

**MINUTES**  
**Peterborough County/City Waste Management**  
**Site Liaison Committee Meeting**  
**Tuesday, July 7, 2009 at 7 p.m. at Stewart Hall**

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**In attendance:**

- Committee Members:** Reeve Dave Nelson - Chairman, Roy Craft, Steve St. Jean,  
Councillor Paul Heath
- Staff Members:** Chris Bradley, Sherry Arcaro - County of Peterborough  
Melanie Kawalec, Craig Simmons - City of Peterborough
- General Public:** Nancy De Guerre, Ed Haass
- Consultants:** Jorge Costa, Tom Mclelwain, Chris Visser – Golder & Associates  
Joe Ovcjak – UEM  
Steve Ash – Jagger Hims

Chairman Reeve Nelson called the meeting to order at 7:08 p.m.

Introductions were held.

**1) Approval of Minutes**

**Moved by:** Roy Craft

**Seconded by:** Steve St Jean

"That the Site Liaison Committee minutes of January 13, 2009 be approved as presented."  
Carried.

**2) Business Arising from Minutes**

Odour issues were discussed but will be updated in the Consultant presentations.

**3) 2008 Monitoring Report Overview - Joe Ovcjak**

Mr. Ovcjak provided a verbal presentation on 2008 Annual Monitoring Report. A copy of the presentation is attached to the minutes. Questions and discussion of the operations of the sites followed the presentation.

**Moved by:** Steve St Jean

**Seconded by:** Roy Craft

"That the presentation by UEM on the 2008 Monitoring Report be accepted as presented."  
Carried.

**4) 2008 Annual Monitoring Report Comments – Jorge Costa & Tom Mclelwain**

Mr. Costa noted that Golder had reviewed the Draft 2008 Annual Monitoring Report, providing comments to UEM prior to submission to the Ministry of the Environment.

He explained that the report is consistent with past experiences and operations of the site.

Mr. Mclelwin commented on the ground and surface water data, noting that he has been looking at the data for the site for over 20 years, with zero changes in the site for the last 18 years. The site itself and the neighbourhood have had no change.

He noted that the site is well operated, with surface and ground water sampled appropriately for the site.

**Moved by:** Roy Craft

**Seconded by:** Steve St Jean

"That the verbal report by Golder and Associates on the 2008 Monitoring Report be received for information."

Carried.

#### 5) Peterborough Biosolids Options Study – Sherry Arcaro

Ms. Arcaro gave an update on the Biosolids Options Study. She noted that the volume of biosolids represent 10% of the total waste received each year. A copy of the biosolids options study update is attached to the minutes.

Following discussion, Reeve Nelson requested that biosolids data be forwarded to Ed Haass for land application consideration.

**Moved by:** Roy Craft

**Seconded by:** Steve St Jean

"That the verbal report on biosolids options study update be received for information."

Carried.

#### 6) Landfill Site Inspection – Jorge Costa

Mr. Costa provided an update on his landfill site inspection conducted earlier in the day. He noted that operations of the site are consistent, noting recent regrading and seeding areas due to maintenance. He noted 3 areas of landfill gas odour: i) along the edge of Cell 1 West B from the underground stone that is still exposed at the outer edge of the cell, ii) the manhole at the southeast corner which may need a new seal, and iii) the toe of the landfill between the entrance and the pumping station, there is a 6 inch pipe which is open.

The second odour he noted on site was from biosolids. The placement of biosolids, due to the high moisture contents, acts like a sponge and retains any new moisture, reactivating the smell. He suggested that the site attempt to manage traffic tracking the biosolids.

Mr. Costa advised the Committee that Chris Visser would be the new representative on behalf of Golder Consultants.

**Moved by:** Steve St Jean

**Seconded by:** Roy Craft

"That the verbal report on the Landfill Site Inspections from Mr. Costa be received for information."

Carried.

**7) Waste Management Facility Update – Melanie Kawalec**

Ms. Kawalec provided an update on the Bensfort Landfill Facility. A copy of the written report is attached to the minutes.

**Moved by:** Roy Craft

**Seconded by:** Steve St Jean

“That the Report #7 providing an update on the Waste Management Facility be received for information.”

Carried.

**8) Consulting Needs of the Committee – M Kawalec**

Reeve Nelson advised the Committee that he will work with the City and County to confirm the consulting need for the Committee.

**9) New Business – Melanie Kawalec**

Melanie Kawalec gave a verbal update on the status private well monitoring program. As of 2009, most of the obligations for testing of private wells have now lapse, as the time required in the original agreement have expired. City and County staff suggested however that the well monitoring program continue on based on the same sampling schedule.

**10) Next Meeting**

The next SLC meeting is scheduled for January 19, 2010 at 7:00 pm General Committee Room, City Hall.

**11) Adjournment**

**Moved by:** Steve St Jean

**Seconded by:** Roy Craft

“That the meeting now adjourn.”

Carried.

The meeting adjourned at 8:27 p.m.



City of  
Peterborough

## Report 7

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**TO:** Site Liaison Committee  
**FROM:** Melanie Kawalec, Manager of Waste Management  
**DATE:** July 7, 2009  
**SUBJECT:** Waste Management Facility Update

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### Operations Update

- shingles now stockpiled on site, ground & used for alternative cover material vs. exported off site.
- Landfill Odour Survey was completed May 22, 2009 which surveyed the SFA for methane. This report will be used to guide the 2009 site maintenance work plan.
- Applied and received another license to cull seagulls for bird control in 2009.
- Landfill Gas Utilization project formalized, permits and approvals underway with the OPA and rezoning public meeting scheduled for August 11, 2009.
- Additional gas wells to be installed in SFA in 2010 and 2011.
- fall 2009 will include seep repairs and hydro seeding as required, with additional landscaping.

### Facility Complaints: January 2009 – June 2009

- **Odour Complaint:** January 28, 2009 from Mike Taylor who lives on Cloverdale Line
- **Results:** Waste Operations Coordinator spoke with Mr. Taylor about the landfill has had stronger than usual odours lately due to the high water table which has flooded some of the gas wells, preventing the flare to draw methane gas from these wells. February 10, 2009, the Coordinator installed a 4-inch vacuum line in MH15 to the gas header line. The draw on this manhole has eliminated the odour in the area for about 100 to 150 feet north and south.
- **Litter Complaint:** April 3, 2009 from Chris Johnston, MOE
- **Results:** Waste Operations Coordinator confirmed that litter pickup along Bensfort Road was scheduled for Monday, April 6<sup>th</sup>. The ditch line had been cleaned up last week but due to the high winds lately it seems to be ongoing at least once a week for the past three weeks.
- **Odour Complaint:** April 27, 2009 from Roy Craft
- **Results:** The Waste Operations Coordinator returned his call and explained that the odour appeared to be due to the placement of Biosolids in the fill area. The Coordinator also agreed to check out the site to ensure that everything else was in order.

### Offenses Summary: January 2009 – June 2009

*January 1 to June 30, 2008 – 275 untarped loads of 558 total offenses*  
*January 1 to June 30, 2009 – 487 untarped loads of 671 total offenses*

### Centralized Composting Facility

- Project stalled due to odour modeling study and Certification of Approval application pending.
- Official Plan Amendment and rezoning applications on hold.
- City Wide Organics on hold until composting site is operational and budget approved, anticipate 2011.

**Landfill Properties Update**

- Farm at 1376 Cloverdale Line, western side of the road only, sold
- 1333 Bensfort Road under renovation; to be offered for rent by September 2009
- Of the 9 houses: 8 are rented, 1 to be rented by September, and 1 remains vacant.
- All farmland is leased for crops or pasture.

## LIAISON COMMITTEE MEETING JULY 7, 2009

**HEI** JACGER HIMS  
LIMITED  
Environmental Consulting Engineers

**UEM** CONSULTANTS  
INCORPORATED  
Environmental Consulting Engineers

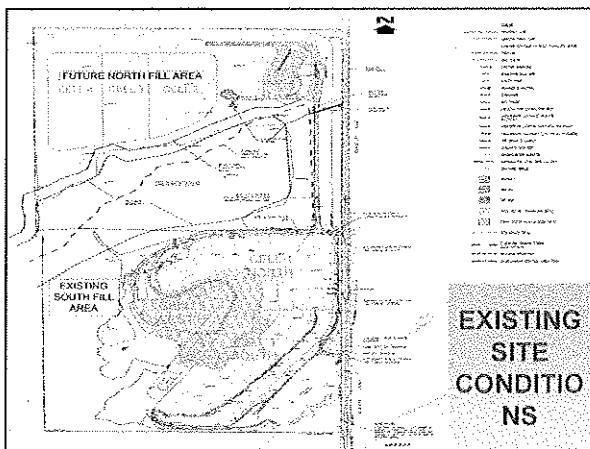
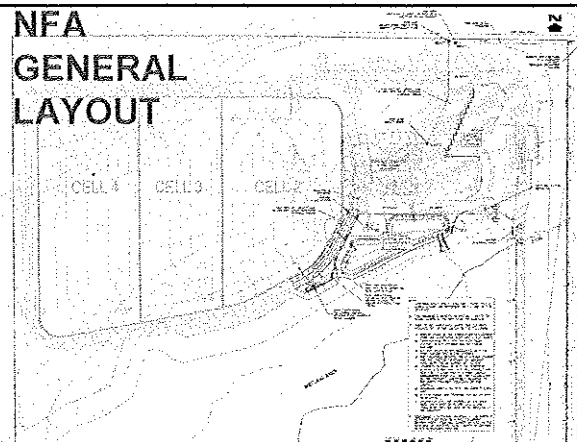
## 2008 Annual Monitoring Report

### SITE DEVELOPMENT

1. In 2008 waste disposal continued in the SFA.
2. 87,970 tonnes of waste placed in 2008.
3. Final cover placed on completed part of SFA. Less than 5 ha of 18.1 ha SFA not under final cover at end of 2008.
4. Topographic survey of SFA completed in January 2008.
5. SFA has capacity for about 2 more years.
6. However, because of need to place waste over top of a new waste Cell 2 in the NFA in 2010, and need to divert waste otherwise disposed in SFA to the NFA, the SFA will not achieve its capacity until mid to late 2011.
7. Total approved Site will provide disposal capacity for at least 13 years.

## Table of Contents

- Summary of Annual Report
  - a) site development
  - b) approvals status
  - c) operations and maintenance
  - d) LCS Monitoring, operation, maintenance
  - e) surface water and ground water monitoring
  - f) LGS odour control, operation, maintenance
- NFA Design and Construction activities and schedule
- Other reports submitted to authorities



## 2008 Annual Monitoring Report

### APPROVAL STATUS

1. On May 8, 2009 C of A was amended to (a) remove 19 ha parcel along Crowley Rd from Site, (b) remove Condition 25.8 that deals with status of search for long-term landfill, (c) adjust LCS cleaning and video inspection frequency to annual from semi annual.
2. In June 2008 Permit to take water was received to permit NFA construction dewatering.
3. Application for S. 53 OWRA approval submitted for SWM pond, site drainage. OWRA approval for leachate management system for the NFA submitted separately. Construction expected to start in September 2009.
4. Application for permit to construct stormwater system for NFA was submitted to Otonabee Region Conservation Authority in 2009.
5. Recently determined that SFA LCS also needs C of A under OWRA as advised by MOE. Will be submitted under separate cover and will not delay construction of NFA LCS and SWMS provided MOE satisfied with design and supporting documents.

## 2008 Annual Monitoring Report

### OPERATIONS AND MAINTENANCE

1. No violations of C of A conditions noted during inspections
2. 295 violation notices issued in 2008 by Staff related to untopped loads
3. Permit to scare or kill gulls renewed and expires Dec. 31, 2009.

### LCS MONITORING, OPERATION AND MAINTENANCE

1. Volume of leachate and GW removed in 2008 was 104,527 cu m.
2. In next few years, leachate generation will decline in SFA as it is closed and final cover placement complete.
3. However, when NFA opens, leachate quantities will increase.

## 2008 Annual Monitoring Report

### LCS OPERATION AND MAINTENANCE

- Gas probe monitoring shows no evidence of gas migration beyond property boundary
- New sections of pipe installed to connect to LCS manholes
- Flare controls were maintained and replaced (thermocouples etc)
- Vent pipes cleaned, gas wells adjusted
- Flame arrestor maintained, flow meter calibrated
- Approx 5,730,000 cu m of gas flared in 2008 (15,700 cu m/day)
- Landfill surface monitoring in 2008 identified odour areas – mainly from LCS manholes – connections to LCS made as recommended

## 2008 Annual Monitoring Report

### LCS MONITORING, OPERATION AND MAINTENANCE

4. City's Sewer Use By-Law parameters are used to evaluate potential impact of leachate on WWTP.
5. The 2008 leachate quality generally meets Sewer Use By-law criteria with the exception of TKN during both sampling events. Historically, TKN periodically exceeds By-law criteria. One sample of nonyl-Phenols was marginally over the by-law limit.
6. Leachate loading of BOD and TSS on WWTP is generally low and represents only a small portion of plant capacity.
7. Ammonia and TKN represent 7 to 16% of influent load to WWTP respectively. Species of VOC xylene in the plant influent appear to primarily originate from the leachate.
8. Future leachate sampling / comparison to By-law recommended

## GROUNDWATER MONITORING ASSESSMENT

Water quality effects from the landfill consist of leachate impacts and historical road salt effects to the east and north of the SFA, similar to previous monitoring. Leachate impacts are limited to overburden monitors immediately downgradient of the waste in these areas.

During 2008, VOC's were detected in four leachate impacted monitors. Low concentrations of VOC's in other downgradient monitors, and within the NFA, may be naturally occurring and/or attributed to other sources.

The Reasonable Use Policy limits that were exceeded are related to either road salt or natural groundwater quality variability at the site and are not attributed to landfill leachate. The performance monitoring program demonstrates that no contingency measures are required at this time.

The NFA overburden and bedrock groundwater quality is representative of the natural baseline conditions, as no landfilling activities have taken place. The groundwater quality based on the 2008 results and previous monitoring indicates a fresh overburden and bedrock groundwater, and brine influenced bedrock groundwater at two monitor locations, 89-1 and 89-1.

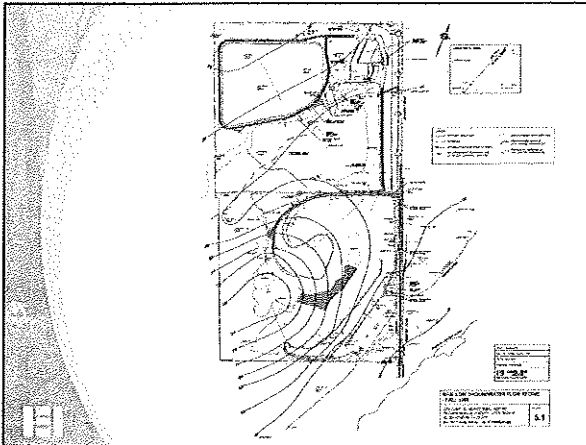
## 2008 Annual Monitoring Report

### LCS MONITORING, OPERATION AND MAINTENANCE

9. In 2008 leachate seeps on east slope of SFA were repaired
10. LCS was flushed and inspected and is generally clear, structurally sound and conveying leachate as designed.
11. Foreman was pressure tested and found satisfactory
12. Pump station, flow meters, pumps etc were inspected and maintained as required and are functioning as designed

## SURFACE WATER MONITORING

Surface water quality during 2008 was similar to that of previous years. Water quality generally satisfied the PWQG with the exception of iron and phosphorous at several locations, including the upstream stations SW1B and SW2C. The exceedances are generally considered to be naturally occurring or the result of road runoff or agricultural impacts. The landfill site does not have a measurable influence on the water quality within the adjacent surface water bodies.



## National Pollutant Release Inventory (NPRI) Report

- Greenhouse gas emissions were below reporting threshold of 100 kilotonnes of equivalent carbon dioxide.
- Other contaminants like Carbon Monoxide and Particulate Matter were above the reporting threshold.

## NFA CONSTRUCTION UTILITIES CONTRACT

- Stormwater Management Facility including pond, ditches, rip rap, control chambers, emergency overflow, spillway, inlet and outlet piping, staff gauge and associated swales.
- NFA pump station, meter chamber and electrical building.
- electrical associated with pump station and meter chamber.
- New forcemain between new PS and existing forcemain on Bensford Road, including connections and new chambers.
- Gravity sewer connection between PS and future compost pond on property to the north.
- Access roads, silt fence, excavation, fine grading, etc.
- Contract drawings and specifications completed in draft and under review by City.
- Construction to start once all approvals are in place, contractor retained (fall 2009)

## LANDFILL GAS COLLECTION SYSTEM REPORT

- Ontario Regulations (O. Reg.) 232/98 and 347 amendments require landfills with greater than 1.5 million m<sup>3</sup> of waste capacity to implement a LGS and to submit a report to the MOE by June 30, 2009.
- The SFA will reach its capacity by late 2011.
- Up to 22 new vertical gas wells will be installed in two stages at the SFA.
- The future NFA will incorporate a LGS that will be progressively installed with development of the NFA.
- A landfill gas utilization facility will be constructed in mid to late 2010.

## Supporting Documents

- NFA Stormwater Management Design Brief dated April 17, 2009 for OWRA and ORCA approval.
- NFA Design Brief for Leachate Management System dated June 2009 for OWRA approval.
- National Pollution Release Inventory (NPRI) Report June 1, 2009 – tracks release of GHG emissions and dust to atmosphere.
- Landfill Gas Collection System Report (June 30, 2009) for existing SFA GCS and proposed additional wells for SFA to be installed upon closure of SFA as well as proposed NFA GCS (in concept only).
- Closure Plan for SFA – to follow this summer.
- Supporting documents for OWRA approval for SFA LCS to follow.
- Other reporting and communications in accordance with regulatory bodies as required.

## SCHEDULE OF FUTURE ACTIVITIES

- Construction of PS and pond at the NFA in fall 2009 (Tender T-36-09)
- Construct Cell 2 in 2010
- New gas wells in SFA in 2010 for areas already under final cover
- More new wells in SFA after entire SFA under final cover in 2011
- Closure report for SFA in fall 2009
- Continued monitoring and site operations



## **Biosolids Options Study Update**

In early 2009 the Waste Mgmt Steering Committee approved a Biosolids Options Study Project. The purpose of the study is to provide WMC with a final report consisting of potential options for the handling of the biosolids cake currently being produced by the City WWTF and being disposed of at the landfill.

The study committee consists of city staff, county staff, a WMC appointed representative and the consulting firm of RV Anderson.

The committee has provided WMC with 2 technical memorandums. The first of which included a long list of potential options for the management of the biosolids cake, and the second which narrowed down the options to be researched based on several criteria including: public safety, cost, technical merit and sustainability of the option.

The next steps for the study committee include site visits to a couple of facilities that currently manage biosolids in a manner other than landfill, more research on the short list and a report back to WMC in early November. Following the WMC committee meeting a Public Info Centre will be held which will present the Final Report which will include recommendations that would then go forward to be included in a formal Environmental Assessment process and all the research and scrutiny that process entails.

While it is the intent of the committee to find an alternative to landfilling of the biosolids in a timely manner, there are several levels of approvals that any recommended alternative must go through. More information on the process will be provided at the PIC in November.

Are there any questions or comments that this committee would like me to take back to the Biosolids Options Study Committee?