

## Humberstone Landfill Site Public Liaison Committee

### Niagara Region - Waste Management Services Division

Notes of a meeting of the Humberstone Landfill Site Public Liaison Committee (PLC) held at Civic Square, Community Room, 60 East Main St., City of Welland, on Wednesday, June 28, 2017.

#### Attendance

Committee: Jay Mitchell, Chair; Helga Goss, Mike Dickman, Timothy Clegg, George Marshall, Regional Councillor

Staff: Jamie Kristjanson, Hydrogeologist Environmental Engineer  
Sandy Sawatzky, Waste Management Clerk/Program Administrator

Regrets: Jim Larouche, Councillor City of Welland

Guests: Steven Markell

#### 1. Acceptance Of Agenda

The agenda was accepted and the meeting called to order at 7:00 pm.

#### 2. Approval Of Previous Notes

**Motion** to accept the notes of the November 2, 2016 meeting (no Quorum).

Moved by: Mike Dickman

Seconded: Helga Goss

Carried.

#### 3. Voting Of New Chair

Jay Mitchell resigned as Chair of the Committee. Accept Timothy Clegg to chair current meeting.

**Motion:** to vote for Chair at next meeting

Moved by: George Marshall

Seconded: Timothy Clegg

Carried.

#### 4. New Membership

Trevor Stratton is an area resident who attended the November 2, 2016 PLC meeting as a guest and has expressed interest in becoming a member of the Committee. The Terms of Reference allows for up to six members of the public. Currently there are three members of the public.

**Motion:** to accept Trevor Stratton as a new member

Moved by: Mike Dickman

Seconded: George Marshall

Carried.

Staff will follow the procedure to ratify Trevor Stratton as a member through Committee and Regional Council.

Defer consideration of Diana Wiggins as new member until the next meeting. Staff will contact Diana to confirm her interest in becoming a member.

## **5. Response to Wilf Ruland Review of the 2015 Monitoring Report**

The Region's detailed response to Wilf Ruland's comments on his review of the 2015 monitoring report were provided to the committee members in the Agenda package and at the meeting. The follow is a synopsis of the Region's response.

- Recommendation 1 – that the Region will coordinate sampling of downstream surface water with discharge from the storm ponds when possible. The Region is in agreement with this recommendation.
- Recommendations 2, 3 & 4 are similar in that Wilf recommends the Region develop a detailed model of groundwater flow. The Regions' response is that a detailed groundwater flow model was developed as part of the Environmental Assessment for the vertical expansion. However, all models should be re-assessed and modified as necessary with new information. The Region is in process of collecting new information over the next several years and the information will be compared to the model. The Region has recently completed a geophysical survey map at the Site to determine the depth of the clay without drilling. The map will be verified at a few locations by drilling to bedrock. The final map will be used to determine the locations of new wells if necessary.
- Recommendation 5 – that the Region use specific statistical analysis to determine what the background groundwater chemistry should be for use in Reasonable Use Policy calculations for leachate impact at the property line. Wilf recommends using either the mean or the median of the background well data. The Region asked the monitoring consultant to investigate different statistical ways to determine what the appropriate method should be. They recommend that the 75<sup>th</sup> percentile be used to determine background levels. This is current MOECC practice for calculating surface water background levels. The information is provided in the 2016 annual monitoring report.
- Wilf has interpreted that the dry wells in the clay at the Site are due to the groundwater pumping at the Townline Tunnel. The Region believes that there are other contributing factors, as dry wells in the clay are also observed at two other Region landfill sites which are 30 km from the Townline Tunnel. This could

be due to climate change, but also likely to some other factor not yet determined.

- Wilf commented that more leachate is being generated than what would be expected. The Region notes that leachate production had decreased significantly in 2015 and 2016. The Region had completed repairs to internal road culvert crossings that may have allowed runoff to enter the leachate collection system. However, leachate production is directly related to the amount of precipitation. So far in 2017 there has been roughly the same amount of precipitation as for all of 2016, and the amount of leachate collected in 2017 is about the same amount as was collected in all of 2016.

The Committee accepted the Region's response to Wilf Ruland's comments for information. Discussion took place about retaining a peer review consultant to review and make comment back to the committee on the Region's response and on the review of the 2016 monitoring report. Wilf Ruland had been the peer review consultant for about 10 years and possibly the committee should seek proposals from other consultants to have a "fresh set of eyes". The members decided that Wilf Ruland has provided good service; and recommended Wilf make comment to the Committee on the Region's responses to his recommendations.

**Motion:** that staff obtain a proposal from Wilf Ruland to retain for him as a peer-review consultant, with the understanding that the price can be negotiated.

Moved by: Helga Goss

Seconded: Mike Dickman

Carried.

## 6. 2016 Monitoring Report

A hard copy was provided to the Committee at the meeting. There are no changes in the interpretation in 2016 as compared to 2015.

Shallow well 91-4 near the maintenance building still shows sign of leachate impact, which is to be expected since it is near waste that was placed in the 1950s. This waste was removed in 2012, and groundwater quality is expected to improve with time. Residual leachate influence is observed in wells near the PCB containment cell. This is an area where waste has been placed in the mid to late 1960s, but was removed in 1989 for the construction of the cell. In 2016 the PCB cell was confirmed by sampling not to be leaking. It was noted that an estimated cost of \$15.5 million to remove the PCB Cell is included in the 9 year capital budget forecast.

## 7. 2016 Operations Report

A hard copy was provided to the Committee at the meeting. About 44,000 tonnes of waste was landfilled in 2016. This is 8,000 tonnes more than landfilled in 2015. The reason is that the Bridge Street Landfill closed on July 1, 2016 and waste that would

have been landfilled at Bridge Street was taken to the Humberstone Landfill. This will continue in 2017 and beyond.

The new Household Hazardous Waste Drop-off Depot collected about 270 tonnes of hazardous waste in 2016, with about 40% being paint.

#### **8. Landfill Gas Collection and Control System**

The Region has received Substantial Completion and will start to operate the gas system during the week of July 3, 2017. Comcor Environmental Limited has been retained to operate the system. The landfill gas will be burned in an enclosed flare as there is not enough gas to generate electricity to place into the electrical grid.

#### **9. Humberstone Landfill Expansion**

The Region has reviewed Golder Associates 40% landfill design and has commented back to Golder. Golder is working on 60% design and incorporating comments made by the Region. The application to amend the MOECC Approval for the landfill expansion is scheduled for completion in autumn 2017.

An attendee asked if the expansion considered bordering neighborhoods. Staff responded that the final contour will be higher on the west side than on the east side as there is more forest on the west side to act as a visual barrier for the community.

The design will include a holding tank so several days of leachate can be temporarily stored during bypass events at the Welland Wastewater Treatment Plant.

#### **10. Other Business**

Next meeting: October 2017 with suggested dates to be sent to Committee members

#### **11. Adjournment**

Committee adjourned at 8:30 pm