



CITY OF KINGSTON
INFORMATION REPORT TO COUNCIL

Report No.: C372

TO: Bert Meunier, Chief Administrative Officer

FROM: Cynthia Beach, P.Eng., Commissioner, Planning & Development Services

PREPARED BY: Paul MacLatchy, Manager – Environment Division

DATE PREPARED: 2002-November-26

DATE OF MEETING: 2002-December-17

SUBJECT: **Status Report – Belle Park Landfill Site**

RECOMMENDATIONS:

This report is for information purposes only. No recommendations are provided at this time.

ORIGIN/PURPOSE:

This report originates from Planning & Development Services – Environment Division. The purpose of this report is to update City Council on the activities being undertaken by City forces at the former Belle Park Landfill Site.

A copy of this report has been forwarded to the local office of the Ministry of the Environment and will also be available on-line on the City's web site.

OPTIONS / DISCUSSION:

Seepage Management / General Operations

- Weekly site surveillance visits are continuing as per the accepted seep management protocol. These visits are conducted by environmental technicians who observe shoreline areas of the site for changed conditions or any other situation that may warrant concern, follow-up monitoring or mitigation to prevent impacts to the Cataraqui River environment.
- During the week of November 18th, surveillance visits identified renewed flow at a previously identified area of intermittent seepage (SD 046) along the south shore. Monitoring of the seepage showed the chemistry to be unacceptable for discharge to the environment and, as per the Seep Management Protocol, mitigation measures were undertaken. Initial attempts to dam and diffuse the seepage were not successful and a decision was made to install a groundwater recovery well similar to other wells on-site. The recovery well was installed on November 27 and 28, 2002 by M.A. Barr Maintenance Ltd. And McLellan Water Technologies. The work was overseen by Malroz Engineering Inc. The supply and installation of this pumping equipment was not budgeted for in the 2002 operating or capital budgets.

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- Additionally, flow was also noted at another previously identified intermittent seepage (SD 059.5) along the south shore of the site. Sampling undertaken as per the Seep Management Protocol has not detected conditions that require mitigation. However, as per the Protocol, the seepage will continue to be monitored and sampled to ensure it continues to pose no threat.
 - It is typical to see increased seepage activity at Belle Park late in the year as increased precipitation coincides with the controlled decrease in the water level of Lake Ontario and the Cataraqui River.
 - Annual environmental monitoring of site conditions (groundwater, surface water and wastewater) is on-going on a semi-annual basis. Results of monitoring conducted in 2002 will be reported within an Annual Monitoring and Operations Report that will be completed by March 2003.
 - Annual Monitoring and Operations Reports for 1999, 2000, and 2001 are available for download from the City's website or they can be viewed or borrowed at the Queens University Documents Library.

Assessment of Long-Term Site Solutions Project

- Proposals have been received for the Assessment of Long-Term Management Options Project.
- In response to advice received following the request for proposals Environment Division is in the process of requesting an addendum to the Request for Proposals to allow for an increased level of public participation and to ensure that the process is valid for any potential sewage works which may be recommended.

Phreatophyte Tree Pilot-Testing

- Planting of the three tree test plots has been completed and monitoring is on-going according to plan.
- The City's Environment Division has partnered with phytoremediation researchers from Environment Canada to undertake additional studies of mature phreatophyte trees along the south shore of the Belle Park site. This work involved the installation of numerous monitoring wells and sophisticated datalogging instrumentation as well as modern electronic weather-logging equipment. Environment Canada's research will be valuable to the City as we continue to assess the feasibility of using selected tree species to intercept groundwater flow within the closed landfill site.

Treatment Wetland Pilot Testing

- The pilot-scale treatment wetland along the northwest shoreline area of the site has not proceeded as planned due to an inability of the Federal Department of Fisheries and Oceans to process the required permits in time to allow autumn construction. Environment Division anticipates having the necessary permits in hand to allow construction to commence in the spring of 2003. This delay in permitting will impart a minimum 6 month delay in project completion.
- Discussions are ongoing with researchers from Queens University's Department of Civil Engineering to allow them to conduct research at the Belle Park site that will compliment the goals of the City's Treatment Wetland Feasibility Study.

Capital Improvement Projects

- Areas along the northeast and southeast shorelines that were scheduled for improvement by placement of additional thicknesses of clean soil cover under contract PDS-ENV-001 have been substantially completed. The work to date has been satisfactory and it is anticipated that these areas will be revisited in the spring to provide additional seeding to encourage healthy grass cover.
- The shoreline improvement project is on-going and work crews were successful in removing additional trash and debris from shoreline areas.

EXISTING POLICY/BY-LAW:

N/A

LINK TO THE STRATEGIC PLAN:

N/A

FINANCIAL CONSIDERATIONS:

Works associated with the management of new seepages along the south-east shore are unbudgeted. Another report to Council will follow once control measures are established and we have a better understanding of costs. This future report will contain a recommendation for funding sources.

CONTACTS:

Paul MacLatchy, Manager - Environment Division, 384-1770 ext 134

DEPARTMENTS/OTHERS CONSULTED AND AFFECTED:

Corporate Services – Legal Services

Corporate Services – Financial Services

APPENDICES:

Figure 1 – Belle Park Site Layout

Cynthia Beach, P.Eng.
Commissioner, Department of Planning & Development Services

Comments:

Bert Meunier
Chief Administrative Officer