



PCBs Material Management during Building Demolition: Outreach, Protocol, Tools, and Training

Scope of Work and Preliminary Planning Cost Estimate

PURPOSE AND NEED

With the adoption of reissued San Francisco Bay Area stormwater Municipal Regional Permit (MRP 2.0) by the San Francisco Bay Regional Water Quality Control Board (Regional Water Board) in November 2015, the implementation of stormwater control programs for PCBs has become a high priority compliance issue for Permittees throughout the Bay Area. Management of building materials during demolition of certain buildings is an important aspect of the overall PCBs program. MRP 2.0 Provision C.12.f. requires that by July 1, 2019 Permittees develop and implement or cause to be developed and implemented an effective protocol for managing materials with PCBs concentrations of 50 ppm or greater in applicable structures at the time such structures undergo demolition, so that PCBs do not enter municipal storm drain systems.

On behalf of MRP 2.0 Permittees, the Bay Area Stormwater Management Agencies Association (BASMAA) plans to request professional consulting services for the development of a PCBs in building materials control program including necessary outreach, guidance and tools, and training. This document provides a general scope of work and preliminary planning-level cost estimate for the project. Work on the project is assumed to be spread over three fiscal years (FY). Work will start during the remainder of FY 2016-17 (assumed to be March – June 2017), the majority of the work will be conducted in FY 2017-18, and wrap-up and training will be conducted in FY 2018-19.

This project will build on extensive existing resources, which are summarized below. The most important of these are a set of materials developed in 2010-2011 by the San Francisco Estuary Partnership (SFEP) with State Water Board grant funding, called the “PCBs in Caulk Project.” Current activities by BASMAA, including a PCBs in public roadway infrastructure sampling project, may provide additional materials useful for this project.

Available materials include:

- United States Environmental Protection Agency (USEPA) PCBs in Building Materials web pages, which provide background information, testing, remediation, and regulatory guidance (<https://www.epa.gov/pcbs/polychlorinated-biphenyls-pcbs-building-materials>)
- A preliminary model implementation process (MIP), including:
 - Proposed municipal implementation process
 - Model ordinance
 - Model staff report
 - Forms & flow charts
 - Frequently Asked Questions
 - List of obstacles, challenges and future needs identified in 2011 as needing to be addressed prior to implementation of any such process
 - Training strategy

- Summaries of existing regulatory requirements, including Task 2.3 Research Results Final Technical Memorandum, September 2010,” Table 1 in the MIP report, and information on the USEPA website
- Methods to prevent PCBs release into urban runoff: Best Management Practices for Reducing PCBs in Runoff Associated with Demolition and Remodeling Projects (November 2011) and remediation guidance (USEPA website)
- PCBs in caulk sampling and analysis plans: SFEP (2010), SFEI (2011) (see <http://www.sfestuary.org/taking-action-for-clean-water-pcbs-in-caulk-project/>) and BASMAA (in development)

SCOPE OF WORK

The scope of work includes efforts necessary to comply with the MRP 2.0 and to assist municipalities with the adoption and implementation of a PCBs in building materials control program. Work is divided into eight tasks, listed below, with details to describe the goals, work effort, and anticipated deliverables.

Task 1. Assemble and Review Existing Information and Update Regulatory Drivers and Requirements

Task 2. Communication and Coordination to Support Project Development

Task 3. Assessment Protocol for Prioritized PCBs-Containing Building Materials

Task 5. Update Supplemental Demolition Permit Application Materials and Process Flow Charts

Task 4. Model Ordinance Language and CEQA Document

Task 6. Outreach and Training to Support Implementation

Task 7. Tracking and Assessment

Task 8. Project Management, Communication, and Client Meetings

Task 1. Assemble and Review Existing Information and Update Regulatory Drivers and Requirements

Under this task the consultant will review the existing available project-related materials supplied by BASMAA and readily available from other reliable sources and identify changes and new information that need to be factored in to the current project, including additional materials understood to contain PCBs (materials in addition to caulk, such as mastics, paint, and coatings), and USEPA and USEPA Region 9’s efforts to address PCBs in building materials.¹ Summarize new information in a brief technical memorandum that identifies any decisions needed by BASMAA prior to proceeding with the remainder of the project.

- Review project-related materials.
- Identify building materials commonly understood to contain PCBs at ≥ 50 ppm.

¹ For example <http://www.smmusd.org/PublicNotices/Malibu.html>,
http://media.wix.com/ugd/561311_de09e627be9e48648494a2dccc026db2.pdf

- Contact USEPA and state and local agencies for updated information on PCBs-containing materials testing, assessment, and regulatory processes.

Deliverables:

1. Summary of new information.
2. Draft list of building materials understood to contain PCBs at ≥ 50 ppm and prioritized by likelihood to be exposed and released to the storm drainage system during or after the demolition process.
3. Final list of up to three PCBs-containing building materials to be addressed by the project.
4. Annotated table of regulatory drivers and relevant requirements.

Task 2. Communication and Coordination to Support Project Development

Communication and coordination with BASMAA, Permittees, and stakeholders is essential to the success of this project. Under this task the consultant will develop coordination and outreach strategy to communicate with BASMAA and stakeholders at a variety of levels during the project. The consultant will provide a single point of contact to respond to inquiries from BASMAA, Permittees, and stakeholders.

Subtask 2.1 Coordination and Engagement Strategy

The consultant will develop a written coordination and engagement strategy that lays out the approach to keeping BASMAA decision makers informed, gaining permittee support, input from the affected community, and regulatory engagement in a transparent process. **Table 1** identifies key groups should be incorporated into the strategy. The strategy should incorporate the Task 2 subtasks identified in the scope of work.

The engagement strategy will include a proposed schedule for engaging the key groups throughout the project, holding focused round table discussions, and will identify the initial outreach efforts need to identify, contact, and engage key stakeholders. The strategy will include convening a Regulatory Round Table and Industry Round Table (focus groups to meet once and provide specific feedback at the start of the project) and establishing a Technical Advisory Group (TAG) to provide technical and regulatory input to the project.

After development of the draft strategy, meet with the BASMAA Steering Committee to discuss approach. Finalize strategy based on BASMAA comments and implement the strategy.

Deliverables:

1. Written coordination and engagement strategy and schedule, draft and final.

Table 1. Summary of Key Groups in the PCBs in Building Materials Project and Assumed Communication Frequency

Group	Role	Frequency Assumed for Budget
BASMAA Board of Directors	Approves all final work products in accordance with BASMAA policies and procedures.	<ul style="list-style-type: none"> • 6 briefings • 2 in FY1, 3 in FY2, 1 in FY3 • see Task 8
BASMAA Steering Committee	Members selected by BASMAA Board to provide strategic direction based on BASMAA and Permittee goals and needs. Approves all draft work products prior to release to stakeholders or the public. Ideally includes higher-level Permittee representatives and as many BASMAA Board members as possible.	<ul style="list-style-type: none"> • 6 briefings • 2 in FY1, 3 in FY2, 1 in FY3 • see Task 8
Stakeholder Group	Larger group with members drawn from municipalities, industry ² , waste management entities, interested public, regulatory agencies (e.g., RWQCB, USEPA, DTSC, and BAAQMD), and consultants to keep informed about the project and from whom to seek feedback and information.	<ul style="list-style-type: none"> • 2 focused round tables (FY1) • 2 stakeholder meetings (FY2) • see Task 2.3
Technical Advisory Group	A small balanced advisory group to be formed from industry, regulatory, and Permittee representatives to provide specific review and input on project work products as they are developed, but not ultimate approval.	<ul style="list-style-type: none"> • 6 meetings (1 in FY1 and 5 in FY2) • see Task 2.3

Subtask 2.2 Initial Industry Stakeholder Outreach and Engagement

Engagement of industry stakeholders that do not typically engage with BASMAA or stormwater programs is important to the success of the project and will help to mitigate potential delays later in the process of ordinance adoption. To engage industry stakeholders requires an active outreach effort and sustained communication to develop relationships with key representatives.

The consultant will develop a project initiation presentation to explain MRP 2.0 requirements, summarize the project and schedule, obtain an initial understanding of stakeholder interests and questions, and invite stakeholder input via the project. The consultant will develop a list of potential groups for project initiation presentations. BASMAA will prioritize the groups for the consultant to contact to offer presentations.

Deliverables:

2. Project initiation presentation and outreach materials (flyers, email blasts).
3. List of potential groups for project initiation presentations.
4. List of key contacts and presentations made (name, organization, phone, email).

² In this context industry means individuals, contractors, developers, property owners, financiers, attorneys, realtors their representatives and consultants engaged or responsible for the assessment of PCBs in building materials. This list is intended to be descriptive, not exclusive.

5. Project initiation presentations to be conducted at up to eight industry meetings, workshops, or seminars.

Subtask 2.3 Implement Stakeholder and Technical Advisory Group Outreach and Engagement

Under this task the consultant will facilitate meetings with stakeholders, conduct round tables discussions, and will establish the small Technical Advisory Group (TAG) to provide input to the project. The budget provided below assumes two round table meetings at the outset of the project (one with each group), up to two stakeholder meetings, and up to six meetings of the TAG. Throughout the project the consultant will provide a single point of contact for all inquiries about the project. The consultant shall maintain a record of their key contacts.

- Conduct stakeholder outreach meetings to obtain input on draft project materials toward the goal informing the stakeholders and considering their feedback to the extent as practical while maintaining BASMAA’s goals including cost-effective and timely fulfillment of its permit requirements.
- Convene and facilitate a round-table of interagency representative to discuss regulatory requirements, interests, overlapping jurisdiction, and barriers to successful program implementation.
- Convene and facilitate a round-table discussion of industry representatives to discuss current practices, industry drivers, and barriers to assessment and abatement.
- Convene and facilitate meetings of the TAG to review the prioritized list of PCBs-containing building materials developed under Task 1, the protocol for assessing prioritized PCBs-containing materials in buildings developed under Task 3, and the demolition permit materials developed under Task 5.
- Track inquiries to the point of contact.

Deliverables:

6. Table of local, state, and federal regulatory agency interested parties, with contact information.
7. Table of industry representatives with contact information.
8. Round Table agendas, materials, and meeting notes (two meetings).
9. List of TAG members and contact information.
10. TAG meetings agendas, materials, and meeting notes (up to six meetings).
11. Stakeholder outreach meetings agendas, materials, and meeting notes (up to two meetings).
12. Table of inquiries to the point of contact and responses.

Task 3. Assessment Protocol for Prioritized PCBs-Containing Building Materials

Under this task the consultant will develop a protocol for the assessment of prioritized PCBs-containing building materials prior to demolition. Current PCBs-containing material assessment practices by proactive demolition firms and property owners will be identified, reviewed, and

considered in the development of this task. Development of the protocol is to be conducted by consultant team experts, with input from the TAG under Task 2.

The consultant will draft a comprehensive protocol for the assessment of PCBs in the prioritized building materials. Development of the protocol should be informed by existing ASTM standards (e.g., ASTM E2356-14 Standard Practice for Comprehensive Building Asbestos Surveys), but would not be developed through the ASTM process. Key components of the assessment protocol include procedures for conducting a comprehensive assessment to locate, identify, sample, and perform chemical analyses to measure PCBs concentrations in building materials. The TAG (Task 2) will provide input and peer review the draft protocol.

Deliverables:

1. Summary of information describing the current state of the practice for identification of the prioritized categories of PCBs-containing building materials.
2. Present materials and obtain feedback at TAG meetings.
3. TAG subgroup agendas, materials, and meeting notes related to this task.
4. Protocol for the assessment of prioritized PCBs-containing building materials prior to demolition, draft, and final.
5. Table of TAG comments identifying any areas where consensus was not reached.

Task 4. Model Ordinance Language and CEQA Document

Under this task the consultant will develop a model municipal ordinance language, CEQA document and supporting staff reports and resolutions.

Subtask 4.1 Model Ordinance Language

Develop and model ordinance language, staff report and resolution. The starting point will be the model ordinance and staff report developed for the PCBs in Caulk Project and they will be updated based on input from BASMAA, the protocol developed in Task 3, and other new information identified in Task 1. The model ordinance language should reflect that some municipalities may choose to update an existing ordinance (e.g., stormwater, demolition) and other may choose to adopt a new ordinance.

Deliverables:

1. Model municipal ordinance language, draft and final.
2. Staff report and resolution, draft and final.

Subtask 4.2 Model CEQA Document

Develop a model CEQA document and supporting information that each jurisdiction can adapt for its use. Under this task the consultant will research and present an approach for CEQA compliance. The budget and level of effort for the CEQA document is assumed to be a Categorical Exemption or Negative Declaration. The approach will identify the level of documentation (substantial evidence) that is needed to support use of a categorical exemption or Negative Declaration

Deliverables:

3. CEQA approach strategy and justification.
4. Model CEQA document, staff report, and resolution draft and final.

Task 5. Update Supplemental Demolition Permit Application Materials and Process Flow Charts

Under this task the consultant will develop an updated template for a municipal PCBs building materials process to accompany a demolition permit application. The starting point will be the model flowcharts and forms developed for the PCBs in Caulk Project to incorporate the PCBs in building materials control program requirements that municipalities will need to verify to issue a demolition permit. The model will incorporate the steps developed in the protocol for assessing prioritized PCBs-containing materials in buildings prior to demolition (Task 3), transforming those steps into appropriate application questions and submittals. The model will also incorporate tracking and assessment information (Task 7) required by MRP 2.0.

The consultant will develop the analysis required for the establishment of a permit fee schedule by municipalities for the costs and work associated with reviewing demolition permits projects involving PCBs in building materials. Development to be coordinated with TAG under Task 2.

Deliverables:

1. Updated PCBs supplemental demolition permit application forms and applicant instructions, and updated flow charts that illustrate the process draft and final
2. Cost analysis and justification for municipalities to use to modify their existing demolition permit fee schedules.

Task 6. Outreach and Training to Support Implementation

Under this task the consultant will develop training and outreach materials. The objective of this task is to provide project information and guidance to municipal staff and outreach information to industry stakeholders on the adoption and implementation of the PCBs in building materials control program.

Subtask 6.1 Municipal Staff Informational Outreach – Ordinance and Demolition Permit

The consultant will develop outreach materials and a standard presentation to inform municipal staff following the completion of Tasks 4 and 5. The goal of this subtask is to provide municipal staff with the information and outreach tools they will need to brief other staff and managers on the ordinance and program requirements.

Deliverables:

1. Municipal outreach materials on the model ordinance and demolition permit, draft and final.

Subtask 6.2 Municipal Staff Training – Program Implementation

The consultant will develop a training strategy and schedule that identifies the municipal staff target audience and the specific knowledge, skills, and abilities to implement the program. The

starting point will be the training strategy and materials developed for the PCBs in Caulk Project and it will be updated based on input from BASMAA and the work products of Tasks 3-5.

The consultant will develop municipal staff training materials to provide the necessary Knowledge, Skills, and Abilities (KSAs) for the target audience. The training materials shall be sufficiently detailed and annotated with speaker notes such that it can be used by municipalities to train staff in the future.

The consultant will develop and present a pilot training workshop after which the training materials will be revised based on feedback and finalized. The consultant will conduct one train the trainer session for municipal staff so they may conduct the training in-house or through countywide programs. Logistics for the pilot training and train the trainer session (advertising, registration, venue, refreshments) will be managed by BASMAA.

Deliverables:

2. Municipal staff training materials, draft and final.
3. One pilot training workshop (or other appropriate training format) for municipal staff.
4. One “Train the Trainer” session for key municipal staff.

Subtask 6.3 Industry Stakeholder Outreach – Program Implementation

The consultant will develop outreach materials and a standard presentation to inform industry stakeholders including developers, planning firms, urban planning NGOs, demolition firms, property owners, property managers, and realtors regarding the PCBs in building materials control program. Materials will address the protocol for the assessment of prioritized PCBs in building materials, Demolition Permit requirements, and BMPs. The standard presentation will be developed in PowerPoint and designed to be delivered in 20 minutes with detailed speaker notes. The consultant will develop a list of regionally appropriate outreach opportunities for the 6 month period following the completion of the project. Outreach presentations will be arranged and provided by municipal and/or program staff.

Deliverables:

5. Industry outreach materials, draft and final.
6. List of outreach opportunities including contact information and dates.

Task 7. Tracking and Assessment

Under this task the consultant will develop an approach and tools for use by the municipalities individually and/or regionally to collect and assess implementation of the PCBs in building materials control program consistent with MRP 2.0. Information from this task will be incorporated into the information collection requirements in Tasks 3 and 5, and will be used to enhance field assessments of BMP implementation at demolition sites involving PCBs in building materials. The approach will be informed by parallel BASMAA projects developing RAA guidance and identification of data gaps.

The consultant will propose a long term method of managing the data collected and submitted by project proponent to facility with the goal of facilitating local and/or regional assessments of loads avoided.

Deliverables:

1. Tracking and assessment approach strategy.
2. Tracking spreadsheet to document and collate information on the number and location of buildings addressed by the PCBs in building materials control program. Data fields shall include the information required to include in GIS.
3. Standardized electronic format for submittal of data collected by project proponents.
 - a. Building materials characterization data (e.g., analytic data, quantity of material disposed).
 - b. Clean up characterization data (if required, analytic data).
4. List of recommended information to collect during routine construction inspections.

Task 8. Project Management, Communication, and Client Meetings

Under this task the consultant will communicate and meet with the Steering Committee, communicate with BASMAA's Project Officer, Committees, Permittees, and attend meetings with BASMAA's Board of Directors to provide status updates on the project and take input on the project. At this time the number of meetings cannot be predicted. The budget will assume up to six meetings with the BASMAA Board of Directors and six with the Steering Committee. Some meetings can be conducted via conference call. Additional meetings will be charged on a time and materials basis.

- Attend and provide briefings to BASMAA Board of Directors
- Attend and participate in Steering Committee meetings/calls
- Provide as need briefings to the BASMAA Project Officer and other communications as needed, mainly via email and telephone

Deliverables:

1. Briefings at BASMAA meeting on project status (up to six meetings).
2. Steering Committee meetings agendas, materials, and meeting notes (up to six meetings).

BUDGET

Table 2 provides a preliminary planning cost estimate that was developed to assist BASMAA in budgeting the project. The estimate was developed using a supporting budget spreadsheet that contains further details, including the estimated break down of hours and hourly rates and notes on assumptions.

Table 2. Preliminary Planning Cost Estimate

Budget Category	Fiscal Year 2016-17				Fiscal Year 2017-18				Fiscal Year 2018-19				Project Grand Total
	# of Hours	Total Labor	Direct Costs	TOTALS	# of Hours	Total Labor	Direct Costs	TOTALS	# of Hours	Total Labor	Direct Costs	TOTALS	
Task 1. Assemble and Review Existing Information and Update Regulatory Drivers and Requirements	40	\$8,000	\$0	\$8,000	0	\$0	\$0	\$0	0	\$0	\$0	\$0	\$8,000
Task 2. Communication and Coordination	270	\$55,000	\$1,100	\$56,100	250	\$54,000	\$700	\$54,700	0	\$0	\$0	\$0	\$110,800
Subtask 2.1 Coordination and Engagement Strategy	30	\$7,000	\$0	\$7,000	0	\$0	\$0	\$0	0	\$0	\$0	\$0	\$7,000
Subtask 2.2 Initial Industry Stakeholder Outreach and Engagement	100	\$19,000	\$800	\$19,800	0	\$0	\$0	\$0	0	\$0	\$0	\$0	\$19,800
Subtask 2.3 Implement Stakeholder and TAG Outreach and Engagement	140	\$29,000	\$300	\$29,300	250	\$54,000	\$700	\$54,700	0	\$0	\$0	\$0	\$84,000
Task 3. Assessment Protocol for Prioritized PCBs-Containing Building Materials	170	\$33,000	\$100	\$33,100	350	\$64,000	\$100	\$64,100	0	\$0	\$0	\$0	\$97,200
Task 4. Model Ordinance Language & CEQA Document	0	\$0	\$0	\$0	260	\$49,000	\$400	\$49,400	0	\$0	\$0	\$0	\$49,400
Subtask 4.1 Model Ordinance Language	0	\$0	\$0	\$0	30	\$7,000	\$0	\$7,000	0	\$0	\$0	\$0	\$7,000
Subtask 4.2 Model CEQA Document	0	\$0	\$0	\$0	230	\$42,000	\$400	\$42,400	0	\$0	\$0	\$0	\$42,400
Task 5. Update Supplemental Demolition Permit Application Materials and Flowcharts	0	\$0	\$0	\$0	70	\$14,000	\$0	\$14,000	0	\$0	\$0	\$0	\$14,000
Task 6. Outreach and Training to Support Implementation	0	\$0	\$0	\$0	0	\$0	\$0	\$0	100	\$19,000	\$200	\$19,200	\$19,200
Subtask 6.1 Municipal Staff Informational Outreach – Ordinance and Demolition Permit	0	\$0	\$0	\$0	0	\$0	\$0	\$0	30	\$6,000	\$0	\$6,000	\$6,000
Subtask 6.2 Municipal Staff Training – Program Implementation	0	\$0	\$0	\$0	0	\$0	\$0	\$0	30	\$6,000	\$200	\$6,200	\$6,200
Subtask 6.3 Industry Stakeholder Outreach Development – Program Implementation	0	\$0	\$0	\$0	0	\$0	\$0	\$0	40	\$7,000	\$0	\$7,000	\$7,000
Task 7. Tracking and Assessment	0	\$0	\$0	\$0	90	\$18,000	\$0	\$18,000	0	\$0	\$0	\$0	\$18,000
Task 8. Project Management, Communication, and Client Meetings	100	\$22,000	\$300	\$22,300	180	\$40,000	\$1,000	\$41,000	60	\$14,000	\$300	\$14,300	\$77,600
Grand Total:	580	\$118,000	\$1,500	\$119,500	1200	\$239,000	\$2,200	\$241,200	160	\$33,000	\$500	\$33,500	\$394,200