

**OPEN SESSION MINUTES  
WINNEBAGO COUNTY BOARD OF SUPERVISORS  
SOLID WASTE MANAGEMENT BOARD**

DATE: March 20, 2013

TIME: 9:00 a.m.

LOCATION: Sunnyview Landfill  
100 W. County Road Y  
Oshkosh, WI

PRESENT: Pat O'Brien, Chairman  
Paul Eisen, Secretary  
Mike Easker  
Jerry Finch  
Doug Nelson  
Pat Brennand (9:00 – 10:42 a.m.)  
David Albrecht (9:01 – 11:14 a.m.)

EXCUSED: Ken Robl, Vice Chairman  
Gerry Konrad

ALSO PRESENT: John Rabe, Director of Solid Waste  
Jennifer Semrau, Recycling Specialist  
Kurt Pernsteiner, Facility Manager  
John Fink, County Executive Assistant  
Warren Shuros, Foth Infrastructure & Environment  
Chris Anderson, Foth Infrastructure & Environment  
Marty Sturzl, Foth Infrastructure & Environment

1. Call to Order: P. O'Brien called the meeting to order at 9:00 a.m.
2. Approve Agenda: Motion to approve the March 20, 2013 agenda, made by J. Finch and seconded by P. Brennand. Motion carried 6-0.
3. Public Comments on Agenda Items: None.
4. Announcement/Communications: J. Rabe informed the SWMB that J. Semrau received the 2013 Christy Dixon Recycler of the Year Award at the WI Integrated Resource Management Conference on February 21, 2013. The award is for an individual whose career demonstrates the highest professional standards in the recycling field. The SWMB congratulated J. Semrau on this award.

J. Rabe presented a proposed schedule for a follow-up meeting on the Brown, Outagamie, Winnebago (BOW) strategic plan. The meeting would be held at 10:00 a.m. on April 15, 2013 at the Outagamie County Solid Waste office, with lunch at 11:30 a.m. and a tour at 1:00 p.m.

Consensus of the SWMB members was that this would work with their schedules and a regular SWMB would still be held on April 17, 2013.

5. Approval of Minutes – February 6 and March 6, 2013 Open Session: Motion to approve the February 6 and March 6, 2013 open session minutes made by J. Finch and seconded by M. Easker. Motion carried 7-0.
6. Discussion – Consider Authorization to Proceed with Siloxane Removal System Design/Request for Proposal Documents: J. Rabe reminded the SWMB that the 2013 Budget included a capital outlay request for a landfill gas siloxane removal system to reduce maintenance/downtime of the engine/generators.

Chris Anderson, Foth Infrastructure and Environment (Foth) presented a siloxane treatment system cost benefit analysis to the SWMB as follows:

- Siloxanes are silicon based organic compounds contained in many household products
- Volatilize from waste into the landfill gas
- Internal combustion forms granular silica deposits on internal surfaces (i.e. sand)
- Sunnyview Landfill siloxane testing levels have been increasing
  - Jan 2009 ~7 mg/m<sup>3</sup>
  - Feb 2012 ~37 mg/m<sup>3</sup> (by GE Jenbacher)
  - Apr 2012 ~28 mg/m<sup>3</sup>
  - Jul 2012 ~17 mg/m<sup>3</sup>
- GE Jenbacher siloxane treatment guidelines
  - < 6 mg/m<sup>3</sup> – not required
  - 6-12 mg/m<sup>3</sup> – questionable
  - > 12 mg/m<sup>3</sup> - required
- Existing engine maintenance seeing increased build-up of silica, effecting engine performance
- Decoking Engines 4&5 four times/year; Engines 1-3 two times/year
- Oil changes every 500 hours= 16 times/year
- Existing maintenance costs approximately one week down for decoking completed by SWMB staff
- Labor/materials/lost power revenue= total annual cost of ~\$500,000/year
- Additional impact on Law Enforcement Center (LEC): possible reduced thermal transfer in exhaust heat exchangers and reduced heat available due to downtime
- Siloxane treatment system specifications proposal received from Venture Engineering and Construction
- Regenerable media system removes siloxanes, moisture, non-methane organic compounds (NMOCs) and hydrogen sulfide (H<sub>2</sub>S)
- Performance:
  - Siloxane reduction target < 5 mg/m<sup>3</sup>
  - Actual performance much better; at least < 1 mg/m<sup>3</sup>
  - NMOC reduction ~ 80%
  - H<sub>2</sub>S reduction ~ 70%

- Siloxane treatment system cost estimate
  - Capital investment ~ \$1.52 million, including all equipment, engineering, permitting, site work, installation and contingency
  - Annual operation and maintenance ~ \$84,500/year including power, media and maintenance
- Engine maintenance reductions with siloxane treatment
  - Assumes engines will no longer need to be decoked
  - Assumes oil change frequency every 1,000 hours (8 times/year)
  - Annual cost ~ \$100,000/year
- Return on investment- siloxane treatment saves ~\$300,000/year (~\$60,000/engine/year); payback in 5.3 years
- Does not include a possible reduction in LEC savings or added costs (decoking exhaust heat exchangers or increased down time of heat recovery system)
- Enough landfill gas available to continue operating all five engines beyond payback period.
- Siloxane treatment savings will continue as engines are shut down.
- Based on updated landfill gas generation rates, anticipate that first engine will be shut down in ~2020, second engine in ~2024 and third engine in ~2028.
- Savings over 15 years (2028) ~\$1.8 million
- Recommendation: proceed with siloxane treatment permitting and design to complete installation in 2013 (equipment lead time minimum 12 weeks)

J. Finch asked if Brown and Outagamie County have the same problems with siloxanes. J. Rabe stated that Brown and Outagamie County do not have the newer waste/high gas flows that contribute to elevated siloxanes. C. Anderson added that Brown and Outagamie County do not operate the engines (contract it out), so it is not as much of a concern.

P. Eisen asked if our staff could operate/maintain this system or if additional staff would be needed. C. Anderson stated that existing staff would be capable of running the system and would have time available, saved from not decoking the engine/generators so frequently.

Discussion ensued amongst the SWMB.

P. Eisen questioned whether some type of grants may be available for this project. J. Rabe stated he would look into whether any applicable grants are available.

M. Easker asked why the siloxane levels in our landfill gas have increased. C. Anderson stated that the make-up of the waste containing more and more products that contain siloxane, and large waste disposal quantities in recent years, are the main causes of this increase. Snell Road landfill gas does not contain siloxane at these levels (old waste).

P. Brennand asked about the air permit ramifications of this project. C. Anderson stated the project is not adding any emissions, but changing where those emissions are released, which should expedite the air permit process with the WDNR.

Motion to proceed with siloxane removal system design/request for proposals estimated at approximately \$175,000, made by M. Easker and seconded by P. Eisen. Motion carried 7-0.

7. Discussion/Action – Consider Award of 2013 Sequence C-4 Final Cover Construction Project (SW02-13): J. Rabe summarized the planned Co-Disposal site final cover project with the SWMB as follows:

- Bid Schedule 1 – 18.6 acres in 2013
- Bid Schedule 2 – 16.1 acres in 2014
- Bid Schedule 3 – 34.7 acres in 2013
  
- Final cover detail – 2’ compacted clay, 40 mil LLDPE textured geomembrane, geocomposite drainage layer, 2.5’ rooting zone soil, 6” topsoil.
  
- Project also involves the abandonment of 30 to 40 horizontal gas wellheads and the installation of new landfill gas header and lateral piping to improve gas collection from the site.

J. Rabe reviewed the project schedule to date: advertised on February 5th and 12th; pre-bid meeting was held on February 19th; bids were received on March 7th. J. Rabe stated four bids were received (from those Contractors that were deemed as qualified) and the bid tally sheet is summarized as follows:

	Hoffman Construction	Integrity Grading and Excavating	Relyco, Inc.	River View Construction
Total-Schedule 1 (Items 1-26)	\$ 2,258,326.50	\$ 2,435,310.00	\$ 2,151,862.00	\$ 2,434,805.25
Total-Schedule 2 (Items 1-27)	\$ 2,354,530.00	\$ 2,660,365.00	\$ 2,186,621.40	\$ 2,673,374.00
Total-Schedule 3 (Items 1-29)	\$ 4,398,527.50	\$ 4,435,927.93	\$ 4,165,448.50	\$ 5,303,806.25
Bid Bond / Cashiers Check	BID BOND	BID BOND	BID BOND	BID BOND

J. Rabe stated that a bid clarification meeting with Relyco and Foth personnel was held on March 12, 2013 to review Relyco’s Bid Schedule 3, construction schedule, proposed subcontractors and various bid items. J. Rabe stated that he wanted to make sure that Relyco and their subcontractors were on board with constructing the entire 34.7 acres final cover in 2013.

As a result, J. Rabe and Marty Sturzl, Foth recommend awarding the one year project to Relyco, Inc (Bid Schedule 3) for a not to exceed cost of \$4,165,448.50. Doing the project in one season is estimated to save ~\$250,000 in construction and engineering costs. J. Rabe reminded the SWMB that final cover construction costs are not budgeted and are paid from the WDNR escrow account funds.

Discussion ensued amongst the SWMB.

P. Eisen asked what the revenue impact of the one year project would be (related to landfill gas compared to a 2 year project). J. Rabe stated that while doing the project in one year versus two could reduce landfill gas production slightly, there would not be a revenue reduction as we have excess landfill gas which must be flared.

Discussion ensued amongst the SWMB.

Motion to approve recommendation to award the Sequence C-4 Final Cover Construction Project (SW02-13) to Relyco, Inc., for a not-to-exceed cost of \$4,165,448.50 (Bid Schedule 3), made by P. Brennand and seconded by J. Finch. Motion carried 7-0.

8. Discussion/Action – Life Cycle Financial Analysis Presentation: J. Rabe reminded the SWMB that the Life Cycle Financial Analysis was last discussed at the July 18, 2012 meeting. Since that time the analysis has been modified to match the format of the new Munis financial system. Warren Shuros, Foth presented the Life Cycle Financial Analysis to the SWMB.

W. Shuros stated that the purpose of this Life Cycle Financial Analysis to better understand the effects of switching from regional landfill operations to predominantly transfer station operations, handling lower total volumes of solid waste. In addition, the SWMB must maintain adequate reserve funding to continue care of the closed Snell Road Landfill and the Sunnyview Landfill. This Life Cycle Financial Analysis provides a management tool to more accurately project future financial performance, maintain adequate reserves, and make appropriate management decisions based on sound financial information.

W. Shuros also indicated that while the SWMB has created a solid retained earnings fund balance and has been able to experience fairly stable tipping fee rates in the past, it is likely that there will need to be some increases in the near future. There are significant economies of scale in operating a regional landfill that are not available in a transfer station operation. In a landfill, extra tonnage brings in extra revenue without a corresponding cost per ton increase in expenses. In the transfer station, extra tonnage means more revenue, but also means the added incremental costs to haul to Outagamie/Brown County and paying the corresponding landfill tipping fees.

Foth developed six different scenarios which were modeled during this update; the Base Case and five sensitivities. The Base Case is set up to represent existing conditions. Sensitivities to the Base Case are used to model different “what-if” scenarios.

- Base Case – Extensive input from J. Rabe and K. Pernsteiner to modify the previous landfill based costs and revenues into the new SWMB accounting system that is focused on the transfer station based solid waste management system. Significant adjustments to labor and other operating cost changes were made, appropriate to this management system changeover. The Base Case is modeled based on the current 2013 budget documents and projections based on SWMB staff experience.
- Sensitivities included various tipping fee increases, and interest and inflation rate variations for the retained earning fund and LTC and closure accounts.
- A retained earnings fund balance of ~\$20 Million was estimated as of December 31, 2012 based on the current draft 2012 financials.

Solid waste tonnage is disposed at the Outagamie County Landfill through 2019. Beginning in 2020, solid waste tonnage is disposed at the Brown County Landfill. In 2020, more tons will pass through the transfer station, but less total tons will be disposed at the Brown County Landfill.

P. Eisen asked why tonnage would decrease when landfilling shifts to Brown County. W. Shuros stated that because Brown County is farther away, it was logical that fewer SWMB customers/haulers would be willing to drive the distance to the Brown County landfill.

P. Eisen asked why we wouldn't still incentivize northern communities to go directly to the Brown County Landfill. W. Shuros reminded the SWMB that this Life Cycle Financial Analysis is a tool which can be used to make these types of management decisions.

W. Shuros stated that the bottom line is that the SWMB needs to consider increasing tipping fees and reducing operational expenses, in order to maintain an adequate retained earning reservation balance over time.

Discussion ensued amongst the SWMB.

Motion to accept the Foth Life Cycle Financial Analysis report as presented, made by D. Nelson and seconded by P. Eisen. Motion carried 6-0.

9. Future Agenda Items: None.
10. Set Next Meeting Date: The next meeting date will be April 3, 2013 at 9:00 a.m.
11. Adjournment: Motion to adjourn made by J. Finch and seconded by M. Easker. Motion carried 6-0. Meeting was adjourned at 11:14 a.m.

Respectfully Submitted,

Jennifer Semrau  
Recycling Specialist

**Approved by SWMB – April 3, 2013**