

# MEMORANDUM

**TO:** Jay Barbeau, CAO

**FROM:** Elizabeth Henning, P. Eng Director of Infrastructure

**DATE:** December 31, 2024

**RE:** Non Hazardous Contaminated Soil

Recently there has been public concern regarding the role of West Nipissing in the Remediation Project taking place at the Serpent River, former Cutler Acid Plant; this is a large Federally Funded remediation project designed to clean up impacted soils off the Serpent River First Nation Land.

As per Environmental Compliance Approval (ECA) Number 3130-54MQ4X, under Service Area and Waste Types, section 27(c), the West Nipissing Landfill Site can accept Non-Hazardous Contaminated Soil (NHCS) from The Province of Ontario for daily use as cover, providing it is tested and determined to meet the quality of solid non-hazardous in accordance with Ontario Regulation 558/00.

NHCS is determined through testing. This testing determines if the soil is NHCS or hazardous waste. This determination can only be completed through a professional Engineering Firm, and is completed through a series of soil tests called Toxicity Characteristic Leaching Procedure (TCPLs). For example the TCPL of the soil received from Serpent River showed levels of Arsenic ranging from 67-430ug/g and NHCS allows for up to 2500ug/g of Arsenic in the soil, levels over 2500ug/g would be considered Hazardous waste and would need to be taken to an appropriate facility.

Once the NHCS are accepted an area is assigned within the landfill boundaries to allow the soils to sit for a designated period of time. The landfill is subject to extensive testing of the both the ground and surface water which is conducted twice a year in the Spring and Fall by our retained Engineering Firm. 27 ground water wells and 12 surface water locations located in various locations within the landfill site and outside of its boundaries are tested for such parameters as aluminum, arsenic, barium, boron, cadmium, chromium copper, iron, lead, mercury, sodium, zinc, alkalinity, ammonia, BOD, COD, chloride, nitrate, phenols, phosphorus, vinyl chloride, dichloromethane benzene, toluene and dichlorobenzene. In addition to this, submitted yearly to the MECP is an Annual Monitoring Report. This report includes the results of the Spring and Fall ground and surface water monitoring results (The landfill is designed so that all water flows south away from the Sturgeon River), a detailed inventory of received waste and recyclable material quantities including solid non-hazardous residential (household garbage) commercial and institutional waste (construction material), solid non-hazardous industrial waste (garbage from

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schools and hospitals), non-hazardous contaminated soils and scrap metal, electronic waste, tire recycling and blue box materials.

Not only does NHCS provide much needed cover for the landfill, it is also a revenue source, which helps offset the cost of Environmental Services to the tax payer. Over the past 5 years the revenues collected were as follows:

- 2024 - \$237,378
- 2023 - \$17,835
- 2022 - \$45,375
- 2021 - \$261,230
- 2020 - \$87,600
- 2019 - \$207,795

Regards,

Elizabeth Henning P. Eng  
Director of Infrastructure