

Title: **Hazardous Materials Work Process for Buildings**

The Environmental Management Requirement (EMR) for Hazardous Materials and Contaminated Sites document provides general information to Alberta Infrastructure staff and consultants dealing with the removal and disposal of hazardous materials found within buildings and the management of contaminated sites. This document, Hazardous Materials Work Process for Buildings, provides specific information for the Project Management Community on when to engage the Manager of Building Environmental Unit (BEU) at Technical Services Branch (TSB).

1. Project Definition & Start-up Phase:

- 1.1 Consult with Building Environment Unit (BEU) within TSB to determine if existing hazardous materials information exists for the building. Most buildings built prior to 1995 generally contain hazardous materials. If building is managed by Infrastructure's Property Management, also contact them for possible additional information.
- 1.2 With the assistance of BEU, determine if hazardous materials investigation is required.
- 1.3 If an investigation is required, BEU will suggest names of Environmental Consultants who can conduct the investigation.
- 1.4 It is suggested that the same consultant be retained for all three phases of the project if the total contract amount is under \$75,000. If above \$75,000, an RFP or competitive process is to be followed.

2. Consultant Selection phase:

- 2.1 Based on BEU's recommendations, the Project Manager is to engage an Environmental Consultant to conduct the hazardous materials investigation. (First phase)
- 2.2 BEU and Project Manager are to create and agree on a scope of work for the Environmental Consultant. Investigation is to provide a cost estimate for removal work based on the proposed project scope.
- 2.3 Project Manager is to obtain a cost estimate from the Environmental Consultant to conduct the hazardous materials investigation. Review the cost with BEU before giving the Environmental Consultant approval to proceed.
- 2.4 Project Manager is to inform Infrastructure's Facility Manager (FM) - Property Management, of this investigation. The FM can then inform the Total Property Management (TPM) Contractor to coordinate access and assistance for the Environmental Consultant on site.
- 2.5 Environmental Consultant is to conduct hazardous materials investigation.
- 2.6 Environmental Consultant is to provide final report on hazardous materials investigation to Project Manager. The report is to include a cost estimate for removal work based on the proposed project scope. Project Manager is to forward the report to BEU for review and comment, and to FM for information.

3. Design phase:

- 3.1 Based on the investigation report findings, adjustments to the final project scope may be required after the review. Project Manager, BEU and Environmental Consultant are to discuss and finalize project scope.
- 3.2 Once the hazardous materials scope of work is finalized, Project Manager is to engage an Environmental Consultant to produce the technical specifications and drawings for the work, and provide input and review up to the award of tender. (Second phase)

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- 3.3 Environmental Consultant is to provide cost estimate for development of specifications, drawings, and input and review. Cost estimate to be reviewed by both the Project Manager and BEU before acceptance to proceed is given.
- 3.4 Environmental Consultant is to prepare specifications and drawings, and provide input and review up to the award of tender. The Project Manager and BEU are to review, comment and agree on the specifications and drawings before final acceptance.
- 3.5 Specifications and drawings for hazardous materials removal are to be included into the contract document for the project.
- 3.6 Project Manager is to inform FM of design stage work and upcoming tender.

4. Tender Award phase:

- 4.1 Project manager is to contact BEU and Environmental Consultant to review hazardous materials removal tender bids from contractor.
- 4.2 Project manager is to engage an Environmental Consultant to conduct the on-site air monitoring and inspection for the hazardous materials removal (Third phase). BEU can assist in preparing the scope of work for air monitoring and inspection.
- 4.3 Environmental Consultant is to provide cost estimate for air monitoring and inspection for Project Manager's review and acceptance. BEU can assist in the review.

5. Construction phase:

- 5.1 Project Manager is to invite BEU and Environmental Consultant to Construction Start-Up Meeting. FM and their TPM contactor should also be asked to attend.
- 5.2 Environmental Consultant conducts the on-site air monitoring and inspection for the hazardous material removal.
- 5.3 Project Manager and BEU are to receive site inspection reports from the Environmental Consultant as the hazardous materials work progresses. Environmental Consultant is to contact the Project Manager if any on-site issues arise during the removal work.
- 5.4 BEU can assist in resolving hazardous materials removal problems that arise during the construction phase.
- 5.5 Alberta Infrastructure has a generic generator number (G4537) that can be entered as the Provincial ID Number on the manifests for "regulated" hazardous materials disposal. The contractor must inform Alberta Environment of the building and project that the generator number will be used for.

6. Commissioning phase:

No BEU involvement required.

7. Warranty phase:

No BEU involvement required.

8. Project Closeout phase:

- 8.1 Environmental Consultant is to provide Project Manager, BEU and FM with a final report on the hazardous materials removal. Report will be filed by BEU. Project Manager is also to enter the report into their environmental file for the project. FM is to enter the information into their asbestos management program file.