Biosolids Master Plan
Stakeholders Advisory Committee
Meeting #2 Notes
November 18, 2013 – Cindy Klassen Recreation Centre, 999 Sargent Avenue

In Attendance

Green Action Centre	Sylvie Hébert
International Institute of Sustainable Development	Karla Zubrycki
Keystone Agricultural Producers	Curtis McRae
Manitoba Environmental Industries Association	Tanis Ostermann
Manitoba Conservation	Robert Boswick
Manitoba Hydro	D.R. (Deny) St. George
Manitoba Composting Association (MCAC); Compo-Stages Manitoba Services Co-op (CSMSC)	Gérard (Gerry) Dubé
Consumers Association of Canada (Manitoba)	Gloria Desorcy
Lake Friendly; Partnership of the Manitoba Capital Region	Colleen Sklar
City of Winnipeg - Water & Waste Department	Duane Griffin
City of Winnipeg - Water & Waste Department	Arnold Permut
City of Winnipeg - Water & Waste Department	Michelle Paetkau
City of Winnipeg - Water & Waste Department	Tiffany Skomro
Veolia	Bruno Valla
Facilitator	Michelle Holland
Guest Specialist	Dr. Jan Oleszkiewicz

Regrets

Winnipeg Chamber of Commerce	Dave Angus

AGENDA

1. Session opening
2. Report back from NEWPCC Tour
3. Recap of standards and guidelines
4. Selection criteria for evaluating options

--Break--

5. Biosolids management trends
6. Biosolids management options:
    a. Composting
    b. Land reclamation and landfilling
7. Session Closing

1. SESSION OPENING

Review SAC Purpose, Ground Rules, Meeting Purpose and Outcomes.

2. REPORT BACK FROM NEWPCC TOUR
Report back from SAC Members who participated in the NEWPCC Tour.

3. RECAP OF STANDARDS AND GUIDELINES
Presentation by Manitoba Conservation on Manitoba's regulation of the treatment, management, and disposal of biosolids.

Regulation ensures that:

- Public health and environmental concerns are addressed;
- Public nuisance conditions do not occur; and
- Land use is not affected.

- Jurisdictions in Manitoba that currently have licences for land application: Brandon, Portage la Prairie, Winnipeg. Other centres are periodic.
- Purpose of Nutrient Management Regulation is to protect water quality by encouraging responsible nutrient planning and by regulating or prohibiting:
    - The application to land of substances containing nitrogen or phosphorus; and
    - The development of certain types of nutrient generating facilities in areas where water bodies or groundwater are sensitive to impact.
- Recent changes include limits to when land application can occur.
- The Water Quality Standards, Objectives and Guidelines Regulation includes biosolids and requires use of best practical technology to prevent contamination of surface and ground water.
- Related key components of Manitoba's Guidelines for Sustainable Development;
    - Waste minimization and substitution;
    - Conserving renewable and non-renewable material resources; and
    - Ensuring local decision making is consistent with our global environmental, economic, and social responsibility.

- Manitoba's Principals and guidelines of sustainable development: http://www.gov.mb.ca/conservation/susresmb/principles-susdev/index.html
- Manitoba's Sustainable Development Code of Practice: http://www.gov.mb.ca/conservation/susresmb/pdf/sd_code_prac.pdf
- Sustainable Development in Manitoba: http://www.gov.mb.ca/conservation/susresmb/sd/index.html

DISCUSSION ITEMS

- What is the Province's preferred option and why?

Land application is encouraged where it is an option because of its reuse of resources.

- How do spreading rates affect the viability of the option?

Nutrient content or metals are the limiting factors.

4. SELECTON CRITERIA FOR EVALUATING OPTIONS

City project team provided selection criteria that must be included, and an outline of sustainable reuse.

The Committee brainstormed criteria for consideration:

- Long-term sustainability
- Net positive contribution to sustainability
- Adaptable – resilience, scaling up or down of solution
- Exemplary practice – go beyond the bare minimum
- Mixed/integrated solution –more than one solution, risk management
- Public private partnerships
- Public understanding, path to acceptability
- Resource recovery rather than waste management
- Nuisance odour
- Respectful of rights of land owners, individuals, neighbours
- Revenue potential, cost
- Level of complexity
- Has to work in Manitoba's climate
- Considers all elements of the biosolids "supply chain"
- Alignment with long-term goals or plans

5. BIOSOLIDS MANAGEMENT TRENDS

Dr. Oleszkiewicz provided an overview of how biosolids are being handled in other jurisdictions.

6. BIOSOLIDS MANAGEMENT OPTIONS

City project team provided an overview of the options, which were then opened up to the Committee for discussion.

a. COMPOSTING

- Is the composting process covered?
- How does the pilot facility interact with other composting operations?
- Have you looked at using straw or other materials (i.e. leaf and yard waste) as a bulking agent?
- Do we have enough wood chips available for the pilot project?
- Is there an opportunity to test other bulking agents, especially considering local availability of alternatives?
- Can food waste be added as part of the composting process?
- Does composting generate greenhouse gases?
- Is there potential for energy capture, reuse with composting?
- As part of the pilot, is the city looking for markets to distribute the compost?

- What is different about this composting option/process that we need to test the compost? Is our process different than what others are doing?
- What is the ratio of biosolids to woodchips?
    - 200 wet tonnes biosolids : 146 wet tonnes woodchips (1 tonne biosolids : 0.73 tonne woodchips)
- What is the potential in terms of end market for compost and profit? Does the pilot involve marketing/market examination of compost product?
- What is the scalability potential of composting if the pilot is successful?
- What are the factors the pilot is testing – climate, meeting regulation, other?

b. LAND RECLAMATION AND LANDFILLING

- When will Brady landfill run out of capacity? Does that anticipate 100% landfilling of biosolids?
- Why are we landfilling all year, when land spreading is still an option in the immediate?
- Will biosolids compost be used for day cover as well as final cover at landfill?

DISCUSSION ITEMS

- What about the N to P ratios in biosolids, as this is important to farmers who would be accepting the sludge for spreading?
    - 3.3%N : 2.3%P
    - 1.4N : 1P
- What other material is being treated other than sewage, e.g. Leachate from Brady?
- What is the expected timeline of the Biosolids Master Plan?
    - The Biosolids Master Plan is scheduled to the design year 2037.

SUMMARY OF ACTION ITEMS – IN PROGRESS

- Review selection criteria with stakeholder groups; provide feedback via "Selection Criteria" survey link to be circulated prior to next meeting. – **All SAC participants**
- How can we determine the relative sustainability (pros and cons) of all the options? – **For further Project Team and SAC consideration**
- What has been the past experience with spreading (WINGRO)? – **Curtis McRae to share with SAC and Project Team at December meeting.**
- Explain Thermal Oxidation: Are nutrients recovered in ash? Can the ash be applied as a fertilizer? – **Project Team to cover in December meeting presentation.**

ADMINISTRATIVE NOTES:

- Circulate meeting notes (this document)

- Circulate Dr. Oleszkiewicz's presentation slides
- Updated meeting dates and times – please update calendars:
    - Meeting #3: Thursday, December 5, 2013 3:30 – 6:15p.m.
    - Meeting #4: Week of February 2, 2014 – Date TBD
- SAC Members asked to Save the Date - public event dates scheduled for January 14 and 15, 2014