
REPORT TITLE: Update on the Implementation of Ontario Regulation 406-19 On-Site and Excess Soil Management

FROM: Kealy Dedman, Commissioner of Public Works

RECOMMENDATION

That the Region of Peel and Credit Valley Conservation Authority partner to study the Beneficial Reuse of Excess Soil for the Pinchin Pit and Capstone Property (Flaherty Pit West) in the Town of Caledon, and enter into a Memorandum of Understanding on business terms satisfactory to the Commissioner of Public works and on legal terms satisfactory to the Regional Solicitor;

And further, that funds under Capital Project 21-9090 in the amount of \$540,000 be used to fund the study costs.

REPORT HIGHLIGHTS

- In November 2020, staff reported the requirements of the new On-Site and Excess Soil Management Regulation (O.Reg. 406/19) to Regional Council. The first phase of the Regulation was implemented in January 2021 and the remaining phases will be implemented over the next five years.
- Staff has assessed the impacts to business practices and identified improvements to several areas required to ensure compliance with the Regulation.
- These focus areas include the Beneficial Reuse of Excess Soils, Qualified Persons Oversight and Documentation, Tracking and Registration of Excess Soil.
- The Region is actively exploring partnership opportunities with local municipalities, conservation authorities and private industry to find potential sites for beneficial reuse opportunities and to reduce costs.

DISCUSSION

1. Background

In December 2019, the provincial government passed the On-Site and Excess Soil Management Regulation (O. Reg 406/19) under the *Environmental Protection Act* to support the improved management of excess construction soil. The new Regulation supports the proper management of excess soil, recognizes excess soil as a valuable resource and will prevent the improper disposal/reuse of the soil, which will inhibit contamination of clean sites alongside reducing illegal dumping. The new Regulation also provides clarification on the responsibilities for both generators and receivers of excess soil in Ontario, and it will be implemented using a multi-phased approach over the next five years.

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In November 2020, staff reported the requirements of the new excess soil regulations to Council and provided a detailed overview of the impacts and obligations of the Region to ensure compliance. This report is a follow up to previous reports and provides a detailed overview of the initial impacts of the regulation and an overview of next steps.

2. Findings and Proposed Direction-Focus Areas

a) Beneficial Reuse of Excess Soil

The Region continues to explore partnership opportunities that will assist in the beneficial reuse of excess soil generated by Peel's capital works projects, reduce project costs related to soil transport, reduce greenhouse gas emissions from shorter transport distances, improve onsite soil conditions and provide a necessary resource to the operation of these facilities.

Staff has identified opportunities at the Region's landfill sites and evaluated each site. The facility that presented the best opportunity for ease of transition, operation and management of excess soil is the closed Chinguacousy Landfill Site.

This facility has the potential capacity to accept excess soil from capital projects for approximately one to two years. The project, which includes community engagement, detailed design, approvals, leachate remediation, soil placement and final site restoration is identified in the 2022 Capital Budget.

Staff has also identified an opportunity with Credit Valley Conservation (CVC) and is recommending a partnership on two potential sites. CVC owns and manages two former aggregate sites in the Town of Caledon - Pinchin Pit and the Capstone Property (previously known as Flaherty Pit West). These properties have been identified as priorities for enhanced ecological restoration as well as future Credit Valley Parks. The acceptance of clean fill to these two properties will facilitate their enhanced restoration, while providing the Region of Peel with a dedicated and reliable fill site for five to seven years and establishing a sustainable funding source for the restoration and management of these two properties.

CVC has initiated a Restoration Feasibility Study (RFS) that will evaluate the technical, cultural, and economic viability of bringing in fill and restoring these properties. The RFS will identify potential impacts and evaluate risks to inform the decision of whether, and how, to advance to detailed design and ultimately implementation of the restoration plan. The fill capacity at these two sites is estimated at 2.9 million tonnes (approximately 2,336,000 tonnes at Pinchin Pit and 572,000 tonnes at Capstone Property). The RFS will include a number of studies and will be undertaken in conjunction with extensive agency, public, stakeholder and Indigenous engagement. If the feasibility studies are favourable, fill material may be brought to these facilities commencing in 2023 and the long-term costs associated with the beneficial use will be funded by applicable capital projects using the facility.

As the Region would be the beneficiary of these facilities, CVC has requested that a Memorandum of Understanding (MOU) be entered into and funds be made available in the amount of \$540,000, from Capital Project 21-9090.

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b) Business Impacts – QP Oversight, Compliance and Documentation, Tracking and Registration

As previously reported to Council, the Regulation will be implemented using a phased approach over the next five years, with three milestones (2021, 2022 and 2025). Below is what is expected at each stage of implementation:

Legislative Requirements		
January 1, 2021	January 1, 2022	January 1, 2025
<ul style="list-style-type: none"> Waste designation Soil rules for receiving sites Verbal tracking of soil loads leaving Regional sites 	<ul style="list-style-type: none"> Formal documentation system to track soil loads leaving Regional sites Reporting into the Provincial soil registry Written approvals from receiving site before soil is moved from Regional sites Retention of Qualified Persons to ensure compliance with the regulations Ensure soil transport does not contribute to local issues like noise, dust, truck traffic, road damage, erosion, drainage, social, economic, health and environmental concerns 	<ul style="list-style-type: none"> Restrictions on landfilling clean soil

The first stage of the regulatory implementation commenced in January 2021. Initial impacts required the Region to develop new procedures that provide oversight of excess soils including retaining Qualified Persons for all capital projects, reviewing and revising current processes and practices to adhere to the Regulation, updating current agreements and contract language, providing overarching project oversight for the new Regulation and educating capital project staff on the Regulation. The Region remained in compliance with all 2021 regulatory requirements. The initial impacts of the regulation were absorbed by existing resources and staff will continue to assess impacts including possible need for additional staff resources.

Regional consultants and contractors must also understand the new Regulation, applicable environmental legislation, and municipal by-laws for environmental requirements. Qualified Persons must oversee the required testing, tracking and documentation for all reuse soil, traffic and transportation plan, evidence documents to support compliance with the Regulation and verbal hauling information, where haulers are required to provide key information on the soil loads.

The second stage of the regulatory implementation requires a more comprehensive undertaking to ensure compliance with the more onerous regulatory requirements of 2022. This requires the Region to develop a documentation, tracking and registration system to track each load of excess soil from the source site to the receiving site. Regional consultants and contractors must understand the requirements of the new Regulation, applicable environmental legislation, and municipal by-laws for environmental requirements.

Qualified Persons must oversee and prepare the required planning documents which includes the assessment of past uses, sampling analysis plan, soil characterization report and excess soil destination assessment report. The Qualified Person is also required to complete the testing, tracking and documentation for all excess soil generated from regional projects, and evidence documents to support compliance with the regulation.

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The Region will need to ensure that Qualified Persons are retained for all capital projects to ensure the above is completed in accordance with the Regulation. Currently, due to the grandfathering clause, which allowed projects tendered and awarded prior to January 1, 2022 to be exempt from the planning process of the Regulation, capital projects did not need to comply with the more stringent requirements of 2022 and the use of a Qualified Person was limited to specific requirements. As the Region move into the next phase of the implementation of the Regulation, there will be more projects requiring a greater need for Qualified Persons. A more detailed assessment will be completed next year to assess the resource impacts across the Region due to the implementation of the Regulation. Based on the foreseen number of capital projects completed yearly, an internal Qualified Person will need to be retained to oversee the excess soil requirements for all capital projects, including the documentation, tracking and registration components of the Regulation and to oversee the beneficial reuse sites. The Region will also need to ensure that the movement does not excessively contribute to local issues like noise, dust, truck traffic, road damage, erosion, drainage, social, economic, health and environmental concerns.

The Region will be jointly procuring with the lower-tier municipalities to retain one vendor to complete the digital tracking of excess soil. The procurement is estimated for Q4 of 2021. The advantages of retaining one vendor will ensure consistency of projects throughout the Region and ensure maintaining compliance with the Regulation.

RISK CONSIDERATIONS

Current industry practices may lead to improper management of excess soil, which can negatively affect ground or surface water quality. Excess soils placed in natural areas and agricultural lands can also have detrimental impacts. The movement of soil is also associated with local issues like noise, dust, truck traffic, road damage, erosion, drainage and other social, economic, health and environmental concerns.

The Regulation includes more stringent testing requirements and excess soil quality standards. The subsequent risk and uncertainty arising from these regulatory amendments, stringent testing requirements and excess soil quality standards and the inconsistent reuse site requirements will ultimately increase the costs to capital projects.

The Region has identified three sites that could result in a potential cost avoidance of between \$8-10 million. However, the lengthy community engagement, detailed design and approvals process of the sites may impact implementation.

FINANCIAL IMPLICATIONS

Staff continue to assess the impacts of the Regulation by reviewing and adjusting current business processes, amending construction contracts, assessing receiving sites, developing partnerships and evaluating strategic considerations as noted above.

Current annual haulage costs for Regional capital projects are estimated at \$20 million. The new regulatory requirements that include additional project oversight, testing, tracking and documentation will increase these costs further. The extent of these impacts is being assessed, however preliminary estimates indicate an additional one to three per cent increase in overall

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capital project costs, not just the haulage costs. The new Regulation also increases the amount of staff time needed to provide general project management services to support capital projects which generate excess soils. These increases will be captured in future budget submissions as the new Regulation is phased in.

Sufficient funding is available under the capital project to carry out the report direction.

CONCLUSION

The protection and conservation of soil is a valuable component of maintaining the environment for present and future generations. The new Regulation, O. Reg 406/19, is a key step to support proper management of excess soils, ensuring valuable resources are not wasted.

The new Regulation will have a significant impact to the Region and the construction industry. Staff will continue to assess the impacts of the more stringent oversight, testing, tracking, and documentation requirements mandated by the regulation.

Given the Regulation will be implemented using a multi-phased approach over the next five years, staff is committed to continue working collaboratively with industry, local partners and municipalities.

It is recommended that the Region of Peel and Credit Valley Conservation partner to study the Beneficial Reuse of Excess Soil and Enhanced Restoration for the Pinchin Pit and Capstone Property (Flaherty Pit West) in the Town of Caledon.

Staff will report back to Council as needed throughout the implementation process.

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