



Sustainable Development

Environmental Stewardship Division
Environmental Approvals Branch
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May 7, 2018

Chris Carroll, P.Eng.
Manager of Wastewater Services Division
City of Winnipeg
109 – 1199 Pacific Avenue
Winnipeg, MB R3E 3S8

Dear Chris Carroll:

Re: City of Winnipeg – Summit Soil Fabrication Pilot Project Request for Approval

I am responding to the February 6, 2018 letter and proposal as well as the related February 26, 2018 email respecting the City of Winnipeg's (City's) proposed Summit Soil Fabrication Pilot Project. The City submitted the letter under Clause 6, Exemption, of Manitoba Regulation 164/88 (amended), Classes of Development. The related email provided additional information requested in a February 16, 2018 email from the Environmental Approvals Branch (EAB). We recognize this Pilot Project as being associated with the City's Biosolids Master Plan.

The letter and proposal describe a three-year pilot project relative to the use of biosolids and other organic and inorganic residuals to fabricate a soil for the vegetative support layer as part of the final cover system at the site of the City's Summit Landfill. The objective of the pilot project is to determine if soil fabrication is a viable long-term option for completing the cap system at Summit Landfill. The soil fabrication process would use biosolids from the City's North End Water Pollution Control Centre (NEWPCC), sand and grit from street sweeping, and woodchips with a goal of the resulting soil being able to support vegetation growth and restore the site to a native prairie landscape. As described in the letter, each year of the pilot will consist of two operational phases, one each of cold and warm weather phases while the City will submit interim, annual and final reports. No stockpiling of non-blended biosolids will occur at the site, as mixing of biosolids with the other elements will occur immediately upon arrival of the biosolids to the site.

The supplementary email provided a copy of Figure 1 that was missing from the February 6, 2018 letter, and indicated the following:

- bench scale testing should be complete by the end of March 2018;
- Sylvis Environmental Services Ltd. (Sylvis) is the expert consultant and Sylvis representatives will participate in key components of the pilot;

- the quantity of biosolids involved in each operational phase of Year 1 will not exceed 4,000 m³ while the City may propose to adjust the quantities involved in each phase of Years 2 and 3;
- the blending activities of materials will occur within the secure area of the Summit Landfill;
- the characteristics of the biosolids have remained generally consistent over the past several years;
- birds present a low risk factor to the pilot, wildlife in the area can pass freely though the area as the perimeter fence has periodic gaps, and pest control measure will be utilized if required;
- the 0.6 metre final thickness of the placed fabricated soil was chosen based on the results of the related 2017 soil fabrication pilot project at the City's Brady Road Resource Management Facility (BRRMF); and
- operations at the site will be suspended if winter conditions cause operational difficulties or safety concerns with all biosolids being redirected back to BRRMF.

Upon consideration of the request for approval of this Summit Soil Fabrication Pilot Project, I have decided, pursuant to Section 6 of Manitoba Regulation 164/88 – Classes of Development, to approve the request subject to the following conditions:

DEFINITIONS

In this letter,

"biosolids" means accumulated organic solids, resulting from wastewater treatment processes, that have received adequate treatment to permit the material to be recycled;

"noise nuisance" means an unwanted sound, in an affected area, which is annoying, troublesome, or disagreeable to a person:

- (a) residing in an affected area;
- (b) working in an affected area; or
- (c) present at a location in an affected area which is normally open to members of the public;

if the unwanted sound

- (d) is the subject of at least 5 written complaints, received by the Director in a form satisfactory to the Director and within a 90 day period, from 5 different persons falling within clauses (a), (b) or (c), who do not live in the same household; or
- (e) is the subject of at least one written complaint, received by the Director in a form satisfactory to the Director, from a person falling within clauses (a), (b) or (c) and the Director is of the opinion that if the unwanted sound had occurred in a more densely populated area there would have been at least 5 written complaints received within a 90 day period from 5 different persons and who do not live in the same household; and

"odour nuisance" means a continuous or repeated odour, smell or aroma, in an affected area which is offensive, obnoxious, troublesome, annoying, unpleasant or disagreeable to a person:

- (a) residing in an affected area;
- (b) working in an affected area; or
- (c) present at a location in an affected area which is normally open to members of the public;

if the odour, smell or aroma

- (d) is the subject of at least 5 written complaints, received by the Director in a form satisfactory to the Director and within a 90-day period, from 5 different persons falling within clauses (a), (b) or (c), who do not live in the same household; or
- (e) is the subject of at least one written complaint, received by the Director in a form satisfactory to the Director, from a person falling within clauses (a), (b) or (c) and the Director is of the opinion that if the odour, smell or aroma had occurred in a more densely populated area there would have been at least 5 written complaints received within a 90-day period, from 5 different persons who do not live in the same household.

GENERAL REQUIREMENTS

1. The City of Winnipeg (City) shall, at least ten working days prior to initiating soil fabrication and placement in 2018, 2019, and 2020, provide to the Director, Environmental Approvals Branch annual plans identifying the intended location(s) and maximum area(s) of land application at Summit Landfill of fabricated soils for that year of the Summit Soil Fabrication Pilot Project.
2. The City shall, at least five working days prior to initiating soil fabrication and placement, provide to the assigned Environment Officer the formula to be used in fabricating the soil to be used in the Summit Soil Fabrication Pilot Project for the duration of that fabricated soil placement event unless it is the same as the previous formula for this project.
3. Biosolids and all associated materials shall be transported between the North End Water Pollution Control Centre (NEWPCC), the Brady Road Resource Management Facility (BRRMF), and the site of the Summit Soil Fabrication Pilot Project in covered containers, to the satisfaction of the assigned Environment Officer, so as to prevent the loss of biosolids and associated liquids.
4. Biosolids materials delivered to the Summit Soil Fabrication Pilot Project will be mixed with feedstock upon arrival and biosolids other than those specifically involved with this project shall not be stored temporarily or permanently at the Summit Landfill.
5. The City shall limit access to the site of the Summit Soil Fabrication Pilot Project to persons specifically participating in associated activities. The method of access restriction to the general public shall be to the satisfaction of the assigned Environment Officer.


6. The City shall provide and display effective warning signs identifying the general nature of the Summit Soil Fabrication Pilot Project at potential access points and around the associated areas to the satisfaction of the assigned Environment Officer.
7. Surface water resulting from precipitation at the site of the Summit Soil Fabrication Pilot Project shall be controlled and managed to the satisfaction of the assigned Environment Officer.
8. The site of the Summit Soil Fabrication Pilot Project shall be operated and maintained so as to control vector attraction and activity at the site to the satisfaction of the assigned Environment Officer.
9. Fabricated soils shall be applied in such a manner that it is placed and spread so as to form a generally homogeneous cover layer.
10. Fabricated soils shall only be applied over areas of the Summit Landfill that are underlain by previously completed waste disposal cells.
11. Fabricated soils shall not be removed from the area of the Summit Soil Fabrication Pilot Project to areas outside of the Summit Landfill site.
12. The City shall maintain the resulting above ground biomass in such manner that it does not create potential threats to the environment, public health or wildlife.
13. The City shall not cause or permit an odour nuisance to be created as a result of the construction, operation or alteration of the Development, and shall take such steps as the Director may require to eliminate or mitigate an odour nuisance.
14. The City shall not not cause or permit a noise nuisance to be created as a result of the construction, operation or alteration of the Development, and shall take such steps as the Director may require to eliminate or mitigate a noise nuisance.
15. Reports summarizing all activities and results associated with the interim winter, interim summer, and annual reports for each year of this Summit Soil Fabrication Pilot Project shall be submitted to the Environmental Approvals Branch, Manitoba Sustainable Development not later than December 31st of each year of operation of this pilot.
16. This approval shall terminate not later than January 31, 2021 unless otherwise approved by the Director.

All other previously approved proposed and imposed conditions, limitations and requirements remain in place during this pilot.

If you have any questions or would like to discuss matters pertaining to this Summit Soil Fabrication Pilot, please contact Robert Boswick, Environmental Engineer, at 204-945-6030 or robert.boswick@gov.mb.ca.

Yours sincerely,



 Tracey Braun, M.Sc.
Director

- c. Duane Griffin, P.Eng. – Water and Waste Department, City of Winnipeg
Don Labossiere/Scott Davies/Yvonne Hawryliuk – Environmental Compliance and Enforcement
Branch, Manitoba Sustainable Development
Robert Boswick/Asit Dey/Cory Graham – Environmental Approvals Branch, Manitoba Sustainable
Development
Public Registries

