

Consolidated Clause in Works Committee Report 2, which was considered by City Council on April 25, 26 and 27, 2006.

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**The Use of Risk Assessment Approach to  
Manage Contaminated Lands Prior to  
Land Conveyances to the City Under the *Planning Act***

*City Council on April 25, 26 and 27, 2006, adopted this Clause without amendment.*

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**The Works Committee recommends that City Council adopt the staff recommendations in the Recommendations Section of the report (February 16, 2006) from the Executive Director, Technical Services.**

Purpose:

The purpose of this report is to: (a) inform Council regarding the risk assessment (RA) approach to manage soil and groundwater contamination under the new provisions of the Environmental Protection Act (EPA) and its regulations; (b) seek Council's authority to use the RA approach, under certain appropriate conditions, as one of the accepted methods to manage soil and groundwater contamination prior to land conveyances to the City; (c) define the policies for accepting the RA approach; (d) define the conditions where the RA approach may be used; and (e) inform Council of the increased scope of work of the City's environmental peer reviewers to peer review certain environmental documents associated with the RA approach in order to protect the City's interests.

Financial Implications and Impact Statement:

This report has no financial implications.

Recommendations:

It is recommended that Council:

- (1) authorize City staff to acquire lands through processes under the *Planning Act* that have been risk assessed under the new provisions of the Environmental Protection Act (EPA) and the Record of Site Condition Regulation (O. Reg. 153/04) (RSC Regulation); and
- (2) endorse the policies and conditions, as described in Appendix A of this report, specifying when it would be appropriate for the City to use the RA approach to manage environmental concerns on properties to be acquired by the City through processes under the *Planning Act*.

### Background:

During the land development or redevelopment process under the *Planning Act*, parcels of land are sometimes conveyed to the City for creating new streets, widening existing streets or developing parks.

Policies of the former area municipalities generally required “that only land having soil which meets the Ministry of the Environment’s requirements for the proposed use thereof or land remediated to that level is to be acquired by the City.” This has traditionally been interpreted to mean that all contaminated soils have to be removed and disposed of off site, and replaced with clean fill, prior to the land coming into City ownership. Most of these policies were developed prior to the 1996 Ministry of the Environment “Guideline for Use at Contaminated Sites in Ontario” and updated in 1997 (Guideline).

With the new EPA provisions and RSC Regulation, the Risk Assessment (RA) approach is becoming more widely used by the development industry for private development sites and often proposed for parcels to be conveyed to the City. Under the RA approach, detailed site specific information is used to estimate potential risks from contaminants to public health and the environment. This approach considers the types, quantity and location of the contaminants relative to any person that can come into contact with the contaminants through different pathways, e.g., skin contact, inhalation, etc. In the past, Council has given authority, on a site by site basis, to use this approach for different projects.

### Comments:

#### (1) Risk Assessment:

The Guideline provided property owners with options and guidance for restoration of contaminated sites. One option provided was to conduct site-specific risk assessments (SSRA). SSRAs underwent external peer review and were then submitted to the MOE for further review to verify that they were conducted in accordance with the Guideline.

The new Provincial legislation and RSC Regulation formalized two approaches for cleaning up or managing of contaminated sites:

- (a) Full Depth Generic or Stratified Clean Up; and
- (b) Preparation of a Risk Assessment.

The Risk Assessment (RA) approach is used when it is difficult, cost prohibitive or unwarranted to use the full depth generic or stratified clean up. Full depth clean up is the total removal of the contaminated soil and its disposal off site in special landfill sites. Under the RA approach, the landowner’s environmental consultant or Qualified Person (QP) has the option of developing property-specific standards through the preparation and acceptance of a RA by the MOE. The RA will determine if the risk to human health and the environment is significant, and provide appropriate site-specific standards for each contaminant of concern. Therefore, human health, ecological health and protection of the natural environment are considered in the preparation of the RA. As part of the preparation of the RA, the QP will determine whether there is a need for a risk management plan. A risk management plan specifies the types of site restrictions or

additional work (e.g., monitoring and reporting to the MOE), required in order not to elevate the risk level. A Certificate of Property Use (CPU) may be issued by the MOE. The CPU imposes restrictions land use, which must be followed and complied with by the current and subsequent property owners.

A major change between the Guideline and the new RSC Regulation for RA is the need for preparation and submission of a Pre-Submission Form (PSF) to the MOE under the supervision of the QP. All these requirements including the qualification of the QP are stipulated in the RSC Regulation. The Regulation also specifies the form and content of a RA for site-specific conditions in order to support the filing of a Record of Site Conditions (RSC). The PSF provides technical information regarding the site characterization, receptor characterization, planned risk assessment approach, site information including an inventory of contaminants, exposure pathways for human health and ecology, and qualifications of the QP. It is an important part of the RA process as the MOE comments on the scope and the approach the RA as well as the qualification of the QP. The MOE will not accept an RA for review until the PSF has been submitted, reviewed and commented on by the MOE. It is at this stage that the City staff and our peer reviewer must be involved to ensure the scope, approach and assumptions are acceptable to the City staff prior to the QP conducting the RA. At the end of the RA process, the peer reviewer will also need to review the risk management plan and CPU, if any, to ensure they do not restrict the use of the intended use of the land and any risk management measures have no significant cost impact.

(2) City's Policies Regarding Land Conveyances Under the *Planning Act*:

The acceptance of the RA approach should be based on the following:

Policies:

- (1) The City may, under the conditions noted below, accept contaminated lands that have been risk assessed, and where the RA and the risk management plan have been approved by the MOE.
- (2) The City's decision is final regarding whether the lands are acceptable from an environmental perspective for conveyance to the City.
- (3) The decision to accept risk assessed land is delegated to the Executive Director, Technical Services and in consultation with the General Manager of Parks, Forestry and Recreation where it is a parkland dedication.
- (4) The site condition standards must meet the standards of the intended land use or the most sensitive adjacent land uses, whichever are more stringent.
- (5) Any deviation from the above policies and/or the following conditions will require approval by Council.

Conditions:

- (1) Only in-situ contaminated materials are to remain in the lands to be conveyed, (i.e., new contaminated soil cannot be imported and buried in the lands to be conveyed).
  - (2) All Phase I and Phase II Environmental Site Assessment reports, the Pre-submission Form (PSF), risk management plan, Certificate of Property Use (CPU), if any, and Record of Site Conditions will be submitted to the City for peer review and concurrence, in accordance with the City's Harmonized Peer Review Process.
  - (3) The owner will be responsible for all costs associated with the peer review, including the City's administrative fee of 7 percent of the peer review service.
  - (4) The PSF must consider the future use of the conveyed lands including construction workers in trenches as potential receptors, and the presence of underground municipal services and private utilities.
  - (5) There is to be no risk management measures or CPU associated with the conveyed lands that will impact or restrict the intended use of the lands or will result in any significant future cost implication to the City.
  - (6) MOE approval of the RA and acknowledgement of the RSC for the conveyed lands are required.
- (3) Other Risk Assessment Examples:

The Risk Assessment approach (or Site Specific Risk Assessment approach under the 1996 MOE Guideline) has been approved by Council in the past. Examples include the lands for Lake Shore Boulevard East right-of-way as part of the Gardiner Expressway East Dismantling project, 28 Bathurst Street as part of the Front Street extension, Ambercroft Subdivision (Main & Gerrard) for the parkland, 1015 Lake Shore Boulevard East (Canadian Tire site).

- (4) Increased Scope of Work for the Environmental Peer Reviewers:

Clause 5 of Report 7 of the Works Committee adopted by Council at its meeting on June 18, 19 and 20, 2002, describes the Harmonized Peer Review Process. In that report, it states that Site Specific Risk Assessment will not be peer reviewed as the MOE reviews these environmental reports. Under the RSC Regulation, the MOE will continue to review the Risk Assessment reports. However, staff consider it prudent where land is being conveyed to the City to include the Pre-Submission Form, the risk management plan and CPU, if any, and the RSC in the list of environmental documents to be peer reviewed. This ensures the assumptions regarding future use of the land, receptors, types and levels of contaminant and potential risk management measures are acceptable and consistent with City's policy and conditions. The City's peer reviewers will not be required to peer review the full Risk Assessment report, which will be accepted by the MOE.

Conclusions:

The new EPA provisions and RSC Regulations permit the use of a risk assessment approach as an option to managing soil contamination. Under the appropriate site conditions, the RA approach may be accepted as an alternative option to the traditional “dig and dump”. It can ensure adequate protection to the general public and construction workers without unnecessarily increasing the cost of development or taking up valuable landfill resources or trucking contaminated materials through the City. The RA process is more prescriptive under the new EPA provisions and RSC Regulations, thus ensuring a more rigorous process and significantly reducing the risk exposure to the City.

Instead of seeking Council’s approval to use the RA approach on a site by site basis, this report recommends that this authority be delegated to staff when the policies and conditions in Appendix A are met. This delegated authority is estimated to eliminate about 20 individual reports per year for RA approach.

This approach has been discussed with other divisions in the City and no concerns have been raised. Specifically, Facilities and Real Estate is also considering using the same approach for land transactions when the conditions are appropriate. This report has been reviewed by Legal Services and Parks, Forestry and Recreation, and was found to be acceptable.

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Attachment:

Appendix A - Policies and Conditions for the Acceptance for Risk Assessed Lands for Conveyance to the City of Toronto

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Appendix A

Policies and Conditions for the Acceptance for Risk Assessed Lands  
for Conveyance to the City of Toronto

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