Biosolids Master Plan
Stakeholders Advisory Committee
Meeting #3 Notes

December 5, 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 Conservation	Robert Boswick
Manitoba Hydro	D.R. (Deny) St. George
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
Manitoba Environmental Industries Association	Tanis Ostermann & John Fjeldsted
Lake Friendly; Partnership of the Manitoba Capital Region	Colleen Sklar
Consumers Association of Canada (Manitoba)	Gloria Desorcy
Manitoba Composting Association (MCAC); Compo-Stages Manitoba Services Co-op (CSMSC)	Gérard (Gerry) Dubé

AGENDA

1. Session opening
2. Presentations & discussion - biosolids management options:
    a. Land Application
    b. Thermal Oxidation
    c. Pelletization

—BREAK—

3. Recap – The Netherlands technology mission
4. Principles and criteria discussion – part 2
5. Recap – public events
6. Brainstorm list of stakeholders
7. Session Closing

1. SESSION OPENING
Review SAC Purpose and Process, Ground Rules, Meeting Purpose and Outcomes.

Recap of SAC Process:
MTG 1:

- Overview of BMP and current practices

MTG 2:

- Review of Options:
  - Composting
  - Landfilling
  - Land reclamation
- Brainstorming principles and criteria

MTG 3:

- Review of Options:
  - Land Application
  - Thermal Oxidation
  - Pelletization
- Refining principles and criteria

MTG 4 (upcoming):

- BMP & Options
  - Comparative look at options
  - RFI results update
  - Results from input at public meetings
- Evaluation of options using principles, criteria
- Additional, final feedback and considerations from SAC

2. BIOSOLIDS MANAGEMENT OPTIONS
City project team continued discussion on options.

a. LAND APPLICATION
Curtis McRae also presented his experience with the previous land application program.

- Can it be applied to hay land, so that greater amounts can be spread?
- What are the guidelines to incorporating the biosolids into the land?
- What kind of crops can be grown on the land after biosolids have been applied?
- What is the biosolids were pathogen free (class A)?
- Is runoff a concern with land application?
- With the changes in the wastewater facilities, do you see the characteristics or quality of the biosolids changing? (N&P, pathogens)

b. THERMAL OXIDATION

- Is material going into the burner (the first part of the process) just biosolids?
- In Europe, is the tendency increasing to use thermal oxidation?
- What happens to the nutrients when you burn biosolids/create ash?
- Can you recover phosphorus from ash? And is the technology to recover leading edge?
- Would there be consideration to subsidizing nutrient recovery of phosphorus?
- Can ash be spread or land applied? Are metals content a limiting factor?

c. PELLETIZATION

- Does it have to reach class A for use in fertilizer?
- Is there a standard in order to make pellets available for lawns?
- How energy intensive is the process?

3. RECAP – THE NETHERLANDS TECHNOLOGY MISSION

Report back from SAC Members who participated in the Netherlands Technology Mission.

- MEIA (Manitoba Environmental Industry Association), WTC (World Trade Centre) Winnipeg, and NRC-IRAP (National Research Council – Industrial Research Assistance Program) led a high-level trade mission in the Netherlands with the support of the Dutch consulate, focusing on water and wastewater technologies.
- Visited leading water and wastewater institutions and projects, learning that the Dutch are good integrators and planners.
- Learned of different technologies and providers.
- City of Amsterdam incinerates all biosolids, using extracted energy for heat and power.
- The future is moving towards all solid waste (i.e. non-recyclables) being put down the drain. This has a potential to increase the production of biosolids from the treatment plant.
- Manitoba is looking to initiate projects with the Netherlands. Opportunity to assess new concepts and technologies.
- Link to press release for the mission: http://www.wtcwinnipeg.com/news/going-dutch-32-manitobans-off-to-investigate-water-technologies-in-the-netherlands/

COMMENTS

- In their waste-to-energy plant, did they dewater biosolids? Did they digest the biosolids first?
- What do they do with their ash?

OVERALL DISCUSSION ITEMS

- Are we considering anaerobic composting as a potential, separate option?
    - What are the cost considerations for anaerobic composting?
    - Would this reach Class A?
- What is the temperature of the wastewater leaving the plant?
- Is it possible to incorporate composting toilets in new developments, as they've done in other places? Or vacuum toilets?
    - Concept of these ideas as requiring an element of community commitment, public "choice" (e.g. as part of a sustainable community pilot type of initiative)
    - Consideration for how these would translate in Winnipeg context
    - Consideration of public health and safety concerns
        - Require controls; variability of operation (i.e. sale of home to new homeowner, and operator/steward)
        - Commercial application lessons learned (e.g. MEC)
- Amsterdam's vision discussed – movement to no garbage pickup (still blue box though) with installation of sophisticated "Shredder/Garborator"-style system for all waste to literally flush down the drain to recovery centre.
- Note that there is value in sharing with the public that these additional ideas were discussed, considered.
- How often do master plans get reviewed?

4. PRINCIPLES AND CRITERIA DISCUSSION

Refined lists resulting from discussion:

Evaluation criteria - for the project team's consideration in evaluating individual biosolids management approaches that may form part of solutions in the biosolids master plan.

- Public legitimacy, understanding and path to acceptability
- Mitigation of neighbour concerns (e.g. odour)
- Ease of operation
- Ability to cope with Manitoba climate
- Revenue potential
- Opportunity for private sector role or involvement
- Exemplary practice – being a leader
- Functional – how efficient is it?
- How quickly it can be implemented
- Has it been proven on a municipal level?
- Cost
- Locating factors - Amount of space required and type of location
- Net positive contribution to sustainability – ecological sustainability
- Adaptability, scalability, resilience

Guiding Principles - for the project team's consideration in formulating the biosolids master plan.

- Long-term sustainability (25-30yr horizon)
- Mixed/integrated solution
- Adequately efficient and effective resource recovery (not waste management)
- Consider all elements in biosolids “supply chain” (e.g. balance of energy, supply materials, bylaws)
- Does it work?
- Health & safety

Require additional discussion/clarity:

- Assessment of risk
- Alignment of long-term goals and plans of City

5. RECAP – PUBLIC EVENTS

SAC are invited to attend one, or both, of the Public Meetings being held next month. An invitation will be circulated, and SAC are requested to forward the invite within their networks.

Date	Tuesday, January 14, 2014	Wednesday, January 15, 2014
Registration and coffee	5:30-6:00 pm	9:00-9:30 am
Presentation	6:00-6:30 pm	9:30-10:00 am
Question and answer period	6:30-7:30 pm	10:00-11:00 am

Location: Manitoba Children's Museum, 45 Forks Market Rd

The website will also be updated to allow for online feedback.

6. BRAINSTORM LIST OF STAKEHOLDERS

SAC are asked to provide input on who we should be contacting to provide feedback on the Biosolids Master Plan process. Please include contact information – email or mailing address.

- AMM
- Mayors, reeves near Winnipeg
- MB Eco Network
- Industry organizations (manufacturing, etc)
- Manitoba Water and Waste Association
- CEM
- Additional suggestions supplied through survey will be included in master list.

SUMMARY OF ACTION ITEMS – COMPLETE

- Composting Reference Documents:

    - http://www.compost.org/English/PDF/Technical_Document_MSW_Organics_Processing_2013.pdf
    - http://www.ccme.ca/assets/pdf/compostgdlns_1340_e.pdf
  - Standards Council of Canada website where you can order access to the Organic Soil Conditioners – Composts document, CAN/BNQ 0413-200/2005.
    - http://www.scc.ca/en/standardsdb/standards/20236

SUMMARY OF ACTION ITEMS – IN PROGRESS

- Add definition of BNR to the Glossary – **Project team**
- Provision of additional background on "net contribution to sustainability" concept – **Gloria Desorcy**
- Follow up with members not in attendance to gain input on meeting proceedings, and survey on refinements to principles and criteria – **Michelle Holland**

ADMINISTRATIVE NOTES:

- Circulate meeting notes (this document)
- Circulate Deny and Curt's presentation slides
- Updated meeting date and time – please update calendars:
  - Meeting #4: Thursday, February 6, 2014
  - Location change: Fort Rouge Leisure Centre-Multi-Purpose Room (625 Osborne Street)