Glanbrook Landfill Coordinating Committee Meeting
Monday, August 27, 2007
Glanbrook Landfill Meeting Room
4:30 p.m. to 6:30 p.m.

ATTENDEES:

MEMBERS: Allan Freeman, Chair
Andy Fevez
Councillor Dave Mitchell
Sheila May

WASTE MANAGEMENT, CITY OF HAMILTON: Craig Murdoch, Manager of Waste Disposal
Fabiano Gondim, Supervisor of Landfills
Frank Falcone, Project Manager, Landfills

WASTE MANAGEMENT OF CANADA CORPORATION: Ron Wright (Resource)

REGrets: Brook Ryan
Mike Caruso WRTF
Joanne Placko (Resource) (MOE)
Annie Michaud (Resource) (NPCA)
Reid Cleland (WMCC)

Review of Minutes from Previous Meeting

Allan Freeman asked the members if there were any comments on the previous minutes and stated that the previous minutes have already been circulated and have been approved. There were no additional comments.

ITEM

1. Landfill Open House and Tour Comments

Fabiano Gondim provided a summary of the open house and stated that it was very successful and the City had a lot of positive comments. There were 44 people that attended the open house. The City is already planning another open house for next year and it will be combined with the grand opening of the landfill gas to energy project in June 2008.

Craig Murdoch requested comments from the GLCC to allow
continuous improvement for the open house next year.

Sheila May thought the open house was excellent. Residents were impressed by the landfill tour and learning how it is run. Sheila also stated that residents said everything was explained very well and at a level that everyone could understand.

Councillor Mitchell stated that all comments he received were positive. He said that the residents recently saw a picture in the Glenbrook newspaper showing the leaf and yard composting facility and he would like to see the public more aware of how the leaf and yard composting facility is operated.

Councillor Mitchell would like to see the heat from the landfill gas power plant be used for greenhouses and he recommends that the City put out a RFP to see if anyone is interested in pursuing this opportunity. It would be approximately $500,000 dollars to build a greenhouse and we should take full advantage of the heat. He would like to see a report by City staff to see the viability of such a proposal by spring 2008. Sheila stated there are a few greenhouses currently in operation in the area and their owners may be interested. Councillor Mitchell asked if this was viable on this project and Craig Murdoch stated that it is common to put in heat exchangers to capture the heat and use it as a revenue source. Councillor Mitchell stated that as long as we recover the capital cost we do not necessarily have to make money on it and we could promote City's energy efficiency programs.

2. Landfill Gas Project Update

Fabiano Gondim updated the GLCC on the progress of the construction of the landfill gas collection project. To date the horizontal collection trenches, vertical wells and the perimeter collector pipe (header) have now been installed and over the next couple of weeks the contractor will be installing the pipes that connect the horizontal perforated trenches and vertical wells to the perimeter collector (header) pipe. These connections will be at shallow depths and the contractor will be excavating very little garbage and producing very little odour as a result of these activities.

The contractor is currently constructing the footings for the engines, flare and associated buildings. The flare is scheduled to be delivered in mid September and the engines are being assembled in containers at another facility and will be delivered this fall. The contractor is two weeks ahead of schedule. We have approval from the MOE (Air and Site) and we need the approval from Hydro One and Ontario Power Authority for the Standard Offer Program.

Allan Freeman asked if we had any recent odour complaints. Fabiano replied there were three complaints in August and two of them were from the same person who was walking his dog along Hall Road early morning and noticed odour at small concentrations. These two complaints were not odour at the complainant's house.

3. Daily Cover

Craig Murdoch stated that the City have found four different sources of soil and one of them is from a housing development in Binbrook, which
is clean clay that the builder is willing to deliver for free and it is between 10,000 m³ and 20,000 m³. This amount of soil is equivalent to the supply of one year of daily cover. The clean soil is not considered waste and we are not subjected to the limit of 82 trucks per day. We do not want to overload the site so we are proposing to bring in 100 loads per day until the builder has completed importing the soil. We will be stockpiling the soil and use it to cover areas that require soil. Craig Murdoch stated that we wanted to make the GLCC aware of the trucks that will be importing the soil in case there are any concerns with the amount of trucks. The truck route will be down Hwy 56 because the source of the soil right off of Hwy 56 at the centre of the town. The GLCC agreed that this clean soil is an excellent source for daily cover.

Craig Murdoch mentioned that one of the other four sources of soil is when the City repairs or builds water mains. When this occurs, the City often has excess soil, which is then tested and can be brought to the landfill if it meets the criteria. Another possibility is Glanbrook Farms; they are interested in bringing soil to the landfill. And finally, the fourth source is Waste Management of Canada that can bring soil from the Hamilton area.

Although we will be importing one year of daily cover soon, the GLCC requested City staff to continue to look for additional sources of soil.

Frank Falcone said that the City will send out another letter to all the builders in the area to ensure they are aware that the City is accepting soil at the Glanbrook landfill.

Allan Freeman asked where the importation of the alternative soil stands. Craig Murdoch replied our current C of A restricts us to only accept soil from our service area (which is Hamilton) and most of the soil that Waste Management of Canada Corporation gets is outside of the service area. The City is planning to apply for service area expansion to avoid geographical restriction for soil importation. The service area can be expanded, but the acceptance criteria will not change. The GLCC supported the City’s plan to expand the service area for soil importation.

4. **Status of Leachate Mound**

- Frank Falcone was unable to print off the updated leachate sections due to computer difficulties. After reviewing the recent leachate levels he concluded that they remained relatively constant.

- Frank Falcone said that the City is looking into the option to lower the leachate mound in Cell 4 by installing finger drains as part of the construction of the landfill gas collection system. The Contractor will submit a proposal to the City to install finger drains as deep as possible.

- During the installation of the horizontal collection trenches for the gas collection system in Cell 4 there was leachate at depth close to the surface in one of the excavations. The City did some additional test pits at different locations in Cell 4 and the test pits indicated that the leachate levels were very low. With the low levels in the test pits and the high levels in the construction excavation, this indicates that there are local pockets of high leachate (perched conditions) and not high
leachate across the entire Cell 4. The installation of the finger drains is expected to help to drop the localized high levels of leachate.

Craig Murdoch said that this investigation supported our theory that Cell 4 is a localized area of high leachate and not indicative of the entire site.

Frank Falcone will have the updated cross section to reflect the August levels at the next meeting. The GLCC agreed to have leachate sections next meeting because there were no major changes to report at this time.

Frank Falcone said that the problem with trying to lower the leachate mound is that the waste is not homogeneous throughout the landfill. Leachate can percolate through different types of waste at different speeds. The important thing to note is that currently there is no leachate coming out the sides of the landfill (seeps). In addition, on the west side of Cell 4 there is approximately 7 metres of waste to be placed, which will further prevent the leachate from coming out the sides of Cell 4.

Councillor Mitchell asked if we would ever get down to the level that the leachate collection system was designed for. Craig Murdoch said that we are not qualified to answer that and we would ask a qualified Hydrologist that question and get back to the GLCC.

Sheila May indicated that design reports should have the maximum allowable leachate height of 3 metres. Craig Murdoch said City staff will review the design reports to check the maximum expected leachate mound and whether or not these levels were amended as a result of the new leachate collection system installation.

Craig Murdoch said that the leachate system retrofit design report estimated that would take 5 years to lower the leachate levels if no perched conditions are found.

Fabiano Gondim said that if we remove the Cell 4 leachate level, the average of leachate level over the landfill is between 4 and 5 metres.

5. Air Purifier Units

Fabiano Gondim updated the GLCC that we had one delivery of 12 air purifier units and another one of 35 units to date. The City has delivered all 47 units to residents. The last delivery will be late this week or early next week, for a total of 82 units delivered.

Craig Murdoch said that we had one unit malfunction and we will have a replacement for it early next week.

6. Air Quality Report

Fabiano Gondim gave an update on the air quality report. The consultant retained by the City (SNC-Lavalin) collected air samples upstream and downstream of the landfill. They also had a trailer collecting air samples for 30 days in April and May. We recently received a draft report from SNC-Lavalin and we had the City’s Health department to peer review the report. We also asked Comcor, who are running the temporary flares, to provide a summary on the flare emissions. Fabiano handed out a copy of the City’s Health Department peer review letter and Comcor’s letter. The final version of the SNC-Lavalin report will be available by the end of the week. The draft report indicated that the only chemical in the air at very low concentration
was hydrogen sulfide, which does not pose a heath risk but is considered a nuisance. SNC-Lavalin’s full report, Health Department’s letter and Comcor’s letter will be posted on the City’s website within two weeks.

Councillor Mitchell asked if air samples were taken further away from the landfill property. Craig Murdoch confirmed that off site air samples were collected and it is reflected in the report.

It was requested by the GLCC that a copy of the Health Department letter be sent to all residents in the area that were provided with air purifier units. It should also include a cover letter with a summary of SNC-Lavalin report and the actions taken by the City. Copies of the SNC-Lavalin report to be delivered to all GLCC members, Glenbrook Municipal Service Centre, Glenbrook Library and WMCC.

7. Pond Data

Frank Falcone provided an update on the pond data. Frank indicated that there was not much additional data since the last GLCC meeting due to the dry summer. There has only been one test on Pond 5 and it has passed.

8. Waste Reduction Task Force Update

Craig Murdoch updated the GLCC on the Waste Reduction Task Force committee. The current City’s waste diversion rate is 40% and is looking for opportunities to increase to 65%.

The energy to waste facility is linked to the partnership with Niagara Region, but it is currently on a 9 month hiatus due to Niagara Region’s landfill space purchasing from Niagara Waste Systems.

Some of the ways the City is looking at to increase recycling rates are:

- Three stream waste collection for multi-residence buildings
- User pay system and a more rigorous enforcement
- Reduced container limits
- Clear bags system, which would allow one dark bag and the other would have to be clear. The Waste Reduction Task Force does not support this initiative
- Recycle bank, which is a program that rewards users for every kilogram of recyclable material they divert (they will get dollars that they can use at local retailers). Staff is looking at the possibility of a trial area for this program

Councillor Mitchell asked why the community recycling centre does not collect winter items at this time of the year. He thinks it is because of the lack of storage. Craig Murdoch said he will look into this for the committee.

Allan Freeman said that the City has to pressure the Provincial Government to limit the amount and types of packaging so that all material can be recycled. Craig Murdoch said the City has already sent two letters endorsed by Council to that effect.

9. New Business

Councillor Mitchell said that when Contractors ran gravel trucks down Hall Road for the Hydro One works they did substantial damage to the
road and has yet been repaired. The City received $8,100 to repair the road but this was not enough. Councillor Mitchell asked if the GLCC would be willing to endorse a motion to council to force Hydro One to fix the road they damaged.

Andy Fevez did not see how this tied into the mandate of the GLCC.

Sheila May said that she did not think this issue should be put through the GLCC. Allan Freeman agreed.

Sheila May said there is a typo on page 41 of the 2006 Annual Report. Instead of “one” it should read “once”. Craig Murdoch said this will be corrected.

Sheila May asked how the salt on roads impacted on the landfill operations. Craig replied the salt indicated in the annual report is the surface water that enters the creek and it is not directly related to the landfill because the salt is in the creek prior to reaching the landfill. A possible source could be from road salting in the winter.

Allan Freeman stated that he would like an Executive Summary and Recommendations of the Annual Monitoring Report be given to the GLCC members and only one full copy is sent to the chair. Craig said we would give copies on the next meeting.

Allan Freeman asked the status of the incineration project mentioned in the newspaper. Councillor Mitchell said the City has endorsed the idea of the incineration of sewage sludge. Liberty Energy is interested in the possibility of building an incinerator but currently it is cheaper to build our own.

NEXT MEETING – Monday, November 26th, 2007 @ 4:30 pm
Minutes prepared by Frank Falcone, reviewed by Fabiano Gondim and approved by the GLCC on September 20, 2007.