



Property Development Program Information Sheet

GENERAL INFORMATION FOR PROPERTY DEVELOPERS

The community of Trail grew up around one of the world's largest lead and zinc smelting facilities, Teck Metals Ltd. Trail Operations ("TML"), operating for over a hundred years. Historical deposition of aerial emissions from these facilities has contributed metals to soil in the surrounding area and soil in the Trail area is likely to have metals above natural background levels and regulatory standards ("Metal Contaminated Soils"). Metal levels in soil are typically higher closer to the operation and decline to near natural background concentrations toward periphery areas. The primary metals which are elevated in soil are lead, arsenic, cadmium and zinc.

TML is working with the Ministry of Environment and Climate Change Strategy ("ENV") to develop and seek approval for a long-term soil management plan called a Wide Area Remediation Plan ("WARP") to meet the requirements of the BC Contaminated Site Regulation and Environmental Management Act. THEP Soil Management AreaIn the interim, TML has an Interim Policy for Involvement in Trail Area Development Projects that outlines the approach for the management of Metal Contaminated Soils and offers voluntary assistance to support development activities in the Trail Area through the Trail Area Health and Environment Program (THEP). The area where soils have been impacted by aerial deposition from TML has been designated as the "THEP Soil Management Area" (see Figure on next page).

THEP is overseen by the Trail Area Health and Environment Committee (THEC), a partnership between government, TML, the City of Trail and community that has been working together for over 30 years to reduce exposure to lead and other smelter metals in the community. Further information on the THEP is available at <https://www.thep.ca/>.

The THEP Property Development Program (PDP) works with property owners and developers to address Metal Contaminated Soils during the redevelopment or new development of commercial, industrial or residential property within the THEP Soil Management Area. New developments/redevelopments typically involve significant soil disturbance including excavation, re-grading of soil and potentially import of new fill. The objectives of the PDP are to:

- Manage Metal Contaminated Soils during the development or re-development of properties within the THEP Soil Management Area;
- Prevent unnecessary costs, delay or stigma to development in the Trail area due to the presence of Metal Contaminated Soils.
- Support sustainable development in the Trail area by assisting with the investigation and risk-based remediation of Metal Contaminated Soils.
- Facilitate safe excavation, handling and disposal of excavated Metal Contaminated Soils through testing and risk management.



PDP DEVELOPMENT SCENARIOS

All PDP projects are unique, but they generally fall into one of four scenarios:

- A. Development on a previously undeveloped property, or re-development of a residential property where most of the property will be developed with buildings, hardscape, or landscaping.
- B. Development on larger undeveloped land or residential property, such as an acreage, agricultural or parkland parcel, or new residential sub-division. In this scenario only a portion of the land will be developed for regular use, and other portions will remain undisturbed and/or not regularly used.
- C. Development on a property previously used for industrial or commercial purposes, but not a potentially contaminating activity defined in [Schedule 2 of the BC Contaminated Sites Regulation](#).
- D. Development on a property previously used for one or more industrial or commercial uses defined in [Schedule 2 of the BC Contaminated Sites Regulation](#). Application for sub-division, re-zoning, development permit, or building permit involving soil disturbance at these properties will require a Site Disclosure Statement that will trigger [site investigation requirements](#) by the ENV.

There may be other development scenarios not covered in this document where remediation of Metal Contaminated Soils will be assessed by TML on a case-by-case basis.

A legal agreement for each PDP project will outline the specific remediation scenario and costs covered by TML. If your proposed development property has previously been used for commercial or industrial purposes, there may be additional environmental investigation and remediation requirements imposed by ENV or required for financing by your lender. TML will not cover costs related to the investigation, remediation or reporting of potential contaminants at the property other than Metal Contaminated Soils.

PROPERTY DEVELOPMENT PROGRAM PROCESS

We encourage you to notify and engage the PDP regarding your project as early as possible, ideally in the early due diligence planning stages. Every property and development scenario is unique, but the process will generally involve the following steps:

1. Property Development Program Application and Confidentiality Agreement

To initiate the PDP, the property owner must fill out an Application Form which will include a confidentiality agreement. The purpose of the Application Form is to provide information on the proposed development and start preliminary discussions without entering into a legally-binding agreement, other than ensuring that confidentiality can be maintained.

2. Preliminary Site Screening

Preliminary Site Screening for Metal Contaminated Soils involves soil testing in accessible areas of the property. Depending on which PDP development scenario the project falls into, the property owner may be required to complete additional environmental investigation to satisfy lender and/or municipal permit requirements.

Properties that haven't been used for commercial or industrial purposes (Scenarios A and B) generally don't require additional environmental investigation other than soil testing for Metal Contaminated Soils. In these scenarios the Preliminary Site Screening process can be managed by TML.

Properties that have had commercial or industrial uses (Scenarios C and D) generally require extra Preliminary Site Screening work to investigate other potential sources of contamination. These sites often require a Phase 1 Environmental Site Investigation (ESA)¹ or Stage 1 Preliminary Site Investigation (PSI)² to satisfy financing, municipal permit and/or ENV requirements. Property owners are responsible for any investigations triggered by lenders, municipalities, or the ENV that aren't directly related to Metal Contaminated Soils.

Based on information provided in the Program Application, TML will engage the property owner to discuss the path forward and plan for Preliminary Site Screening. Costs for the investigation of Metal Contaminated Soils will be covered by TML. If contamination risks other than smelter metals are identified (e.g., fuels or solvents) they will require investigation at the property owner's expense. The specific arrangement for who coordinates the testing and any required Phase 2 ESA or Stage 2 PSI investigations will be project specific and could involve TML consultants, property owner consultants or a combination of the two.

Development Scenario	Preliminary Site Screening Required	Completed By
A and B – Previously residential or undeveloped.	Soil testing No Phase 1 ESA or Stage 1 PSI required	TML
C – Previously commercial or industrial, but no Schedule 2 use.	Phase 1 ESA – required by lender and/or to complete Site Disclosure Statement for municipal permit application. Soil Testing	Property Owner TML for Metal Contaminated Soils; Property owner for any other contaminants of concern
D – Previous Schedule 2 commercial or industrial use.	Stage 1 and Stage 2 PSI – Required by ENV to release development permits Soil testing completed during Stage 2 PSI	Property Owner TML for Metal Contaminated Soils; Property owner for any other contaminants of concern

¹ This is a standard due diligence report that most financial lenders require for commercial or industrial properties

² This is a regulatory version of a Phase 1 that satisfies BC ENV requirements under the BC CSR.

The Phase 1 ESA / Stage 1 PSI involves searching existing records for information about a site, interviewing people who are familiar with the site, and determining the general location and degree of any historical contamination. These studies must be completed by qualified environmental professionals.

The preliminary soil metals screening investigation will collect samples to characterize smelter metals levels for current and future land use. The assessment focuses on surface soils (top 1m) so often no heavy equipment is required. Surface soils will be screened using an x-ray fluorescence analyzer that will provide a screening-level indication of metals concentrations on the property. Depending on the results, samples may be submitted for confirmatory laboratory analysis. The number of samples collected will vary depending on the size of the property.

If your project requires a Phase 2 ESA or Stage 2 PSI to assess contamination risks unrelated to smelter metals, more invasive testing may be required. This may include the use of drill rigs to collect soil samples and install groundwater monitoring wells. These costs are generally not covered by TML because Metal Contaminated Soils are surficial in nature and have been demonstrated to not affect groundwater. TML will cover the incremental costs for testing of Metal Contaminated Soils during larger Phase 2 ESA or Stage 2 PSI studies that include testing for other contaminant sources.

TML will review all Preliminary Site Screening studies and metals investigation results. Additional investigation and risk assessment may be required prior to remediation work.

3. Remediation Planning

Once Preliminary Site Screening investigations are complete, TML will meet with the property owner to discuss the results and implications to property development plans and schedules. Depending on the complexity of the project, it may take more than one meeting to achieve the following:

- Review development plan information with the property owner (i.e. development permits and plans, soil cut and fill plans, sequence of development, location of access roads, equipment and material lay down areas, etc.);
- Discuss the results of the preliminary and metals screening investigations;
- Review any environmental requirements from the ENV, municipality or lender;
- Introduce the property owner to risk management options where Preliminary Site Screening suggests risk management of Metal Contaminated Soils is the best option;
- Identify data gaps and arrange to complete additional site investigation and risk assessment work to confirm results;
- Provide remediation options;
- Identify soil disposal options and locations;
- Develop a proposed remediation schedule;
- Agree on the professional consultants and contractors to complete the work and whether they will be hired by the property owner or by TML;
- Agree on financial support and responsibilities; and
- Develop and execute a legal agreement.

4. Legal Agreement

Based on the information collected, TML will develop and propose a legal agreement. Having a legal agreement is in the best interest of both parties and is required by TML before TML provides further technical and/or financial support to the property owner. Part of the legal agreement will require the property owner to proceed with the planned development project in order for funding to continue. This is to protect TML from expending resources on a property that is ultimately not developed. The exact legal agreement will vary depending on the development. The property owner will be given the opportunity to obtain independent legal advice on the proposed legal agreement.

The Legal Agreement will outline the financial responsibilities of TML, which are generally the incremental costs incurred during development due to the presence of Metal Contaminated Soils. The Legal Agreement will also outline who is responsible for retaining the professional consultants and contractors to complete the remediation activities. TML reserves the right to review and approve companies retained by the property owner or to use TML consultants and contractors for the assessment and remediation of Metals Contaminated Soils.

5. Risk Based Remediation of Metals Contaminated Soils

Contaminated surface soil on PDP properties will be remediated to risk-based standards³ as defined in the BC Contaminated Sites Regulation (CSR). The risk-based standards are determined by a property-specific risk assessment. The endpoint of a risk assessment may vary depending on the development scenario and lender or regulatory requirements. Depending on the development plan, this may involve a combination of:

- removal and offsite disposal of surface soil with concentrations greater than risk-based standards; and
- risk management of Metal Contaminated Soils left in place through:
 - capping landscaped areas with clean soil; and/or
 - capping soil in place beneath building foundations or hardscape such as driveways, walkways and patios.

TML will monitor key milestones of the remediation scope for Metal Contaminated Soils including:

- Confirming the depth of excavation and that the remediation plan scope of work was followed;
- Collecting samples at the base of any excavation and screening for metals;
- Testing and approving backfill materials prior to bringing onsite; and,
- Collecting any post-remediation samples necessary to confirm risk-based remediation objectives have been met.

TML will reimburse the property owner for the incremental costs outlined in the legal agreement. TML will not be responsible for any contamination other than Metal Contaminated Soils.

³ At most sites, removing all Metal Contaminated Soils substances is not possible or practical. These soils can be managed on-site to ensure they do not pose a hazard to human or environmental health. BC ENV guidance for risk assessment can be found [here](#).

6. Property Development Program Closure

The final phase of the PDP will depend on the development scenario and regulatory and lender requirements. An approved environmental consultant will prepare a Confirmation of Remediation Report to document the work completed and current condition of the property. This document may be submitted in support of a Certificate of Compliance application to the ENV.

TML requires developers to execute a release in favour of TML with respect to the environmental condition of the property in a form satisfactory to TML.