

Environmental Site Assessments
and
CEAA Screening Reports
for
Housing Related Projects

NORTHERN HOUSING CONFERENCE

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by

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PRESENTATION OUTLINE

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- What is a Phase I ESA and Why are they Important?
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Part I: Phase I Environmental Site Assessments (ESAs)

What is a contaminated site?

- A contaminated site is a property that contains substances referred to as “contaminants”. In most cases, these substances have been measured and determined to be at elevated levels above commonly accepted environmental criteria established for the protection of the environment and/or human health.
- Generally, contaminants may enter the environment from industrial or commercial operations which may not have been historically managed properly, or through an accidental spill, or improper waste disposal practices.

- Once released a contaminant can, persist, biomagnify, and/or migrate extensively, both horizontally and vertically depending on its chemical properties along with physical conditions of the environment, for examples, fractured bedrock, soil, groundwater or surface water, and moisture etc.

- Typically, there are two contaminated site processes which could be followed when assessing a property. A Phase I ESA may be required either through the federal or provincial process.
- Determination of which process to use to investigate a contaminated site, is determined by the property jurisdiction as either federal land or provincial land.
- Nonetheless, requirements for completing a Phase I ESA across Canada is standardized by the Canadian Standards Association, in a document named, Phase I Environmental Site Assessment, Z768-01 (Reaffirmed 2006).

What is a Phase I ESA and Why are they Important?

- A Phase I ESA is:
“the systematic process, by which an assessor seeks to determine whether a particular property is or may be subject to actual or potential contamination. A Phase I ESA does not involve the investigative procedures of sampling, analyzing, and measuring, unless enhancements are agreed upon between a client and an assessor” (CSA – Z768-01).
- A Phase I ESA completed in accordance with the CSA Standard, is intended to reduce, but not necessarily eliminate, uncertainty regarding the potential for contamination on a subject property.

A Phase I ESA is not:

- An environmental audit of management systems used to evaluate the environmental management and regulatory compliance of a specific operation.

Nor, is it an environmental assessment (EA).

- Both, environmental audits and environmental assessments are different processes governed under separate legislation and used for other environmental purposes.

Phase I ESAs: Why?

- A Phase I ESA may be used to establish baseline information about a property prior to development, when landuse designations change or when a property is severed.
- A Phase I ESA can be used as a planning tool for an additional investigation (Phase II); or for future property redevelopment or for remediation activities.

And...

- A Phase I ESA is usually requested whenever there is a property transaction and financing from a lending institution or insurance is needed.
- Elected by a purchaser/seller, as a demonstration of due diligence in the event of a potential re-sale or litigation.

Purpose of a Phase I ESA

- Is to identify actual and/or potential site contamination, in a clear, concise and standardized format.
- The completion of a Phase I ESA serves primarily to minimize liabilities associated with contamination, or perceived contamination on a property and can be used by property owners, purchasers, lenders and tenants to make informed decisions about property management, facility operations and investments.

Components of a Phase I ESA

There are four basic components of completing a Phase I ESA:

- Record Review;
- Site Visit;
- Interviews; and
- Reporting.

Record Review

- Includes a review of aerial photographs, property use records, a title search, previous Phase I ESA Reports, storage tank inventories, remediation reports, monitoring data, waste management records, asbestos surveys, site plans and regulatory information (such as, permits, work orders, and control orders etc.).
- The intent of the record review is to collect data on past activities on the site that could be interpreted as potential contamination from historical landuse.

Site Visit

- Includes, but not limited to, a visual inspection of structures and grounds, neighbouring properties, pits and lagoons, hydrogeologic conditions, filled or graded areas, watercourses, ditches or standing water, roads, right of ways, waste disposal/storage areas, abandoned drums of substances (identified or unidentified) and any odours.
- Observations of the interior of structures are also carried out on the subject property by the assessor. Assessors inspect the interior of buildings/structures for any indications of contamination or potential contamination.

Site Visit (Con't)

- During a site visit, the assessor is observing any signs of potential contamination from present or historical landuse activities on the subject property.
- The site visit should be completed following the record search, not before, for accuracy and verification of the record search.





Interviews

- The assessor is responsible for arranging interviews with third parties such as neighbours of the property and former employees or any representative of a site with knowledge or familiarity with historical and current activities on the property and may provide more detailed information of occurrences on the property than discovered through the record search.

Reporting

- The report documents the findings of the investigation and evaluation of results for the purposes of identifying areas of actual or potential contamination and the relative degree of uncertainty associated with evidence of potential contamination.
- Conclusions in a Phase I ESA report may state:
 - there is no evidence of contamination in connection with the property;
 - there is evidence of potential contamination in connection with the property;
 - there is evidence of actual contamination; or
 - there is evidence of actual and potential contamination in connection with the subject property.

Reporting (Con't)

- Where actual contamination is likely, a recommendation for additional investigation is prescribed (Phase II).
- In cases where there is potential contamination identified, the recommendation is often to complete a Phase II ESA, in order to reduce the level of uncertainty.

Phase II ESA and Beyond

- A Phase II ESA is:

“the systematic process, by which an assessor seeks to characterize and/or delineate the concentrations or quantities of substances of concern related to a site and to compare those levels to established criteria” (CSA Standard Z769).

Summary of Phase I ESAs

- A Phase I ESA is a systematic process which determines whether a property has actual or potential signs of contamination and does not typically involve intrusive sampling procedures characteristic of a Phase II ESA.
- A Phase I is used by property owners, purchasers, lenders and tenants to reduce, but not to eliminate uncertainty regarding the potential for contamination on a subject property.

Summary of Phase I ESAs (Con't)

- The application of completing a Phase I ESA for First Nation communities is largely required by the lending institution financing a property, or through the investigation of a contaminated site which may not have been previously known, through a private purchase or property transfer agreement.
- A Phase I ESA can limit liabilities associated with actual or perceived contamination on a property and demonstrates due diligence.
- A Phase I ESA is not an environmental audit of management systems which deals with compliance of operating systems, nor an environmental assessment (EA) of a property.

Part II: Canadian Environmental Assessment Act (CEAA) & Screening Reports for Housing Projects

- Background
- Screening Reports & Comprehensive Studies
- Recent Changes to CEAA and Regulations
- What Does this Mean?
- Implications for First Nation Housing Projects

What is CEAA?

- CEAA is federal environmental assessment (EA) legislation which was enacted in 1992. This important piece of legislation is meant to identify, consider and mitigate adverse impacts to the environment from projects, early in the planning phase before projects are implemented.
- EA of a project is an assessment of environmental effects of a project that is conducted in accordance with the Act and its regulations.

CEAA Triggers

- CEAA applies to all federal lands including reserve lands and therefore, certain projects which occur on reserve lands or are funded with federal monies are considered to see if they “trigger” CEAA under Sections 5 and 11 of the Act.
- Typically these types of projects are infrastructure projects or economic development projects which trigger CEAA through federal funding, leasing of lands, or federal regulatory action such as permitting. Whichever federal department is responsible for issuing permits or provides funding for a project which has triggered CEAA is referred to as the Responsible Authority (RA).

CEAA Exclusion

- Some projects or classes of projects are exempt from CEAA and such projects are identified in Schedule 1 of the Exclusion List Regulations (2007) and are identified as “General Projects” and as “physical work”.
- A "physical work" is something that has been or will be constructed (human-made) and has a fixed location. Examples include a bridge, building or pipeline, but do not include airplanes or ships at sea.
- Exclusion of a project is dependent upon the “physical work” meeting criteria, distance to water, footprint size, and whether the physical work is likely to release a polluting substance.

Level of Assessment

- There are four levels of EA under CEAA which are progressively more rigorous: screening level assessment, comprehensive study level assessment, mediation and panel review.
- Each level of assessment requires RAs to determine the scope of the EA, conduct an assessment, need for the project and alternatives, prepare a report which considers the environmental impacts, the significance of potential impacts, public comments, and mitigating measures of significant adverse effects.

Level of Assessment (Con't)

- Once a screening report is submitted to the RA, the RA is responsible for determining level of environmental effect.
- If there are no significant adverse environmental effects, a permit or funding may be issued. If there are significant adverse effects which can not be justified or mitigated sufficiently, then the RA must request that the project be subject to a panel review for further assessment.
- Approximately 99% of projects that trigger CEAA require a screening level assessment, which can take up to a few days to several months to complete, depending on the project (Sierra Club of Canada, 2009).
- Typically, most projects carried out on reserve lands are subject to a CEAA screening level assessment.

Screening Level Assessment

- A screening level assessment is:
“a systematic approach to documenting the environmental effects of a proposed project and determines the need to eliminate or minimize the adverse effects”.
- By completing an environmental screening of a project early in the planning phases, the project plan can be modified or alternatives considered to minimize potential environmental effects. Most projects are subject to a screening level assessment, and the responsible authority determines whether the project may proceed or to provide funding, land, or permits.

Comprehensive Study

- A comprehensive study is usually required for large projects with potential significant adverse environmental effects and may also generate public concerns.
- These projects can include oil and natural gas developments, nuclear power and hydro-electric developments (Comprehensive Study List Regs).
- Depending on the project and the significance of environmental effects, the Minister of the Environment decides if the project should continue to be assessed as a comprehensive study or referred to mediation or panel review.

Recent Changes to CEAA

- In March 2009, the Government of Canada introduced two new regulations under CEAA as part of a Regulatory Package for Infrastructure Projects.
 - Regulations Amending the Exclusion List Regulations, 2007 (“the Exclusion List Regulations”); and
 - Infrastructure Projects Environmental Assessment Adaptation Regulations (“the Adaptation Regulations”).
 - These regulations are in effect for a period of two years.

Recent Changes to CEAA (Con't)

- The new CEAA regulations are aimed specifically at infrastructure projects which are funded under the Building Canada Fund.
- The amended regulations add a number of other funds to the exemption list, including Canada Strategic Infrastructure Fund Act and Investments in First Nations Infrastructure initiatives referred to in Chapter 3 of the Canada's Economic Action Plan (Budget 2009) and an initiative administered by CMHC to provide funding for renovation and energy retrofits of off-reserve federally funded and administered social housing units.

Recent Changes to CEAA (Con't)

- The amended Exclusion List Regulations exempt a significant number of new types of projects from CEAA (refer to Schedule 4), including waste disposal sites (but only the “proposed modification to an existing waste disposal facility for the purposes of the collection, processing, diversion treatment or disposal of solid waste” – this does not include an expansion or relocation of waste or operation of a waste disposal site).

Recent Changes to CEAA (Con't)

- Waste management is included under Part VI of the “Inclusion List Regulations” for which a permit would be required for developing a waste disposal site and referenced under Part IX – Projects on Aboriginal Lands.
- Other projects exempt from CEAA, if funded under certain infrastructure programs include: public transit infrastructure, railways, highway interchanges, bridges, road widening projects and sewage treatment plants (refer to Schedule 4 – Exclusion List Regulations, 2007).

Implications for First Nations Housing Projects

- The federal budget 2009, identified significant investment in First Nations on-reserve housing. The First Nations Housing Fund created under the 2009 Economic Action Plan represents \$400 million in infrastructure funding to be allocated over two years for projects such as on reserve housing, new social housing projects remediation to existing stock and complementary housing activities. The funding is administered by INAC and CMHC.

Implications for First Nations Housing Projects (Con't)

- The recent changes to CEAA regulations has little effect on, on-reserve housing construction projects, as most projects were already exempt under section 6 of Schedule 1, of the Exclusion List Regulations 2007, provided certain criteria were met (examples: footprint size < 500 m², distance to a water body 30 m, and the project is unlikely to release a polluting substance to a water body).

Implications for First Nations Housing Projects (Con't)

- Nonetheless, the First Nations Housing Fund is identified in the amended Infrastructure Regulations. As such, subdivision or lot development projects funded separately by INAC that typically would trigger CEAA may be exempt, if funded through the First Nations Housing Fund.
- INAC should be consulted on specific projects as they are the regulatory authority to make that decision.

Conclusions

- A Phase I ESA seeks to determine whether a particular property is or may be subject to actual or potential contamination.
- Useful tool for lenders, property purchasers and owners to limit liabilities associated with actual or potential contamination.
- Does not include sampling or verification procedures.

Conclusions (Con't)

Alternatively,

- An environmental assessment of a project or “physical work” includes an evaluation of environmental effects of a proposed project. If effects are non-significant or can be mitigated to the satisfaction of the Responsible Authority, then the project may proceed.
- CEAA is triggered when federal monies or permits are required.
- Most projects are subject to the screening level assessment.
- Recent changes to CEAA and its regulations have excluded many additional infrastructure projects depending on funding.
- Housing projects on First Nation lands are excluded provided they meet criteria outlined in the exclusion list regulations.

Additional Sources of Information

- An introduction to Environmental Site Assessments (2003), Canadian Mortgage and Housing Corporation. www.cmhc-schl.gc.ca
- Phase I Environmental Site Assessment (Z768-01 Reaffirmed, 2006). Canadian Standards Association. www.shopCSA.ca
- For information related to CEAA. www.ceaa.gc.ca

For technical assistance

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