



TOWNSHIP OF EDWARDSBURGH CARDINAL INFORMATION ITEM

Committee: Combined AF- Public Works, Environmental Services & Facilities

Date: June 20, 2022

Department: Environmental Services

Topic: South Cell Lagoon Valve Bypass Event

Background:

Following the 2022 annual spring discharge, E/S encountered difficulty seating the south lagoon discharge sluice gate valve. Budgetary quotes were being obtained to replace the south valve after the 2023 spring discharge. On May 24th, E/S met with a contractor to obtain a budgetary quote and discovered the valve was leaking-by. Partially treated sewage was discharging to the South Nation River. The south cell was isolated and all influent was directed to the north cell. Notifications were made to the Spills Action Centre (Reference # 1-1TGTA7), Township of Casselman, (nearest downstream user), Leeds & Grenville Health Unit and MECP inspector Monika Howlett. The chamber was inspected two weeks prior and was not leaking at that time. Based on an estimated flow rate and worst-case scenario of 2 weeks, Staff estimated 6500 L (6.5 m³) of partially treated sewage spilled into the South Nation River.

Samples were collected from the south cell, upstream and downstream of the discharge point to the South Nation River. Parameters tested included total suspended solids, biological oxygen demand, carbonaceous biological oxygen demand, total phosphorus and ammonia. Laboratory results for the bypass event were well below our Environmental Compliance Approval limits.

E/S fabricated a temporary wooden plate and support system to cover the pipework which stopped the leak on May 24th. On May 25th, E/S pumped down the valve chamber and made a confined space entry to make further temporary repairs to the valve. The plate was removed in the pipework and the south cell was placed in service. A report was filed with the MECP. The Leeds & Grenville Health Unit was satisfied with the response and had no additional concerns.

Quotes are being received to supply and install a new valve. This work is expected to be completed immediately after the spring discharge in 2023. The long term plan is to also replace the north cell valve.

Eric Wemerman

Eric Wemerman
Chief Water/Sewer Operator