




# INFORMATION REPORT

<b>TO:</b>	Chair and Members Planning Committee
<b>COMMITTEE DATE:</b>	March 21, 2023
<b>SUBJECT/REPORT NO:</b>	Integrating Health & Environmental Requirements to Demolition Permits (PED23066) (City Wide) <b>(Outstanding Business List Item)</b>
<b>WARD(S) AFFECTED:</b>	City Wide
<b>PREPARED BY:</b>	Jorge Caetano (905) 546-2424 Ext. 3931
<b>SUBMITTED BY:</b>	Alan Shaw Director, Building and Chief Building Official Planning and Economic Development Department
<b>SIGNATURE:</b>	

## COUNCIL DIRECTION

On February 10, 2021, Council provided the following direction to staff:

- (a) That the General Manager of Planning and Economic Development draft a letter to the Ministry of Municipal Affairs and Housing requesting demolition requirements, under the Ontario Building Code be expanded to include a mandatory notification to all neighbouring properties, in writing, of the date and time that a commercial or industrial demolition is to take place which includes:
  - (i) the previous use of the site to be demolished;
  - (ii) a list of any potential contaminants which could become airborne or enter Hamilton's waterways or soil;
  - (iii) the potential human health impacts of contamination; and,
  - (iv) a detailed action plan to mitigate all potential impacts to human health, air quality and waterways or soil.

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OUR Vision: To be the best place to raise a child and age successfully.

OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

- (b) That Public Health Services work with the Building Division to:
  - (i) determine the size, scope, building-types of commercial and industrial demolitions that present the highest risk to human health;
  - (ii) determine application requirements for permit approval for any higher risk demolitions that qualify, such as:
    - (1) ensure that a designated substances survey (DSS), as defined within the Occupational Health And Safety Act, has been completed prior to demolition;
    - (2) an appropriate dust management plan will be implemented during demolition; and,
    - (3) inform mitigation requirements of human health impacts.
  - (iii) review the dust mitigation plan with the Building Division before final approval.
- (c) That the Building Division be directed to:
  - (i) review the current demolition permitting process of other Ontario Municipalities which account for human health and environmental impacts and make relevant adjustments in accordance with the Ontario Building Code including but not limited to the above; and
  - (ii) report back with final recommended revisions to the City of Hamilton Building & Demolition Permit.

This report will address the above noted directions.

## **INFORMATION**

### **Background**

This Report has been prepared in response to concerns raised by Council and the general public related to the demolition of commercial and industrial buildings. Below is the response from the Building Division and Public Health Services to each of the directions given by Council.

**Sub-Section (a) – Letter to the Ministry of Municipal Affairs and Housing**

A letter has been sent to the Ministry of Municipal Affairs and Housing by the General Manager of Planning and Economic Development Department requesting an amendment be made to the Ontario Building Code requiring mandatory notification of pending demolition to all neighbouring properties, including the time that a commercial or industrial demolition will take place. Additionally, Council directed that such notice is to include the additional requirements outlined in clauses (i) to (iv) of sub-section (a) of the Council Direction given at the beginning of this Information Report.

**Sub-Section (b) – Public Health Services Comments on Demolition Process**

Public Health Services staff worked with Building Division staff to provide the following responses to clauses (i) to (iii) of sub-section (b) of the Council Direction:

*(i) determine the size, scope, building-types of commercial and industrial demolitions that present the highest risk to human health.*

There is little published literature that directly addresses the question “what size, scope and type of building demolition presents the highest risk to human health?”, from a public health perspective. The available literature related to demolition activities and risk to health, safety and environment is primarily limited to the demolition site and workers, not the public and surrounding environment.

Available literature from well-documented studies of public health impacts associated with demolition practices are related to hazards such as lead (Pb), asbestos, mercury, silica dust and other contaminants that are identified as ‘designated substances’ under O. Reg. 490/09 under the *Occupational Health and Safety Act*.

*The National Building Code of Canada (2020)* includes provisions for “Protection of the public” at demolition sites that primarily addresses prevention of physical injury to the public related to the demolition site activities (i.e., fencing and barricades; traffic control; control of waste material).

Despite the lack of evidence contained within the literature, there is existing legislation in Ontario that define physical characteristics of buildings during demolition. Section 6 (c) of O. Reg. 213/91 - Construction Projects, under the *Ontario Occupational Health and Safety Act* states that if “*the work is the demolition of a building at least four metres high with a floor area of at least thirty square metres;*”, the project must be registered with the Ministry of Labour.

*(ii) determine application requirements for permit approval for any higher risk demolitions that qualify, such as:*

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*(1) ensure that a designated substances survey (DSS), as defined within the Occupational Health and Safety Act, has been completed prior to demolition.*

The Ontario *Occupational Health and Safety Act* requires that a list of all designated substances at a project site be provided to all bidders at the tendering stage.

Sec. 30 (1) of O. Reg. 490/09 - Designated Substances, under the *Act*, states: “Before beginning a project, the owner shall determine whether any designated substances are present at the project site and shall prepare a list of all designated substances that are present at the site.”

A Designated Substances Survey includes a visual inspection (walk-through) of the site, to identify the readily-accessible areas for the presence of designated substances used in building and construction materials and equipment. Accordingly, assessment of the type, characteristics and condition of the building materials and collection of sample materials for subsequent laboratory analysis.

The result is a Designated Substances Survey (Assessment Report) that outlines materials of concern on the job site, lab analysis and results of materials tested, overall discussion of the materials (types, locations) found in the job site and conclusions/recommendations made according to these observations and testing.

Thus, in properly identifying these other Hazardous Materials on a project work site, work procedures and proper waste handling guidelines can be determined to minimize possible health and environmental impact.

*(2) an appropriate dust management plan will be implemented during demolition;*

In Ontario, Professional Engineers are subject to regulation under the *Professional Engineers Act, 1990*. Performance standards for building construction, enlargement, alteration and demolition are detailed within O. Reg. 260/08 – Performance Standards, under the *Act*.

As per Sec. 3 (2) (vi) of O. Reg. 260/08, “*The professional engineer, limited licence holder or provisional licence holder shall include in a demolition plan made with respect to the demolition of a building or structure, a description of any environmental hazard that would or could arise as a result of the demolition, and of the measures necessary to address the hazard*”

In addition to the provincial regulation referenced above, Hamilton Public Health Services staff have worked with Clean Air Hamilton to develop a best practices handbook for the reduction of air emissions from construction and demolition activities (see Appendix “A” to Report PED23066).

*(3) inform mitigation requirements of human health impacts.*

As per the Ontario Ministry of Labour's *Occupational Health and Safety Act, 1990*, and the Ministry of Environment, Conservation and Parks' *Environmental Protection Act, 1990*, protection of impacts to human health and the environment are provided therein. If demolitions are performed in accordance with provisions of the *Acts* and their associated regulations, human health impacts will be mitigated.

*(iii) review dust mitigation plan with the Building Division before final approval.*

Public Health Services is not an approving authority for the issuing of a demolition permit under the OBC. Additionally, Public Health Services is not the approving authority for dust management plans for demolitions, or other projects related to land development and construction.

As noted earlier in this report with respect to developing a demolition plan, Professional Engineers in Ontario are subject to O. Reg. 260/08, which requires the Engineer to *"include in a demolition plan made with respect to the demolition of a building or structure, a description of any environmental hazard that would or could arise as a result of the demolition, and of the measures necessary to address the hazard"*

### **Sub-Section (c) – Building Division Review of Demolition Permit Process**

Demolition Permits are regulated under the *Building Code Act*, which establishes what authorities the City has with respect to demolitions.

In order to secure a Demolition Permit, an applicant must do the following:

- Complete a demolition permit application form
- Provide a site plan showing the location of buildings to be demolished
- Provide confirmation that utilities have been disconnected (applicant must submit a completed "Disconnection of Services" form)
- Provide a Commitment to General Review Form, where the demolition is being reviewed by a professional engineer
- Complete an Application Demolition Checklist
- Pay the required permit fee

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In addition, Article 1.2.2.3. of Division C of the Ontario Building Code states that:

- “(1) The applicant for a permit respecting the demolition of a building shall retain a professional engineer to undertake the general review of the project during demolition, where,
- (a) the building exceeds 3 storeys in building height or 600 m<sup>2</sup> in building area,
  - (b) the building structure includes pre-tensioned or post-tensioned members,
  - (c) it is proposed that the demolition will extend below the level of the footings of any adjacent building and occur within the angle of repose of the soil, as drawn from the bottom of such footings, or
  - (d) explosives or a laser are to be used during the course of demolition.”

Additionally, where a professional engineer is required to review the project during demolition the professional engineer must complete and submit a Commitment to General Review form at the time of application which states that they have been retained to provide general review during demolition.

Under the Ontario Building Code, the Demolition Permit holder is not required to call for City inspections during the demolition. They are only required to call once the demolition has been completed. The City of Hamilton would then confirm that the building has been demolished and the site made clear.

It is not within the City’s authority to attach additional conditions to the Demolition Permit, such as when the demolition can occur, required weather conditions, etc. It is up to the demolition contractor, together with the consulting engineer, to determine when, and how, to best to carry out the demolition taking into account dust suppression, weather conditions, proximity to other buildings, noise, etc. However, the following Provincial Ministries do have separate dust regulations in the Province of Ontario which must be complied with during demolition.

The Ministry of Environment, Conservation and Parks (MOECP) requires owners to have a plan to control emissions from their site, and to meet Section 49 of Ontario Regulation 419/05 (regulation made under the *Environmental Protection Act*) which states that no contaminant shall be carried beyond the limits of the property on which the demolition is taking place unless every step necessary to control the emission of the contaminant has been implemented. Meeting these provisions is the responsibility of the owner and their consulting engineer.

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The Ministry of Labour regulates dust if it is a hazard to workers under the *Occupational Health and Safety Act*. Under this Act, dust must be adequately controlled, or workers must be given personal protective equipment to ensure their health and safety. Residents or workers may contact the Ministry of Labour's Health and Safety Contact Centre to inquire about workplace health and safety, and to report unsafe work practices.

The Professional Engineers of Ontario have also published a Guideline dated June 2022 titled "Professional Engineers Providing Services for Demolition of Buildings and other Structures". The purpose of this guideline is to offer professional engineers with guidance on the level of diligence they should provide during the demolition of buildings or structures.

Even though the requirement for dust control measures are outside the scope of applicable law under the *Building Code Act*, the Building Division currently attaches an information sheet with all building and demolition permits in order to remind permit applicants that there may be other legislation (MOECP, Ministry of Labour, etc.) that their project may be subject to.

In order to address concerns raised by Council and the general public related to demolition of commercial and industrial buildings, Building Staff have had several meetings with Public Health Services, Ministry of the Environment, Conservation and Parks, and the Ministry of Labour regarding this issue. These meetings started in late 2019, however, they were put on hold during the COVID-19 shutdown from March of 2020 until earlier this year. As a result of these discussions the following changes were made to the demolition permit application process in order to clarify the different regulations (outside of the Ontario Building Code) that may also apply to the proposed demolition and to ensure the applicants for demolition permits were aware of their duty to ensure these regulations were followed:

- At the time of Permit application, a completed Demolition Application Checklist must be completed by the owner, or authorized agent of the owner, requiring them to answer specific environmental consideration questions and advising them of other legislation that apply to their demolition, and who to contact (MOECP, Ministry of Labour) for additional information.
- We have now put in place a process where the MOECP is notified of all commercial and industrial demolition permits issued by our Division to provide them with a notification of upcoming demolitions.

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- The Building Division is also making available at our front counter copies of the “Contractor’s Environmental Handbook, Best Practices for the Reduction of Air Emissions from Construction and Demolition Activities” (see Appendix “A” to Report PED23066).

These changes have been made to ensure applicants for demolition permits are made aware that there are other regulations and environmental considerations that apply to their demolition site in addition to the *Building Code Act*.

Given this information, it is recommended that this item be removed from the Outstanding Business List.

**APPENDICES AND SCHEDULES ATTACHED**

Appendix “A” to Report PED23066 – Contractor’s Environmental Handbook: Best Practices for the Reduction of Air Emissions from Construction and Demolition Activities