

Risk Assessment for 70 Norwich Street East, Guelph, Ontario  
June 2017

This communication is in respect to part of the property located at 70 Norwich Street East, in the City of Guelph, Ontario. The property (hereafter referred to as 'the Site') is located on the west bank of the Speed River (approximately 0.5 km northwest of downtown Guelph) and it is primarily used as a park/recreational area (land use is considered to be parkland). The northern portion of the Site is occupied by the stone wall ruins and tall brick chimney of the historic Goldie Mill, which was initially built in 1850 and some time later destroyed by fire. The southern portion of the Site is grass/landscaped. The City of Guelph's "Downtown Trail" / "Royal Recreation Trail" that extends along the west bank of the Speed River passes through the Site. The Site is owned by the Grand River Conservation Authority (GRCA). The park is managed and operated by the City of Guelph.



*Figure 1. Site Located at 70 Norwich Street East, Guelph*

According to historical records, the Site has been used previously as a sawmill and for various other manufacturing activities (e.g., as a foundry, a cooperage, a distillery, a piggery, and a tannery). The Site was first developed in 1827, as a wood sawmill. This original sawmill was destroyed by fire in 1850 and following this it was rebuilt using stone materials. A second major fire destroyed the sawmill in 1864. James Goldie purchased the property in 1866 and subsequently rebuilt and enlarged the stone building in 1867. The sawmill continued to expand until 1918 when it was sold to a new owner. The mill operated until a spring flood in 1929 destroyed the dam. A third major fire destroyed a portion of the mill in 1953, and following this incident it has been subsequently maintained as a ruin by the **Grand River Conservation Authority (GRCA)**.

Englobe (2016), who were contracted by GRCA, completed a limited-scope Phase II ESA in December 2016 designed to investigate the potential impacts to the environmental quality of soil at the site that had been identified during the completion of a previous Phase I ESA.

Based on Englobe's investigations, the soil analytical results indicated that the concentrations of various parameters exceed the applicable regulatory guidelines set out by the Ontario Ministry of the Environment and Climate Change (MOECC). The soil parameters exceeding their guidelines were identified as: metals and inorganics, polycyclic aromatic hydrocarbons, petroleum hydrocarbons and benzene, toluene, ethylbenzene and xylenes (referred to as BTEX fractions).

**The area that has impacts has been fenced off, and we are in the process of completing additional investigations (including collecting more soil samples).**

**A Risk Assessment (a type of investigation that focuses on determining whether there are potential concerns for human health or the environment) has already been completed for part of the Site. We are in the process of updating the RA based on new information that is obtained for other areas of the Site.**

NovaTox Inc., on behalf of the **GRCA**., prepared a **risk assessment** (RA) for the Site, in order to ensure the chemicals identified at the Site pose no unacceptable risk to human health or the environment. We have been in contact with the Ontario Ministry of the Environment as well as the City of Guelph, who are aware of the current site conditions.

Several receptor groups were assessed using very conservative exposure assumptions. The users included those that might visit the site frequently (recreational users), City or Park workers, and Construction workers that may be involved in clean-up/ remediation or other intrusive activities.

There are no immediate concerns for the safety of individuals, and the overall potential risks estimates that were derived by **NovaTox** are considered to be moderate. Historically users of the Site are not expected to have had direct contact with contaminated soil at the Site, as the majority of impacts are found at depth, and the existing walking pathways include the use of soft capping measures.

Risk assessment is a scientific process which has been established by the Ontario Ministry of the Environment to determine the potential risk of exposure with the identified chemical impacts in soil on the people who may use the Site, in addition to ecological receptors (plants and animals) that may be present. Where unacceptable risks to human or ecological receptors are identified, a suitable Risk Management Plan is typically developed for the site.

Risk management refers to the development and implementation of a decision, strategy, or technique to limit or manage the level of risk estimated by the risk assessment process. The Risk Management Measures adopted for the Site must be designed to prevent, eliminate, or ameliorate unacceptable risks to human and ecological health. Such measures may include strategies, controls, or techniques to limit the movement of contaminants or to limit the potential for receptors to be exposed to the contaminants. The Risk Management Measures must remain in place until such time that the concentrations of chemicals no longer pose a risk to the anticipated human or ecological receptors that may frequent the Site. Such a reduction in contaminant concentrations may occur through a variety of means, including natural attenuation processes, or a blocking mechanism to prevent human or ecological receptors from being exposed to the contaminants of concern found in soil or groundwater at the Site.

**Why are we posting this information**

The legislative and regulatory requirements for assessing the environmental conditions of a site, the clean-up of brownfields sites, and the filing of a Record of Site Condition (RSC), are set out under Parts XV.1 and XV.2 of the *Environmental Protection Act* and Ontario Regulation 153/04 – Records of

Condition, as amended by Ontario Regulations 511/09 and 269/11 made under the *Environmental Protection Act*.

Under Ontario Regulation 153/04 (as amended), some Sites may be identified by the MOE as being located within a "Wider Area of Abatement." This designation is based on off-site regional information including individual properties surrounding the Site and considering the potential for additional responsible parties and multiple affected parties. While we are currently not required to notify the Ministry regarding this Site, we are voluntarily choosing to work with the City and the Ministry to ensure that appropriate procedures are put into place to address this Site and to ensure that there are no unacceptable risks to users of the Site in the future.

In addition, risk assessments for these types of minor impacted sites sometimes require additional consultation with the MOECC as well as the surrounding property owners (including the City of Guelph) and other interested parties or stakeholders.

As a recreational land user and stakeholder, you are being notified of the risk assessment as part of a voluntary public consultation process. The purpose of the public communication program is to:

- Ensure that stakeholders are primarily aware that a risk assessment process is currently underway at the Site;
- Provide an opportunity for engagement of the public with clear rules and expectations for process; and
- Address stakeholder concerns before the final risk assessment or risk management plans and approaches are finalized.

On behalf of the **GRCA., NovaTox Inc.**, a specialized risk assessment and environmental toxicology consulting firm, has initiated the risk assessment process and will provide assistance to other consultants that are responsible for completing the additional environmental investigations at the Site. NovaTox, as one of the environmental consultants for **GRCA.**, is available to answer any questions or comments regarding the risk assessment, which is on-going. Representatives of the **GRCA** also are available for questions related to the Site. Our contact details are provided below.

Upon completion of the additional environmental investigations, and any additional risk assessment, the reports will be submitted to the Ontario Ministry of the Environment and Climate Change.

**Contact for More Information**

Please direct your enquiries to the contact persons identified below.

For questions concerning the risk assessment, contact:

Mr. Mark Chappel, M.Sc., DABT, QP<sub>RA</sub>  
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For questions concerning the site conditions and sampling program, contact:

**Grand River Conservation Authority**  
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***NovaTox Inc.** operates a leading risk assessment and environmental toxicology consulting business, providing multi-disciplined solutions world-wide covering all aspects of environmental toxicology, environmental risk assessment, human health toxicology, industrial hygiene, environmental permitting, industrial permitting and biological services.*