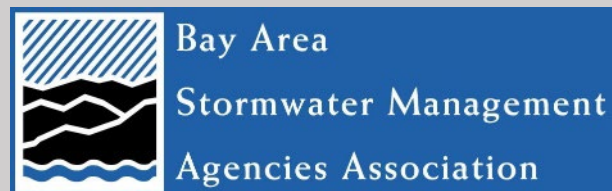


PCBs in Priority Building Materials: Model Screening Assessment Applicant Package



Managing PCBs–Containing Building Materials during Demolition: Guidance, Tools, Outreach and Training



August 2018
(Revised November 2019 and May 2023)

This document is a deliverable of the Bay Area Stormwater Management Agencies Association (BASMAA) project *Managing PCBs–Containing Building Materials during Demolition: Guidance, Tools, Outreach and Training*. BASMAA developed guidance, tools, and outreach and training materials to assist with San Francisco Bay Area municipal agencies’ efforts to address the requirements of Provision C.12.f. of the Bay Area Municipal Regional Stormwater Permit (referred to as the MRP). Provision C.12.f. of the MRP requires Permittees to manage PCBs–containing building materials during demolition. This document was updated to include additional requirements in MRP 3.0 (Order No. R2-2022-0018) Provision C.12.g.

We gratefully acknowledge the BASMAA Steering Committee for this project, which provided overall project oversight (during 2018 and earlier), including during the development of this and other project deliverables:

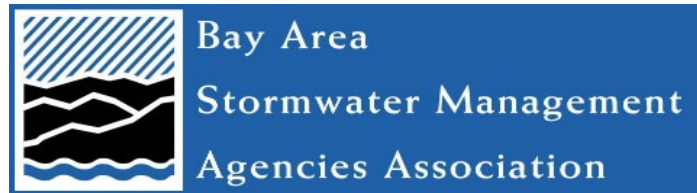
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Stakeholder Group	Representative(s)
Regulatory – stormwater/PCBs	Luisa Valiela and Carmen Santos, U.S. EPA Region 9
Regulatory – stormwater/TMDL	Jan O’Hara, San Francisco Bay Regional Water Quality Control Board
Regulatory – experience with related program (asbestos management)	Ron Carey and Richard Lew, Bay Area Air Quality Management District
Industry – demolition contractors	Avery Brown, Ferma Corporation
Industry – remediation consultants	John Martinelli, Forensic Analytical Consulting John Trenev, Bayview Environmental Services, Inc.
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DISCLAIMER

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The material presented in this document is intended solely for the implementation of a municipal regulatory program required by the San Francisco Bay Area Regional Water Quality Control Board Municipal Regional Stormwater Permit for the protection of water quality under the Clean Water Act.

BASMAA prepared the tools and guidance herein to assist MRP Permittees' efforts to address the requirements of Provision C.12.f. of the MRP. The project team received input from a variety of stakeholders during development of the tools and guidance, including regulators (San Francisco Bay Regional Water Quality Control Board, U.S. EPA, and Bay Area Air Quality Management District staff), Bay Area municipal agency staff, and industry representatives.

This document does not address other environmental programs or regulations (e.g., PCBs regulations under the Toxic Substances Control Act (TSCA); federal, state, or local regulations for hazardous material handling and hazardous waste disposal; health and safety practices to mitigate human exposure to PCBs or other hazardous materials; recycling mandates; and abatement at sites with PCBs (or other contaminants). The Applicant is responsible for knowing and complying with all relevant laws and regulations.

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Process Overview

This document provides a model PCBs in Priority Building Materials Screening Assessment process to be conducted by demolition project proponents (Applicants). A flow chart illustrating the above processes is provided in **Attachment A**.

Applicants proposing to demolish buildings must conduct the PCBs screening assessment. Through the PCBs screening assessment Applicants will:

- 1) Determine whether the building proposed for demolition is likely to have PCBs-containing building materials (see discussion of applicable structure); and
- 2) Determine whether PCBs are present at a concentration equal to or greater than 50 parts per million (ppm) in building materials.

Use the *PCBs Screening Assessment Form (Attachment B)* to summarize and certify the information required by the municipality to issue the demolition permit. The form is divided into four parts:

- **Part 1** provide Applicant information and project location.
- **Part 2** complete the questions to identify whether the project involves an applicable structure. If the demolition does not involve an applicable structure, the form may be certified and submitted without completing Part 3.
- **Part 3** complete the questions to provide the concentrations of PCBs in any priority building materials.
- **Part 4** certify the information being submitted.

Note that fluorescent light ballasts, polyurethane foam furniture, and Askarel fluid used in transformers, all of which may contain PCBs, are typically managed during pre-demolition activities under current regulations and programs that require removal of universal waste and outdated transformers. For this process it is assumed that those materials will be evaluated and managed under those existing programs.

This screening process is part of a program for water quality protection and was designed in accordance with requirements in the MRP.¹ It does not address other environmental programs or regulations (e.g., PCBs regulations under the Toxic Substances Control Act (TSCA); federal, state, or local regulations for hazardous material handling and hazardous waste disposal; health and safety practices to mitigate human exposure to PCBs or other hazardous materials; recycling mandates; or abatement at sites with PCBs (or other contaminants). **The Applicant is responsible for complying with all relevant laws and regulations. See the Federal and State PCBs Regulations section for additional information.**

Water quality within the San Francisco Bay Region is regulated by the San Francisco Bay Area Regional Water Quality Control Board (Regional Water Board).

The Regional Water Board issues the Municipal Regional Permit (MRP)¹ that regulates discharges of stormwater runoff. The MRP includes provisions for reducing discharges of polychlorinated biphenyls (PCBs) in stormwater runoff and requires municipalities to implement a program to manage priority PCBs—containing building materials during demolition.

Existing federal and state regulations create the framework for managing PCBs in building materials once those PCBs are identified through this program and for disposing of wastes containing PCBs.

¹ A National Pollutant Discharge Elimination System (NPDES) permit issued to municipalities in the counties of Alameda, Contra Costa, San Mateo, and Santa Clara, and the Cities of Fairfield, Suisun City, and Vallejo.

Applicant Instructions for Completing the PCBs Screening Assessment Form

Applicants for demolition permits or other permits that involve the complete demolition of a building must conduct an assessment to screen for PCBs in priority building materials. Use the *PCBs Screening Assessment Form*, to summarize and certify the information needed by the municipality to issue a demolition permit. The form is provided in **Attachment B**. If the project includes the demolition of multiple buildings complete one form for each building to be demolished.

Part 1. Owner and project information

Complete the owner and consultant information and the project location information.

For the Type of Construction select one of the following options:

- **Wood Frame** (Buildings constructed with lumber or timbers, which make up the studs, plates, joists, and rafters.)
- **Masonry Construction** (Buildings constructed with concrete blocks or bricks as the load bearing walls typically with the floors and ceilings constructed with wooden joists.)
- **Steel Frame Construction** (Buildings constructed with steel studs or steel columns and steel joists or trusses to support floors and roofs. Includes light gauge steel construction and high-rise steel construction.)
- **Concrete Frame** (Buildings constructed with reinforced concrete columns, concrete beams, and concrete slabs.)
- **Pre-Engineered** (Buildings constructed with pre-engineered parts bolted together.)

Part 2. Is building subject to the screening requirement based on type, use, and age of the building?

Part 2 documents the determination of whether the proposed demolition will affect an applicable structure. If the demolition does not affect an applicable structure, then the assessment is complete, and the form can be certified.

This determination screens out buildings that are a lower priority with regard PCBs-containing materials and provides an off-ramp from the rest of the screening process.

Key Definitions

Demolition means the wrecking, razing, or tearing down of any entire building. The definition is intended to be consistent with the demolition activities undertaken by contractors with a C-21 Building Moving/Demolition Contractor's License.

Priority Building Materials are:

1. Caulk;
2. Thermal insulation;
3. Fiberglass insulation;
4. Adhesive mastics; and
5. Rubber window gaskets.

Buildings are structures with a roof and walls standing more or less permanently in one place. Buildings are intended for human habitation or occupancy.

Applicable Structure is defined as building constructed or remodeled between January 1, 1950 and December 31, 1980. Wood framed buildings and single-family residential buildings are not an Applicable Structure regardless of the age of the building.

Question 2.a: Is the building to be demolished wood framed and/or single family residential?

- If YES the PCBs Screening Assessment is complete, skip to the certification in Part 4.
- If NO, continue to Question 2.b.

Question 2.b: Was the building to be demolished constructed or remodeled between January 1, 1950 and December 31, 1980?

- If YES continue to Question 2.c.
- If NO, the PCBs Screening Assessment is complete, skip to the certification in Part 4.

Question 2.c: Is the proposed demolition a complete demolition of the entire building (as defined in key definitions of this document)?

- If YES continue to Part 3.
- If NO, the PCBs Screening Assessment is complete, skip to the certification in Part 4.

Studies have found the highest concentrations of PCBs in building materials in buildings that were built or remodeled from 1950 to 1980.

For this process, the date that the building permit was issued will be used to determine applicability.

Part 3. Report concentrations of PCBs in priority building materials

Part 3 documents the results of the assessment of PCBs concentrations in priority building materials.² Part 3 is only required for proposed demolition of an applicable structure, as determined in Part 2. Check the option used.

- **Option 1** Conduct representative sampling and analysis of the priority building materials per the *Protocol for Evaluating Priority PCBs-Containing Materials before Building Demolition* (August 2018) provided in **Attachment C**.
- **Option 2** Use existing sampling results of the priority building materials. Applicants who have conducted sampling prior to the publication of the protocol may use that data provided it is consistent with the protocol (e.g., analytical methods, sample collection frequency, QA/QC). It is anticipated that prior sampling results will rarely be available and that most Applicants will need to use Option 1.

3.a Option 1 – Conduct representative sampling

Check this box if you conducted representative sampling and analysis of the priority building materials per the *Protocol for Evaluating Priority PCBs-Containing Materials before Building Demolition* (August 2018) (**Attachment C**).

- Complete the applicable tables for each priority building material.
- Attach the contractor's report³ documenting the evaluation results.
- Attach (or include in the contractor's report) the QA/QC checklist (see **Attachment C**, Section 2.2.4).
- Attach copies of the analytical data reports.

² The applicant is responsible for conducting the assessment, including collecting samples, chemical analysis, and documentation of the results.

³ The contractor's report of the findings of the PCBs building material evaluation. See section 3 of Protocol for Evaluating Priority PCBs-Containing Materials before Building Demolition (Attachment C).

3.a Option 2 – Use existing sampling records

In some cases, a property owner may have conducted sampling of the priority building materials for PCBs. If such data exist, you may use these data to demonstrate the concentration of PCBs in the priority building materials for the PCBs screening. However, if the sampling must be consistent with the *Protocol for Evaluating Priority PCBs-Containing Materials before Building Demolition*.

- Complete the applicable tables for each priority building material.
- Attach the contractor's report/statement that the results are consistent with the *Protocol for Evaluating Priority PCBs-Containing Materials before Building Demolition*.
- Attach copies of the analytical data reports.

Part 3 Tables Summarize concentrations of PCBs in priority building materials

Use these tables to summarize the concentrations of PCBs in the priority building materials.

- Each page of the table is for a different material. Duplicate the pages as needed to report all concentration data.
- A blank page is provided. Applicants have the option of submitting PCBs concentration data on other materials in addition to the priority building materials.

Column 1: required for all priority building material PCBs concentrations

- Use column 1 to report all PCBs concentrations in the priority building materials. Provide short description of the sample location, concentration.

Column 2: only required for PCBs concentrations ≥ 50 ppm

- Use column 2 to estimate the amount of material associated with each sample.

Note: MRP Provisions C.12.g.ii (3) and (4) require municipalities to enhance their construction site stormwater program for demolition sites where PCBs are detected at concentrations of ≥ 50 ppm. These additional requirements may include the implementation of enhanced erosion control, sediment control, and good housekeeping BMPs to minimize migration of PCBs into the storm drainage system during demolition. Check with the municipality issuing the demolition permit for BMP requirements. Additionally, the site may be inspected more frequently to ensure the proper implementation of the BMPs. As noted in Part 4, the Applicant must keep the municipality informed of the demolition schedule.

Part 4. Certification

- Complete the certification. The certification must be signed by the property owner or the owner's agent or legal representatives and the consultant who completed the application form. Completing and signing the certification indicates that the Applicant:
 - Has provided information in the form that is true, accurate, and complete.
 - Understands the responsibility for knowing and complying with all relevant laws and regulations related to reporting, abating, and handling and disposing of PCBs materials and wastes.
 - For demolition sites where PCBs are detected at concentrations ≥ 50 ppm:
 - Will notify the Regional Water Board, US EPA, and the municipality at least five working days in advance of the of the start of demolition.

- Within five working days after the demolition is complete, will notify the municipality of the actual demolition date(s).
- Within five working days of it being determined, will notify the municipality whether advance approval from the U.S. EPA is required for this site.⁴
- If it is determined⁵ that advance approval from the U.S. EPA is not required for this site, will submit the hazardous waste manifest for the disposal of PCBs materials to the municipality within five working days of it becoming available. If advance approval from the U.S. EPA is required for this site, submittal of the hazardous waste manifest is not required.

Regarding your responsibility for knowing and complying with all relevant laws and regulations related to reporting, abating, and handing and disposing of PCBs materials and wastes, there are significant penalties for submitting false information.

Regarding your responsibility to follow through with the above notifications and submittals, consequences for lack of compliance may include:

- Revoking site development/building permits;
- Referral to appropriate regulatory agencies; and/or
- Fines or other penalties.

For further information, contact the municipality with jurisdiction over the demolition.

⁴ Provision C.12.g.iii (4) states: " Beginning with their 2024 Annual Report, Permittees shall provide the following: ...and for those cases where notification and advance approval from the U.S. EPA is not required and were approved for demolition after June 30, 2023, the hazardous waste manifest prepared for transportation of the material to a disposal facility." It appears that the intent is that it is necessary to provide the manifest when EPA is not involved with the site remediation. Under some circumstances (that should be described in available EPA guidance) these types of PCBs remediations can be self-implemented and do not necessarily require any involvement by EPA staff. If self-implemented and EPA is not involved, then the municipality should require the Applicant to submit the manifest to the municipality so that the municipality can provide it in its Annual Report.

⁵ The Applicant makes this determination.

Federal and State PCBs Regulations

Applicants that determine PCBs exist in priority building materials must follow applicable federal and state laws. This may include reporting to U.S. Environmental Protection Agency (USEPA), the San Francisco Bay Regional Water Quality Control Board, and the California Department of Toxic Substances Control (DTSC). These agencies may require additional sampling and abatement of PCBs.

Depending on the approach for sampling and removing building materials containing PCBs, you may need to notify or seek advance approval from USEPA before building demolition. Even in circumstances where advance approval from USEPA is not required before the demolition activity, the disposal of PCBs waste is regulated under Toxic Substances Control Act (TSCA).

Additionally, the disposal of PCBs waste is subject to California Code of Regulations (CCR) California Code of Regulations (CCR) Title 22, Section Division 4.5, Chapter 12, Standards Applicable to Hazardous Waste Generators.

Building owners and employers need to consider worker and public safety during work involving hazardous materials and wastes including PCBs.

In addition, see below Notes Regarding Federal and State PCBs Regulations.

Notes Regarding Federal and State PCBs Regulations

1. See 40 Code of Federal Regulations (CFR) 761.3 for important information relative to disposal of PCBs-containing building materials, including definitions of PCBs bulk product wastes and PCBs remediation wastes. Also see the memorandum dated October 24, 2012 "PCB Bulk Product Waste Reinterpretation" from Suzanne Rudzinski, Director, Office of Resource Conservation and Recovery, EPA.
2. Disposal of PCBs wastes are subject to TSCA requirements such as manifesting of the waste for transportation and disposal. See 40 CFR 761 and 40 CFR 761, Subpart K.
3. TSCA-regulated does not equate solely to materials containing PCBs at or above 50 ppm. There are circumstances in which materials containing PCBs below 50 ppm are subject to regulation under TSCA. See 40 CFR 761.61(a)(5)(i)(B)(2)(ii).
4. Disposal of PCBs wastes are subject to California Code of Regulations (CCR) Title 22, Section Division 4.5, Chapter 12, Standards Applicable to Hazardous Waste Generators.
5. California hazardous waste regulatory levels for PCBs are 5 ppm based on the Soluble Threshold Limit Concentration test and 50 ppm based on the Total Threshold Limit Concentration test, see CCR, Title 22, Section 66261.24, Table III.

Agency Contacts

Applicants should contact the appropriate agencies and review the relevant guidance and information about PCBs in building materials. Municipal staff are not able to advise you on the requirements of the applicable federal and state laws.

Agency	Contact	Useful Links
US Environmental Protection Agency	Carmen Santos (415) 972-3360 santos.carmen@epa.gov	https://www.epa.gov/pcbs (EPA PCB website) https://www.epa.gov/pcbs/questions-and-answers-about-polychlorinated-biphenyls-pcbs-building-materials (PCBs in Building Materials Fact Sheet and Q/A Document) https://www.epa.gov/pcbs/pcb-facility-approval-streamlining-toolbox-fast-streamlining-cleanup-approval-process (USEPA PCB Facility Approval Streamlining Toolbox (PCB FAST)) https://www.epa.gov/pcbs/polychlorinated-biphenyls-pcbs-building-materials#Test-Methods (See Information for Contractors Working in Older Buildings that May Contain PCBs)
San Francisco Bay Regional Water Quality Control Board	Imtiaz-Ali Kalyan (510) 622-2499 Imtiaz-Ali.kalyan@waterboards.ca.gov Cheryl Prowell (510) 622-2499 Cheryl.Prowell@waterboards.ca.gov	https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/TMDLs/sfbaypcbstmdl.shtml https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/sitecleanupprogram.html
Department of Toxic Substances Control	Regulatory Assistance Office 1-800-72TOXIC RAO@dtsc.ca.gov	http://www.dtsc.ca.gov/SiteCleanup/Brownfields/upload/PUB_SMP_Guide-to-Selecting-a-Consultant.pdf
California Division of Occupational Safety and Health (known as Cal/OSHA)	CalOSHA Consultations Services 1-800-963-9424	https://www.dir.ca.gov/dosh/consultation.html

Attachment A
Process Flow Chart

Attachment B
PCBs in Priority Building Materials Screening
Assessment Form

Attachment C
Protocol for Evaluating Priority PCBs-Containing
Materials before Building Demolition
