



Region of Waterloo Brownfield Financial Incentives Program

Eligible Cost Submission Guideline

The following is a list of some of the costs that may be considered eligible under the Region's Brownfield Financial Incentive Program (Joint TIG and RDC Exemption).

Costs must be related to the remediation of the site as specified by a Remedial Work Plan/Action Plan to allow filing of a Record of Site Condition (RSC). **Development (or redevelopment) related costs are not eligible.** Any costs that may be related to both remediation and redevelopment will be subject to further review and apportioned appropriately (and may only be partially eligible). Further, in any cases where the applicant may need to make a distinction between costs associated with remediation and/or redevelopment, photographic documentation may be of assistance.

It is strongly recommended that applicants ensure that the supporting information and financial accounting is organized in a clear and easily understandable manner **at the outset of the remediation work.** Providing direction to any qualified persons, contractors, and financial service providers regarding the requirements of these programs **at the beginning of the process** can significantly reduce the time and effort to meet the submission requirements.

If the applicant/owner intends to do some of the remedial work using a wholly owned company or a subsidiary firm, cost estimates for the work should be provided by at least two other competitive bidders. Applicants should also be prepared to demonstrate the anticipated costs savings or benefit this approach provides. Further, in all instances, it is the applicant's responsibility and duty to manage, mitigate and minimize remedial costs. The Region reserves the right to review the recommended remedial approach with the applicant if deemed necessary.

Please note: This is intended as a guideline only, and is not an exhaustive list of all possible eligible costs. All invoices submitted as part of this program are subject to internal and external review and will be considered on a case-by-case basis.

For any questions, please contact:

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1. Phase 1 Environmental Site Assessment (ESA)¹

- Documents Review
 - FOI Request
 - Aerial Photos and mapping (over time, development, topographic maps, physiographic maps, geological maps, well records).
 - Previous environmental studies
 - Relevant Government Information (Certificate of approval, certificates of property use, inventory of coal gasification plants, National Pollutant Release Inventory, waste management inventory, retail fuel storage tank info, etc.)
 - Other relevant documents (Insurance, ownership/land title)
- Interviews
- Site Reconnaissance
- Conceptual Model Development²
- Report

NOTE: *It is the responsibility of the applicant to ensure that all Phase 1 ESA work is conducted in accordance with the O.Reg 153/04 (as amended) under the Environmental Protection Act (EPA). Applicants should refer to the Regulation (Schedule D) for specific Phase 1 requirements.*

2. Phase 2 Environmental Site Assessment (ESA)

- Field Work
 - Site Visit/Investigation
 - Utility locates
 - Drilling/excavation/ other methods of intrusive sampling
 - Geological Study
 - Soil Sampling – Stockpile sampling/sampling of excavation
 - Test Pit Excavation and observation
 - Geophysical testing
 - Hydrogeology Study
 - Water level and Well Condition survey
 - Observation of Borehole Drilling, Well Abandonment, Well Repairs
 - Surveying – Elevation survey of wells and associated data analysis
 - Groundwater Sampling
 - Field Supervision (monitoring, sample selection and quality control)
 - Field Equipment (consumables)
- Data Compilation/Analysis
 - Data Reduction, Analysis and Review
 - GIS Support, Site Plans Preparation
- Contract/Laboratory Fees
 - Soil and Water chemical analysis
- Administrative Assistance
- Disbursements
- Reporting

¹ Per CAN/CSA Z768-01, O. Reg. 511/09 amendment to O. Reg 153/04 as of July 1, 2011.

² Per O. Reg. 511/09.

- Qualified Person Review
- Supplemental Phase 2
 - Delineation of contamination
- Project Management
 - Meetings
 - Bid Preparation
 - Region Application
 - Bid Preparation

- **Peer Review**
 - Data Gap Analysis

NOTE: *It is the responsibility of the applicant to ensure that all Phase 2 ESA work is conducted in accordance with the O.Reg 153/04 (as amended) under the Environmental Protection Act (EPA). Applicants should refer to the Regulation (Schedule E) for specific Phase 2 requirements.*

3. Environmental Remediation Work

Environmental remediation work identified in a remediation work plan, excluding work completed prior to 12 months of filing a TIG application.

Remediation work would include, but is not limited to:

a) Remedial Action Plan/ Remedial Work Plan³

- Options Review/Assessment
- Remedial Cost Analysis
- Development of Plan

b) Risk Assessment⁴

- Preliminary RA data gap analysis
- Risk Assessment Pre-Submission for
 - Site Characterization
 - Report Review
 - Data Evaluation
 - Preparation of Figures
 - Toxicological Profiles
 - Report Preparation
 - Project Management
- Data Gap Assessment
 - Service clearances
 - Surveying
 - Drilling Services
 - Monitoring Well Supplies

³ Prepared by a Qualified Person as defined by Ontario Regulation 153/04

⁴ Prepared by a Qualified Person as defined by Ontario Regulation 153/04

- Chemical Analysis
- Field equipment
- Analysis
 - Hydrogeological Assessment
 - Ecological Risk Assessment (ERA)
 - Human Health Risk Assessment (HHRA)
 - Risk Management Plan
 - Public Communication Plan
 - Reporting and MOE Submission

c) Environmental Rehabilitation⁵

- Alternative Techniques⁶
 - Activated Carbon Treatment
 - Air Stripping
 - Bioremediation
 - Capping
 - Chemical Dehalogenation
 - Chemical Oxidation
 - Soil Excavation
 - Fracturing
 - In-Situ Flushing
 - In-Situ Thermal Treatment
 - Incineration
 - Monitored Natural Attenuation
 - Permeable Reactive Barriers
 - Phytoremediation
 - Pump and Treat
 - Soil Vapour Extraction and Air Sparging
 - Soil Washing
 - Solidification/Stabalization
 - Solvent Extraction
 - Thermal Desorption
 - Vitrification
- Geotechnical studies and shoring costs associated with the environmental rehabilitation; and
- The treatment of Designated Substances⁷ on a case-by-case basis, where required to address other contamination.

⁵ Defined as the use of various techniques to reduce, eliminate or mitigate contaminants of concern or designated substances⁵ in the ground (soil, water) or buildings to allow for the filing of a Record of Site Condition (RSC) and fulfilling the conditions of a Certificate of Property Use (CPU) if applicable.

⁶ Listed on US Environmental Protection Agency – www.clu-in.products/citguide "Citizen's Guides to Cleanup Methods". Not intended to be a comprehensive list.

⁷ "Designated Substance" means a biological, chemical or physical agent or combination thereof prescribed as a designated substance to which the exposure of a worker is prohibited, regulated, restricted, limited or controlled; (*Occupational Health and Safety Act*). O.Reg. 490/09 Designated Substances. O. Reg. 278/05 Designated Substances - Asbestos on Construction Projects and in Building and Repair Operations.

Risk Mitigation Measures (RMMs)⁸

- Pump and Treat Systems
- Capping (must be remediation related)
 - Hard cap, soil cap, landscaping
- Monitoring
 - Indoor Air Monitoring Plan
 - Groundwater
 - Soil Vapour
 - Outdoor Air
- Soil and Groundwater Management Plan
- Health and Safety Plan
- Subsurface barriers

NOTE: Only the costs associated with the implementation of these measures (such as the design costs, capital costs and installation) will be considered eligible. **Operating and maintenance costs are not eligible.** Determination of eligibility will be made on a case by case basis.

NOTE: If capping is required on the site for remediation purposes as well as redevelopment, the applicant should be prepared to demonstrate what percentage of the cost is attributed to the remediation of the site and not the overall landscaping plan. Eligible costs will be limited to the basic elements needed to meet the technical requirements of the cap as per the CPU.

d) Disposal of contaminated soil⁹

- Tipping Fees
- Trucking Fees

NOTE: Costs related to the disposal of contaminated soil may be subject to the submission and review of a soil management plan. Costs related to “impacted soil”¹⁰ are not eligible. Applicants should be prepared to provide documentation related to the segregation and tracking of contaminated soil (including hours and weigh tickets). Inadequately tracked activities may be deemed ineligible.

⁸ Risk Management Measures (RMMs) are those measures required on a specific site in order to allow filing a Record of Site Condition and outlined by a Certificate of Property Use (CPU).

⁹ Soil that does not meet the applicable generic Ontario Ministry of Environment (MOE) site condition standards (SCS) for soil as defined in Ontario Regulation 153/04 (as amended)⁹ OR the lowest effects-based property specific standards (PSS) developed through the use of a risk assessment approach completed in accordance with Ontario Regulation 153/04 (as amended), whichever is less stringent.

¹⁰ Soil that does not meet the revised Ontario Ministry of the Environment Table 1 “Full Depth Background Site Condition Standards” BUT does meet the applicable generic MOE site condition standards (SCS) as defined in Ontario Regulation 153/04 (as amended) under the Environmental Protection Act of Ontario OR the lowest effects-based property specific standards (“PSS”) developed through the use of a risk assessment in accordance with Ontario Regulation 153/04 (as amended) for the purposes of filing of a RSC with the MOE in accordance with Ontario Regulation 153/04, whichever is less stringent.



e) Placing of clean fill and grading

f) Building demolition related to remediation

NOTE: *The applicant should be prepared to demonstrate how the demolition was required as part of the remedial plan and not simply part of the overall redevelopment of the site.*

4. Indirect Remediation Costs

- Planning fees
- Legal costs
- Financing Fees associated with remediation
- Insurance Premiums
- Assessment Estimates
- Preparation of Record of Site Condition
- Certificate of Approval

NOTE: *The Brownfields Financial Incentive Program allows for a flat percentage allowance to be applied (10% for TIGs and 20% for RDC exemptions). Receipts for these costs are not required and any invoices related to the indirect costs above, will not be included in the base eligible cost calculations.*

Eligible Cost Review Process

- 1) Applicant submits all supporting documentation required for applicable incentive program
 - Remedial Work Plan/Action Plan
 - Original Cost Estimates
 - Any additional correspondence/clarification from the Qualified Person
 - Risk Management Plan
 - Risk Assessment (if applicable)
 - Certificate of Property Use
 - Hard copies of paid invoices
 - Summary of expenses

- 2) All invoices and supporting documentation should be provided in full. A summary of these invoices should also be included, containing the following information”
 - Invoice number
 - Invoice date
 - Firm name/description
 - Invoice amount (less GST or HST)
 - Activities included – description of eligible cost category and details
 - Applicability
 - Final amount (if different from above)
 - Comments/Explanation

- Please provide any outstanding information that you would like included as part of this review.
- 3) A third party audit of these costs will be required. The audit should confirm the link between direct remediation costs submitted and the work plan followed to achieve filing of the Record of Site Condition. Further, it should be carried out in accordance with the standards set out in Section 5815 of the Canadian Institute of Chartered Accountants Handbook – Special Reports - Audit Reports on Compliance with Agreements, Statutes and Regulations.
 - 4) Please submit the results of the audit in a letter prepared by an appropriate accredited professional that includes the following:
 - A review of all the documents listed above in section 1;
 - A statement confirming that all eligible remediation costs have been incurred and that no further costs related to the project are anticipated;
 - A statement confirming that the invoices submitted relate to the Risk Management Plan followed in order to achieve a Record of Site Condition and to meet the requirements of the Certificate of Property Use (CPU) for the site; and
 - A statement that the costs conform to the defined Eligible Remediation Costs as defined by the applicable incentive program.
 - 5) Once the final package is received and reviewed internally by the applicable staff, the invoices will be sign-off by Sr. Management at the Region of Waterloo (and if applicable) Sr. Management at the City.
 - 6) For the TIG program, a signed addendum outlining the agreed upon cost assessment will be added to the original TIG agreement.

NOTE: *Only costs incurred at the time of the final cost calculation date will be included.*

- *RDC Exemption. Costs must be included in Audit at time of application. Future costs will not be considered.*
- *TIG Program. Costs must be incurred prior to the approval of the final legal agreement.*