

July 26, 2010

Project No. 10-1188-0008

Ms. Christine Wright
Township of Otonabee-South Monaghan
Site Liaison Committee
Peterborough City/County Waste Management Facility
P.O. Box 70, Third Street
Keene, Ontario
K0L 2G0

JULY 13, 2010 SITE INSPECTION – SOUTH FILL AREA AND PUBLIC DROP-OFF FACILITY PETERBOROUGH CITY/COUNTY WASTE MANAGEMENT FACILITY (PCCWMF)

Dear Ms. Wright:

This letter summarizes the observations made during a site walk-over inspection of Cell 1-North, Cell 1-South and the new Cell 1-West (Parts A & B) of the South Fill Area (SFA) at the PCCWMF (Bensfort Road Landfill) on July 12, 2010. The inspection was carried out to satisfy conditions of Section 4.3.1, of Schedule "B" of Provisional Certificate of Approval (C of A) No. A341508 (December 22, 1993 and subsequent amendments) and to confirm that the site was being operated consistent with and in general compliance with the C. of A. presently applicable to the site. Development of Cell 1-West is governed under Notice No. 8 of the above C. of A.

1.0 SITE INSPECTION OBSERVATIONS

The site inspection was performed on the morning of July 12, 2010 by Mr. Chris Visser. The inspection consisted of an approximately 2 hour walk-over of the SFA (Cell 1-North, South and West) of the landfill site and the Public Drop-off area, and included observations of the site conditions and ongoing operations. Mr. Visser was accompanied by the landfill site manager, Mr. Craig Simmons, who provided additional information on site operations and recent maintenance works completed at the site. The following is a summary of the notable observations made during the walk-over inspection (refer to the attached Figure 1 for general locations and to the Site Inspection Report for notes).

1.1 Operations (Cell 1 – West / North)

On-going landfilling operations in the Cell 1-West B and in the south-eastern portion of Cell 1 - North appear to generally follow the methods described/proposed in the "South Fill Area Design & Operations Report" dated January 2004, prepared by Conestoga-Rovers & Associates.

Waste had been placed over the entire portion of Cell 1 - South, the southern portion of Cell 1 - West A and the top of the eastern portion of Cell 1 - North, and these areas have been contoured to the design top surface mound shape. Final cover has largely been completed over Cell 1-South including the eastern portion of Cell 1-North, and these areas are reportedly scheduled to receive topsoil and seed in September / October of 2010.







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The new Cell 1 - West B area has been partially filled to about half the design elevation and interim cover has been placed over the waste at this location.

The following is a summary of observations made during the site visit:

- seagulls were observed at the active area of the landfill. It is our understanding that culling of the birds has not been undertaken similar to previous years, although approval have been obtained;
- waste was being disposed at the active face in the south eastern portion of Cell 1 North. Sections of the site completed to final grades at this location have been covered with interim cover;
- one waste compactor (Cat 826C) was being used to spread and compact the waste in lifts, with a bulldozer available for on-site maintenance;
- a small pile of roofing shingles (asphalt based) was present at the northwest corner of Cell 1-West B, reportedly to be ground into fine particles for use as daily cover and improving access roads to the tipping face under wet / soft ground conditions;
- daily cover soil (sandy material) was stockpiled on site at two locations and appears to be applied to the tipping face area on a daily basis;
- stone is stockpiled on site and it is our understanding this material is utilized for on-site roads;
- a large stockpile of topsoil has been placed in the southern section of Cell 1 West A to be utilized during September and October 2010 for placement over the final cover areas;
- interim cover soil have been placed over the south/west and central area of Cell 1 West B and selected top surface locations in the south-eastern area of Cell 1 North;
- southern portions of Cell 1 North completed to final design grades have been covered with final cover. It is our understanding that this area along with the east perimeter of Cell 1 South is scheduled to receive topsoil and seeding during September and October 2010;
- the Public Drop-Off bins in the North Fill Area (NFA) appeared to contain materials specific to the signs posted and separation of materials appeared to be evident, including separate stockpiling of white goods, tires and brush; and
- Excavation and grading of the future north fill (NFA) area was being undertaken at the time of the site visit.

1.2 Litter Control:

There was no litter noted on the East or North Slope of the landfill nor observed along Bensfort Road. There was a litter fence located along the east side of the tipping area; the active face is located in a slightly depressed area and adjacent to a soil berm which reduced the potential for generation of wind borne litter. Litter pick-up in the SFA was underway during the time of the site visit.

No litter was observed at the scale house and public drop-off area which appeared neat and tidy.

1.3 Landfill Gas (LFG) Control:

Localized landfill gas odour was noted at three locations, namely: at the active landfill disposal area (faint); at the south toe of Cell 1 – South along the toe perimeter road (faint); and at the western edge of finished Cell 1 – West A (faint).

Mr. Simmons indicated that the City actively works towards identifying the source of landfill gas odours, and the implementation of measures to mitigate off-site impacts. The City recently completed a landfill gas emission survey which identified some "hot spots" where landfill gas may be emanating from the landfill. The City is



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investigating measures (i.e., gas extraction wells) to capture the landfill gas that may be escaping collection at these locations.

1.4 Leachate Management:

There were no leachate seeps observed during the time of the site visit. Mr. Simmons did point out a seasonal seep location identified by the City on the east slope of Cell 1 - North. This area will be remediated during 2010.

1.5 Final Cover:

Final cover placement was recently completed along the top of the eastern portion of Cell 1-South and Cell 1 -North. Placement of topsoil and hydroseeding over this area will reportedly be completed during September / October 2010.

1.6 **Biosolids Odour:**

During previous site visits a strong odour associated with the disposal of "Biosolids" waste from the wastewater treatment plant was present at the site. In April 2010 the landfilling of biosolid wastes from the wastewater treatment plant within the active fill areas of the landfill was terminated which resolved this odour impact.

2.0 **SUMMARY**

In summary, at the time of the site inspection the landfill operations were being implemented as described and proposed in the C. of A. supporting documents, and in general compliance with the conditions of the Certificate of Approval.

The above noted site observations were discussed with the landfill site manager (Mr. Craig Simmons) who indicated that appropriate actions would continue to be taken as required in addressing identified deficiencies.

3.0 SITE LIAISON COMMITTEE MEETING:

The above site observations were reported by Mr. Visser at the Site Liaison Committee meeting held at Steward Hall on the evening of July 13, 2010. In addition, Golder confirmed the review and concurrence of the 2009 Annual Monitoring Report prepared by Urban & Environmental Management Inc. (UEM).

We trust that the above details of our site inspection are sufficient for your immediate requirements. If you have any questions, please do not hesitate to contact us.

Yours truly,

GOLDER ASSOCIATES LTD.

Chris Visser

Senior Waste Specialist

CV/JMAC/cv

CC:

Ms. Melanie Kawalec, Waste Management Manager, City of Peterborough - 10 Copies for

distribution to the SLC members.

Attachments: Figure 1 - Site Inspection - July 12, 2010

Site Inspection Report

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SITE INSPECTION REPORT PETERBOROUGH CITY/COUNTY WASTE MANAGEMENT FACILITY (BENSFORT ROAD LANDFILL)

July 13 Date of Inspection: 2010 **Project Number:** 10-1188-0008 Time of Inspection: 9:30 - 11:30**Weather Conditions:** Sunny, humid and clear skies Chris Visser Inspected by: Light wind (SE to NW), + 25°C

1.	Site Appearance Neat
2.	Access Roads In Good

Condition

Waste Compactor On Duty

4. Tipping Area Litter Fences Used

5. Perimeter Litter Fences Used

6. Litter Being Collected

7. Berms Around Active Area

8. Daily Cover Being Used

9. Interim Cover In Good Condition

10. Final Cover In Good Condition

- 11. Repairs Made To Interim/Final Cover
- 12. Perimeter Ditches Unobstructed
- 13. Perimeter Ditches In Good Condition
- 14. Natural Slopes In Good Condition
- 15. Vegetative Cover In Good Condition
- 16. Evidence Of Surface Water Ponding
- 17. Evidence Of Leachate Seeps
- 18. Presence Of Leachate Odours
- 19. Presence Of LFG Odours
- 20. Evidence Of LFG Vegetation Kill
- 21. Borrow Area In Good Condition
- 22. Public drop-off operated properly
- 23. Other Observations

The second se	**********	
Yes	No	Comments
1		
✓		
✓		1 (CAT) – LF Compactor and 1 - Bulldozer
	✓	
✓		Snow-type fence
✓		Litter collecting was taking place at time of the site visit.
✓		
✓		From on-site stockpiled material.
✓		The state of the s
√		Recently completed final cover was placed along the top of the site scheduled to receive topsoil and seed in Sept. / Oct. 2010
✓		
✓		
✓		
√		
√		Trees have been planted across the eastern slopes of Cell 1 South and Cell 1 North.
	✓	
	✓	
	✓	
✓		Faint LFG odour noted at the tipping face, along the toe perimeter road near the southern toe of Cell 1 south and the western edge of Cell 1 West A. (Refer Figure 1)
	✓	No vegetation kills observed, but areas with sparse and LFG impacted vegetation observed. Repairs to these areas planned during 2010.
✓		On-site material stockpiles.
✓		
√		a) Small shingles pile located in the south fill area. Shingles are utilized for improving access to the tipping face under wet / soft ground conditions.
		 Topsoil stockpile located in the south-west corner of the site for completing final cover placement across the top of the landfill.
		 c) Excavation and grading of the future North Fill Area was being undertaken at the time of the site visit.

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