample, the cumulative sample duration time and average flow rate will be used to calculate the air volume sampled; a minimum sample volume of 1,000 to 1,200 L of air will be sampled over the monitoring period to achieve the EPA's approval laboratory reporting limit of $\leq$ 0.050 µg/m^3 for total PCBs for indoor air samples;
- Devices to record the interior and exterior building temperature during sample collection will be deployed along with the air monitors;
- Ambient atmospheric pressure readings will be collected from the nearest official recording station for the area.

Representative indoor air sampling will be conducted on a quarterly basis. A total of 16 air samples (includes 1 duplicate and 1 blank)will be collected during the year (4 air samples per sampling event each quarter).

Indoor air samples will be collected at representative locations to characterize potential exposure risks to occupants and focus on locations where encapsulated PCBs are present. Air samples will be analyzed using EPA Method T0-10A for PCB Homolog analysis. Quality assurance and quality control sampling will include blanks, and duplicate samples.

7.4 Quality Assurance/Quality Control (QA/QC)

QA/QC samples will be collected during the monitoring. QA/QC samples for both wipe samples and indoor air samples will be collected.

Wipe QA/QC samples will include field duplicate and field blank samples. A field duplicate sample is used to evaluate both the field sampling procedure and laboratory analytical precision. The duplicate sample will be collected using the same sampling techniques noted above and will be collected immediately adjacent to the original sample. Field duplicate samples will be collected and analyzed for 10% of the samples. The field blank will be an analysis of the sample media. The sample media (hexane soaked gauze pad) will be analyzed to verify that the media is free of PCBs prior to sample collection. Field blank samples will collected and analyzed for 5% of the samples.

Indoor air QA/QC samples will include field duplicate, and field blank. A field duplicate will be collected using the same sampling techniques. Field duplicate samples will be collected and analyzed for 10% of the samples. The field blank will be an analysis of the sample media without drawing air through the sampling tube. Field blank samples will be collected and analyzed for 5% of the samples.

7.5 Site Specific Action Levels

Per the EPA site specific approval PCB wipe sample analytical results for encapsulated surfaces must contain PCBs at less than 1 µg/100 cm^2 to be in compliance. If concentrations are found at levels above 1 µg/100 cm^2; then the EPA will be contacted within 48 hours to discuss an appropriate response which could include site specific risk assessment, cleaning or repair.

Per the EPA site specific approval PCB indoor air sample analytical results must contain PCBs at less than 200 ng/m^3 to be in compliance. If concentrations are found at levels above 200 ng/m^3; then the EPA will be contacted within 48 hours to discuss an appropriate response which could include site specific risk assessment, increased building ventilation, or other mitigation measures.

7.6 Data Review

As data is received, they will be reviewed by the environmental consultant and compared to project specific compliance criteria and the LMMP. Results that exceed the compliance criteria will be

transmitted to the library, Town of Suffield Department of Public Works, EPA, and Connecticut Department of Energy and Environmental Protection (CTDEEP) within 48 hours of data receipt from the laboratory. Annual reports for the monitoring will also be submitted to EPA and CTDEEP (*see Section 8.0*).

8 Schedule

8.1 Periodic Visual Inspections by Environmental Consultant

Periodic visual inspection will be performed on a quarterly basis by the environmental consultant using the designated checklist. These inspections will be conducted by a field scientist familiar with PCB remediation and trained in PCB sampling protocols.

8.2 Indoor Air and Wipe Sampling by Environmental Consultant

Indoor air and wipe sampling monitoring will continue quarterly per the LMMP methods and protocol.

8.2.1 Indoor Air Sampling

Sampling will be conducted on a quarterly basis. Samples will be collected in representative locations throughout the library to evaluate potential exposure risks to occupants.

Indoor air samples will be analyzed using EPA Method T0-10A for PCB Homolog analysis. Quality assurance and quality control sampling will include 5% blank samples, and 10% duplicate samples. Prior to collecting samples, visual inspections of representative areas will be completed to ensure that the mechanical system is operational and representative of occupied conditions. Surface Wipe Sampling of Encapsulated Materials

For encapsulated surfaces a visual inspection will include looking for signs of wear, delamination or other indicators of product coating failure. Sampling will be conducted on a quarterly basis to verify effectiveness of the coatings to prevent migration of PCBs form coated porous surfaces.

Samples will be collected at representative locations quarterly/seasonally to evaluate if the encapsulation is functioning appropriately. Wipe samples will be analyzed using EPA Method 8082 with extraction performed by EPA Method 3540C. Quality assurance and quality control sampling will include 5% blank and 10% duplicate samples. Prior to collecting samples, visual inspections of representative areas will be completed to note any damage to the surfaces.

9 Reporting and Record Keeping

9.1 Reporting of Analytical Results

The environmental consultant will review monitoring data and prepare a sampling event spreadsheet report documenting sample locations, analytical results, and compliance with the LMMP. If data indicates results that exceed the LMMP criteria, then results will be forwarded to the library, Town of Suffield Department of Public Works, EPA and CTDEEP within 48 hours. If results do not exceed the LMMP criteria then the sampling event report will be submitted to the library, Town of Suffield, EPA, and CTDEEP within 45 days of the receipt of final laboratory data by the environmental consultant.

Quarterly periodic visual inspection forms and analytical results will be added to the LMMP and will be available in an office of the library and Town of Suffield Department of Public Works for review by the local public community.

9.2 Record Keeping

Documentation of sampling and analytical results for activities outlined in the LMMP shall be maintained by the Town of Suffield Department of Public Works. These records will be available for inspection by EPA, CTDEEP, CTDPH and local health departments as well as the public. Results of the monitoring outlined in the LMMP will be available for review by employees, and the public. PCB testing records will be available during normal business hours at the library and Town of Suffield Department of Public Works. On-going PCB testing records and periodic visual inspection forms shall be added to the LMMP file located in the Town of Suffield Department of Public Works office to update records.

9.3 Review of Applicability of LMMP

The LMMP will remain in effect, and monitoring will continue, until such time that EPA approves, in writing, that LMMP activities are no longer necessary. On a quarterly basis, the environmental consultant will review the applicability of the LMMP and if warranted, the environmental consultant will provide in writing to the EPA on behalf of Town of Suffield a request to reduce the scope of the LMMP.

10 Corrective Measures

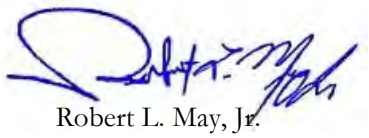
If results of the inspections or sampling indicate PCB concentrations in excess of the project-specific action levels as described in *Section 7.0* corrective measures shall be discussed with EPA, CTDEEP, the library, the Town of Suffield Department of Public Works, and the environmental consultant.

If maintenance of the encapsulating coatings or other remedial measures is warranted, a plan for supplemental remedial actions will be developed and submitted to EPA for approval and the supplemental remedial actions will be implemented based on a schedule approved by EPA and CTDEEP.

Plan prepared by Environmental Technician III, James B. Blum, CMC.

Plan reviewed by:

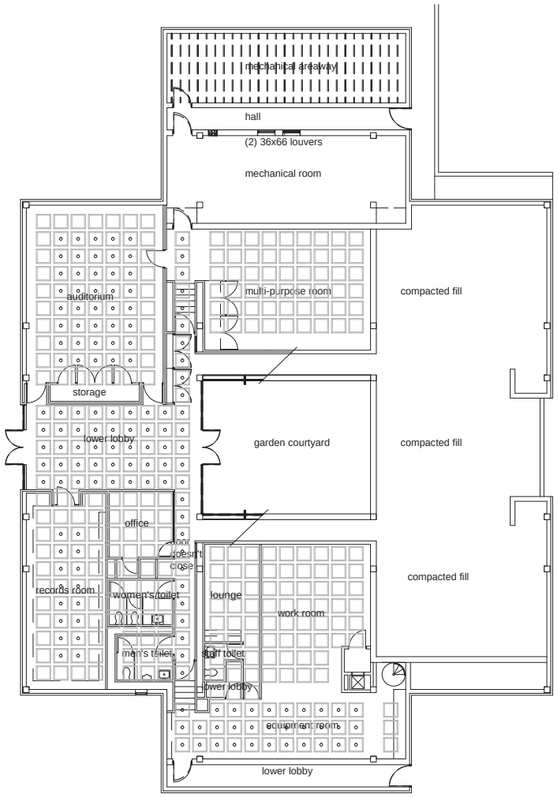
Eduardo Miguel Marques
Senior Environmental Analyst



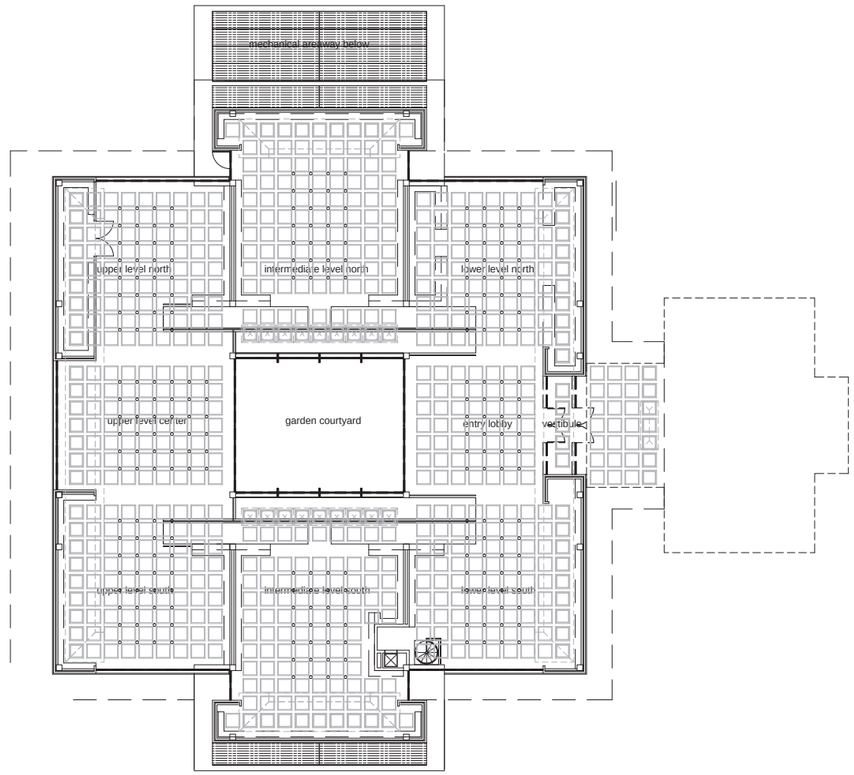
Robert L. May, Jr.
Senior Vice President/Business Line Leader

Appendix A

Site Floor Plan



BASEMENT LEVEL
1/16" = 1'



UPPER, INTERMEDIATE & LOWER FIRST FLOOR LEVELS
1/16" = 1'

No.	DATE	DESCRIPTION	DESIGNER	REVIEWER
1.			XX/XX	XX

SCALE:
HORZ.: 1/16" = 1'
VERT.:
DATUM:
HORZ.:
VERT.:

FUSS&O'NEILL
146 HARTFORD ROAD
MANCHESTER, CONNECTICUT 06040
860.646.2469
www.fando.com

Kent Memorial Library

50 NORTH MAIN STREET SUFFIELD, CONNECTICUT

PROJ. No.:
DATE:

File Path: J:\DWG\P2015\11259\A3E\Environmental\Plan\20151259A3E_STP01_wipe samples cieling plan.dwg Layout: 18X24-L Plotted: Mon, January 29, 2018 - 11:29 AM User: srochelt
Plotter: DWG TO PDF.PC3 CTB File: FO HALF.STB
LAYER STATE:
MS VIEW:

Appendix B

Key Contact Information

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FUSS & O'NEILL
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Appendix C

Periodic Visual Inspection Form

FUSS & O'NEILL

Periodic Visual Inspection Form

Date of Surveillance: _____

PCB Encapsulated Surface	Location	Previous Condition	Present Condition	Encapsulate Worn	Encapsulate Damaged	Comments
Concrete Roof Panel Joints and Columns/Beams	Roof System					
Concrete Coffered Ceiling Systems	Throughout Interior					
Porous Surfaces (i.e., structural concrete, granite) associated with Window Systems	Throughout Interior					
Concrete and Granite Sills, Heads, and Columns associated with Window and Door Systems	Exterior of Building at Windows and Doors					
Caulking at Concrete, Heads, and Columns associated with Window and Door Systems	Interior of Building at Windows and Doors					
Concrete Brick and Concrete Block associated with Interior Wall and Columns	Throughout Interior					

Conditions: G = Good; NA = Not applicable; D = Damaged; IA = Inaccessible; SD = Significant damage; F = Fair

Surveillance conducted by: _____ _____

(print name) (signature)

I, the PCB Program Coordinator, have read and understood the findings noted above: _____ Date: _____