

## **SUMMARY OF COMMENTS/RECOMMENDATIONS**

**PROPONENT: City of Steinbach**

**PROPOSAL NAME: Waste Disposal Grounds**

**CLASS OF DEVELOPMENT: Class 2**

**TYPE OF DEVELOPMENT: Waste Disposal Grounds**

**CLIENT FILE NO.: 5332.00**

### **OVERVIEW:**

The Department received a Proposal from Dillon Consulting on behalf of the City of Steinbach on March 18, 2008 for the continuing operation of a Waste Disposal Grounds located at N ½ 23-6-6 EPM. After review, it was determined that the Proposal did not contain sufficient detail and the Proposal was returned to Dillon with a request for additional information.

The Department received a revised Proposal from Dillon Consulting on behalf of the City of Steinbach on May 5, 2008 for the continuing operation of a Waste Disposal Grounds located at N ½ 23-6-6 EPM.

On May 27, 2008 the Department placed copies of the Proposal in the Public Registries located at 123 Main St. (Union Station), the Millennium Public Library in Winnipeg, the Jake Epp Public Library in Steinbach and the Manitoba Eco-Network. As well, copies of the Proposal were provided to the Technical Advisory Committee (TAC) members. The Department placed a public notification of the Proposal in the Steinbach Carillon on June 5, 2008. The newspaper and TAC notification invited responses until June 30, 2008.

### **COMMENTS FROM THE PUBLIC:**

There were no responses received from the public.

### **COMMENTS FROM THE TECHNICAL ADVISORY COMMITTEE:**

#### **Innovation, Energy and Mines, Mines Branch**

No concerns.

#### **Infrastructure and Transportation, Highway Planning and Design Branch**

No concerns.

#### **Conservation, Parks and Natural Areas Branch**

No comments.

#### **Conservation, Sustainable Resource & Policy Management Branch**

No comments.

#### **Agriculture Food and Rural Initiatives, Land Use Planning Branch**

No issues or concerns from an agricultural or agricultural land use perspective.

### **Community Planning Services, Steinbach**

It was noted that the proposed waste disposal expansion is generally in keeping with the intent of the City of Steinbach Development Plan and Zoning By-Law. A conditional use will have to be obtained from the municipality prior to the establishment of the facility. Our office has no concerns with respect to the proposal.

### **Response from the Proponent:**

These comments were forwarded to the Proponent and the response was as follows: I have contacted the City regarding the zoning concern and their Zoning Department found the following:

- 1) The Steinbach Landfill Facility Site is currently zoned "A" - Agricultural.
- 2) According to the Zoning By-Law, Landfill Facilities within Agricultural Zonings require a conditional use to be developed.
- 3) The Zoning By-Law also has an exemption written into it for Public Works Facilities.

If a Public Works Facility is set up on City owned land, for use by the City, then this use would be exempt from any Zoning By-Law restrictions.

Since the WDG is a Public Works facility used by the City operating on City owned land, it complies with Item 3 above and a Conditional-Use "permit" is not required.

### **Disposition:**

There is no further action required.

### **Culture, Heritage, Tourism and Sport, Historic Resources Branch**

No concerns with regard to this project's potential to impact heritage resources. If at any time however, significant heritage resources are recorded in association with these lands during development, the Historic Resources Branch may require that an acceptable heritage resource management strategy be implemented by the developer to mitigate the affects of development on the heritage resources.

### **Disposition:**

There is no further action required.

### **Water Stewardship**

Had the following comments:

1. *The Water Rights Act* indicates that no person shall control water or construct, establish or maintain any "water control works" unless he or she holds a valid licence to do so. "Water control works" are defined as any dyke, dam, surface or subsurface drain, drainage, improved natural waterway, canal, tunnel, bridge, culvert borehole or contrivance for carrying or conducting water, that temporarily or permanently alters

or may alter the flow or level of water, including but not limited to water in a water body, by any means, including drainage, OR changes or may change the location or direction of flow of water, including but not limited to water in a water body, by any means, including drainage. If the proposal in question advocates any of these activities, application for a Water Rights Licence to Construct Water Control Works is required.

2. The City re-routed a 2<sup>nd</sup> order drain that used to run through the grounds to the west of the grounds. They have identified a number of measures to manage the estimated 137,000 m<sup>3</sup> of surface water and have indicated long term monitoring of the 2<sup>nd</sup> order drain and ground water.
3. Our concerns would be with any potential to impact surface water quality. While the 2<sup>nd</sup> order drain may be an intermittent creek it drains to Manning Canal which supports white sucker, dace and fathead minnows.
4. Any discharge from the grounds should meet the Manitoba Water Quality Standards, Objectives and Guidelines.
5. For the surface water quality program, the Department recommends to add total phosphorus and xylene to the list in Table 5 of the proposal.
6. Because pesticide containers may be disposed at the site, an annual test for pesticides during spring runoff is also recommended at the proposed upstream and downstream sampling sites as shown in Appendix D, Figure 3.
7. The proposal should address closure and post – closure requirements.
8. The City of Steinbach should account for the WDG as an environmental liability as required by the Public Sector Accounting Board.

### **Response from the Proponent**

These comments were forwarded to the Proponent on October 30, 2008 and the response, received on December 15, 2008, was as follows:

1. The potential requirement for a Water Rights Licence was discussed with Senior Water Resource Officer, Geoff Reimer. In Mr. Reimer's professional opinion, it was determined that a Water Rights Licence is not required for this project.
2. No follow-up comment required.
3. Precipitation and surface water that is diverted and collected within the WDG site in the stormwater, sedimentation, and evaporation ponds will be analyzed and compared to the Manitoba Water Quality Standards, Objectives and Guidelines. The regional Manitoba Conservation officer will be provided with

the results of the analysis and notified prior to any water discharge from the WDG site.

4. See response to Comment #3.
5. Phosphorus and xylene will be added to the list of Water Quality Parameters identified in Table 5 of the proposal if requested by the Director.
6. Upstream and downstream analysis parameters will likely include phosphorus and nitrogen. Furthermore, the pesticide containers will be collected in an independent collection area, as described in Section 2.7 of the Environment Act Proposal. As these onsite containment measures will be taken, residual pesticides from the Pesticide Container Collection Depot (if any) are not anticipated outside of the designed containment area. Liquid collected from the Pesticide Container Collection Depot will be disposed of in the leachate evaporation pond.
7. Closure and post closure requirements are provided in Schedule E of Manitoba Regulation 150/91. In addition, the post closure plan for the existing disposal area has been provided in Section 2.11 of the Environment Act Proposal.
8. Noted.

**Disposition:**

The draft licence addresses surface water, pesticide container concerns and closure of the development

**Conservation, Pollution Prevention Branch**

Had the comments:

The prevailing wind as stated in the proposal and as validated is in the southerly direction. This is away from the residential areas that has the potential to be affected by odour (if ever). Although strong gusts in the directions of the north, north-west and west may be experienced between 6-30 days in a given year. This will have an impact on the odour generated by the WDG operations.\*

The proposal states that methane generated will be freely vented to the atmosphere. It is suggested that flaring (or any other technology to harness the gas) may be considered to reduce CH<sub>4</sub> into CO<sub>2</sub> to reduce the potential to global warming.

**Disposition:**

The draft licence addresses odour and greenhouse gas emissions.

## **Conservation Eastern Region, Regional Operations Division**

Had the following comments which were forwarded to the Proponent on October 30, 2008:

1. For the proposed active cell, what is the elevation of the cell bottom? At grade? What is prairie elevation (270)? Water table indicated at 1.5m below grade.
2. The compost pad is listed as only 0.4m compacted clay instead of 1.0m that we request for class 2 or 3 sites.
3. What is the O&M for the composting facility? What equipment is used to turn, frequency of turning, carbon source, protocol for odour prevention, etc.
4. The water chemistry list does not match with the standard parameters requested for waste disposal grounds.
5. Is there any water chemistry data available from their previous testing of the monitoring wells?
6. The underlying soil does not achieve  $1 \times 10^{-7}$  cm/s only  $1.2 \times 10^{-6}$  cm/s
7. The perimeter ditch (noted as 2<sup>nd</sup> order drain) does not meet setbacks from wdg to a surface water course
8. Further information is requested as to what underlies the C&D wastes that the new cell is to be constructed on top of. i.e. is there to be a meter of compacted clay to separate the C&D from new wastes or what underlies the C&D as a liner (just native soil at  $1 \times 10^{-6}$ )?
9. What is the depth of the C&D waste already in place? Is it below grade, and therefore encroaching the 1 m buffer to the water table?
10. If clay is to be brought in to create the barrier, where is the location of the borrow pit?
11. In figure 6, to what depth is scarification & compacting, & to what extent is the compaction? Will it achieve  $1 \times 10^{-7}$  cm/s?
12. What is used for compaction? A fully ballasted sheepsfoot?
13. Do we see construction drawings, prior to issuance of a license or prior to construction? As it is noted these drawings are “not for construction”.

14. What is the method of construction for the Leachate collection pond. Stripping of top soil, scarification and compaction prior to laying HDPE? Maximum 6" lifts for compaction? No mention of removing all rocks or potential items that would damage the liner.
15. Is it required that License holders identify the contractor that is installing liners?
16. Is there a requirement for a concrete access ramp to access the bottom of the evaporation pond for O&M of the spray equipment, recirculation equipment or when removing the sludge?
17. The Leachate collection pond is listed with only a 30mil liner, common practice for livestock manure storages and recently permitted wdg have all been 60 mil HDPE liners.
18. Is the 'wicking geotextile' to be non-woven?
19. There is no mention about application for the Used Oil collection depot or white goods collection.
20. Is there a larger site plan / layout that clearly shows roadways, width of berms, and drainage routes?
21. Set back variations from cemetery, residences, airport, etc.

### **Response from the Proponent**

The response which was received on December 15, 2008 from the Proponent was as follows:

1. The elevation for the proposed active cell is at grade (i.e. "prairie elevation"). The existing topography of the site slopes from south to north. As a result, floor elevations within the proposed active cell will range between 270.4 m asl at the southerly end of the disposal area and 267.9 m asl at the northerly end of the disposal area.

Construction debris was historically buried in natural depressions within the proposed waste disposal area. The depth of the C&D debris varies between 1.5 m (elevation 266.4 m asl) and 2.5 m (elevation 265.4 m asl) below grade (average elevation —268 m asp. As it is impractical to excavate and remove this material, the proposed active disposal area will be constructed at grade (on top of the buried C&D debris where present).

Based on monitoring well data collected between January 2003 and November 2006 at 10 discrete locations within the existing and proposed WDG site, the water table exists at an average elevation of 266.23 m (approx. 1.7 m below

grade), with spatial and temporal values ranging between 1 and 4 m below grade. This data was also utilized to estimate the vertical hydraulic gradient between the surface and the "*sand aquifer*" (defined below); a downward gradient of approximately 0.06 was estimated.

Horizontal migration of liquid outside of the waste disposal area will be mitigated using a low permeability cut-off wall that will tie into the low permeability till that exists between 0.9 m and 3 m below the surface. The 1 m thick vertical cut-off wall will be constructed to extend at least 2 m above grade through the centre of the perimeter embankments surrounding the waste disposal area (see Figure 11), using a high plasticity low permeability clay (i.e.  $1 \times 10^{-7}$  cm/s or less) or a soil admix to achieve  $1 \times 10^{-7}$  cm/s or less.

Vertical migration of liquid below the waste disposal area is mitigated by the dense insitu silty clay till soils that exist to depths in excess of 18 m below the surface. Based on drill logs (GWDrill 2008), the primary water source in the area is the limestone aquifer which exists more than 40 m below the surface. However, intermittent (discontinuous) sand and gravel seams have been observed around 17 m below the surface. Therefore, this potential water bearing unit (henceforth referred to as the "*sand aquifer*") will be used as the basis/boundary for our review of the "Geologic Sensitivity of the Landfill to the Aquifer". Using the lowest reported elevation of the buried construction debris and estimated depth to the "*sand aquifer*" from borehole information, there is 14.5 m of dense, low permeability silty clay till that will impede liquid flow from the disposal cell to the sand aquifer.

In addition, liquid/leachate levels (i.e. hydraulic head) within the disposal area will be controlled with a network of floor and perimeter collection trenches/drains. At the northerly end of the site with the lowest grade levels, the gravel trenches (with perforated pipes) will be installed approximately 0.3 m below grade. Liquid/leachate within the disposal area will be directed via gravity drainage on the sloping grade level surface to this section of the collection system. Since the construction debris will remain in place (over the silty clay till soils), some leachate may accumulate in this material below the depth of the collector or a maximum of 2.5 m below grade. The liquid level will be established by the performance of the drain and in equilibrium with the local water table, and will represent the maximum hydraulic head that could transmit liquid vertically downward through the soil matrix.

The estimated vertical hydraulic gradient at the site between the water table and the sand aquifer is approximately 0.06 m downwards. Based on the permeability of a representative silty clay till soil sample from the site ( $1.2 \times 10^{-6}$  cm/s), effective porosity estimated for the till of 0.25, and the distance from the start of the silty clay till soils below the C&D debris to the underlying aquifer (14.5 m), leachate contained within the boundaries of the waste disposal area that migrates downwards will take approximately

160 years to reach the underlying sand aquifer.

It is expected that the potential proportion of leachate migration vertically downward beyond the control at the leachate collector is low. Given the estimated travel time to the sand aquifer of 160 years, and the travel distance of 14.5 m, significant natural attenuation of any leachate impacted groundwater would occur due to process of dispersion and chemical sorption. As well, groundwater reaching the sand aquifer will discharge from the till at a rate several orders of magnitude slower than the expected transmissivity of the aquifer. The permeability contrast would result in substantial additional attenuation due to dispersion processes.

Historic analysis of the subsurface groundwater from the existing monitoring wells surrounding the existing and proposed sites found high salinity values (i.e. potential indication of landfill leachate impacts) in only one well (MW-6), located along the west side of the existing disposal area. This area would be isolated from the proposed development via the proposed perimeter cutoff wall surrounding the proposed disposal area.

Monitoring wells are located around the entire perimeter of the site, providing adequate groundwater monitoring capabilities for the site. The current monitoring plan will be continued to monitor the potential for impact to the groundwater from the WDG site.

In the event that groundwater impact is identified through the monitoring program, surrounding residents will be notified and their groundwater supply sources will be tested. Based on the location of the groundwater impact identified, a practical and environmentally sound remediation plan can be developed if necessary.

A sketch of a cross-section of the containment system, groundwater levels, and soil conditions is provided as Figure I I (attached) for reference purposes.

2. There are no published guidelines or regulations regarding compost pads in the Province. Given the quality of soils underlying the compost area (silty till,  $1.2 \times 10^{-6}$  cm/s), we feel that the proposed design is sufficient to prevent seepage of "compost tea" through the proposed compost pad liner. In addition, the compost pad would be graded to prevent ponding of liquid on the surface. The pad will have a 1% slope towards a small sump at one end of the pad which will collect the compost tea so that it can be pumped into the leachate evaporation pond.
3. An O&M manual will be developed for composting operations at the WDG based upon existing procedures, which have been refined during the past 6 years of compost operations at the existing site. Solid Waste Department Head, Mr. Eldon Wallman, has received training and certification through the Solid Waste Association of North America's (SWANA) Manager of Landfill Operations (MOLO) program and is cooperatively working with Resource Conservation Manitoba's composting expert, Christine Schroeder to ensure operations are effective and efficient. There are also



numerous members of the community that are certified Master Composters, with whom the City consults with on a regular basis.

Windrows (stockpiles) will be turned approximately once a week, depending on conditions, using existing equipment (963 C Caterpillar). Grass clippings, leaves, and fall garden waste will serve as the feedstock (carbon & nitrogen sources) for the composting operation. Odour prevention will include regular turning of the compost windrows to maintain aerobic conditions. In addition, composting operations have been sited at the southerly end of the development, making it at the furthest possible location relative to the residential area to the north of the waste disposal site. If odours are anticipated, windrows will be turned when winds are from a northerly direction (i.e. causing potential odours to drift away from the City of Steinbach).

4. The water chemistry list is in agreement with the current testing requirements for the existing waste disposal facility in Steinbach.
5. Water chemistry data from monitoring wells at the site has been collected on an annual basis since 2003. The data has been analyzed and reported to Manitoba Conservation; the reports containing this data have been identified in Section 1.3.1 of the Environment Act Proposal.
6. Manitoba Regulation 150/91 does not identify specific soil hydraulic conductivity requirements for waste disposal sites. The Guidelines for the Siting of a Class 1 Waste Disposal Ground in Manitoba (Manitoba Environment, 1994) recommends assessing the geologic sensitivity of the site, which is based on the concept of the time-of-travel (TOT); the time required for a contaminant to move vertically from the base of the fill area to the underlying aquifer. The TOT is recommended as a general guidance criterion to identify areas of vulnerable hydrogeology and includes consideration of the hydraulic conductivity of the underlying soils. TOT is discussed in Section 1.3.3 of the Environment Act Proposal. The TOT analysis concluded that the proposed disposal has a geologic sensitivity rating of "low" (i.e. water moving vertically will reach the aquifer within several decades to a century).

The low permeability of the insitu soils at the site was demonstrated during the geotechnical investigation in October 2007. No seepage was observed in test holes that were drilled a depth of at least 6 m below grade. The historical groundwater data indicates that groundwater exists between 1 and 4 m below grade. As groundwater was not observed to be seeping into the test holes, this serves as a demonstration of the low permeability of the insitu soils at the site.

7. The ditch adjacent to the site on the west was recently re-routed to this location as the ditch formerly flowed through the existing waste disposal site. The ditch was rerouted in consultation with Mr. Geoff Reimer and Dave Buhler from Water Stewardship. The perimeter ditch will be 300 ms from the proposed active disposal area.

8. The silty till soils that exist below the buried C&D debris will form the "floor" of the containment barrier, and will be used in conjunction with the underlying clay till, 'liner' for the site, as described in Section 1.3.2 of the Environment Act Proposal.
9. See response to Question #1.
10. Low permeability insitu clay till will serve as the liner material. If borrow material is required to construct the vertical cut-off walls, excavated clayey soil material from the site (pond construction) will be utilized. The City has also indicated that excavated clayey soils from the recently improved Keating Drain will also be available for embankment construction if required.
11. Topsoil will be stripped and the upper 0.3 m of the surface will be scarified and compacted. The working surface will not be tested for hydraulic conductivity as it is not required, nor is it intended to be the "liner" for the disposal area. However, the construction specifications will indicate that the working surface must be compacted to 95% Standard Proctor Density.
12. The construction specifications will identify the performance requirements for the working surface of the waste disposal area (see #11 above). The method to achieve these requirements will be at the discretion of the contractor.
13. Detailed drawings for Construction will be developed subsequent to receipt of an Environment Act Licence. Prior to initiating construction, design plans will be submitted to Manitoba Conservation (as per the requirements for a similar facility — the R.M. of Richot WDG [Licence No.: 2482 R]). Record Drawings for the site will be provided after the completion of construction.
14. Topsoil will be stripped and the working surface will be scarified and compacted. The geosynthetic liner installation would be as per manufacturer specifications, which typically includes rock removal beneath the liner.
15. The contractor will be selected through a public bidding process.
16. There is no requirement for a concrete access ramp. The liner will be covered with suitable protective material (e.g. sand), as per manufacturer specifications. The thickness of the cover material is based upon the equipment that may sporadically be required to maneuver on its surface. A temporary ramp (e.g. Mud MatsR) may be utilized to further protect the liner when equipment is needed to maneuver on its surface.

17. The leachate evaporation pond will be lined with a 60mil HDPE material. The material will be installed and covered as per manufacturer specifications.
18. The wicking geotextile will be a non-woven geotextile fabric.
19. The existing Used Oil Collection Depot will continue to operate as a component of the waste disposal grounds. Licence No.: 60 HW was issued on June 19, 1998 for the operation of the Used Oil Collection Depot.
20. A larger site plan showing roadways and drainage routes is attached (Figure 10). Drainage routes and roadways are also shown on Figures 3 and 5, respectively, in the Environment Act Proposal. The tops of the berms that surround the waste disposal area will be 3 m wide. Profiles of the perimeter berms are shown on Figure 6 in the Environment Act Proposal.
22. Set back distances are identified and discussed in Section 1.1.3 of the Environment Act Proposal.

To confirm, the proposed Development (i.e. Class I Waste Disposal Grounds) for which this Environment Act Proposal is submitted includes the NE <sup>1</sup>/<sub>4</sub> of Section 23-6-6 EPM as well as the northern portion of NW <sup>1</sup>/<sub>4</sub> 23-6-6 WPM, as shown on Figure 10 (attached). The existing active waste disposal area is not included as a component of the Development.

**Disposition:**

The draft licence addresses the concerns.

**Canadian Environmental Assessment Agency**

The application of the Canadian Environmental Assessment Act with respect to this proposal will not be required.

**Additional Information:**

1. On January 19, 2009 further questions/ comments were sent to the Proponent, by Environmental Assessment and Licensing:

Following a review of the Environment Act Proposal for the Steinbach Waste Disposal Ground and the additional information provided in your letter of December 12, 2008, a number of issues remain unresolved. As these issues involve fundamental siting and design considerations, we will not be able to proceed with the environmental assessment and licensing process until the issues are satisfactorily resolved.

The existing waste disposal ground site does not comply with present day siting requirements concerning setback distances to the property boundary, residences and a cemetery. It does not have a suitable liner system or a leachate collection system. “Adding on” to this facility is not feasible – the proposed facility must be completely isolated from the present facility with respect to drainage, seepage and leachate collection so that the eventual remediation of the present site can be carried out without affecting the proposed site.

The proposed waste disposal ground site is immediately adjacent to the present site. It will be required to comply with all present siting, liner and leachate collection requirements. Information provided to date does not completely show how these requirements will be met. The minimum requirement for a liner is a compacted clay layer with a thickness of 1 metre and a permeability not greater than  $1 \times 10^{-7}$  cm/s. This requirement will be rigorously tested by Manitoba Conservation in the constructed liner before approval will be provided for the facility to operate. The liner must be continuous under all portions and stages of the waste disposal ground.

A portion of the new site is underlain by a layer of construction and demolition waste. As the liner cannot be installed under this material, it must either be completely removed from the site or the liner must be constructed over it. If the intent is to construct over the construction and demolition waste, evidence must be presented that the integrity of the liner over the material will be preserved under all conditions. Details of how the liner will be constructed near the existing unlined site are also needed.

2. On March 20, 2009 further questions/ comments were sent to the Proponent by Environmental Assessment and Licensing :

Could you clarify something John said on Wednesday.

When I asked about the cut off wall he indicated that the wall would be constructed in stages as the landfill filled up.

So when waste is deposited at say the north end of the “cell” the cut off wall will be constructed along all the north part of the cell and partly down each side (as far as the waste is being deposited.)

If this is the case, what stops the leachate from moving as far as it wants towards the south?

**Response from the Proponent:**

On August 28, 2009 a 9 page reply was received from Dillon in response to the January 19, 2008 and March 20, 2008 letters. Information was provided with respect to setback distances, cell liner and leachate collection. Information was also included about soil testing that had been carried out during the spring/summer months.

3. On September 18, 2009 further questions/ comments were sent to the Proponent by Environmental Assessment and Licensing:

- a) There are some questions about the cemetery directly adjacent to the existing WDG at Steinbach. What is the date of the cemetery and how many plots are there? Has there been any investigation to determine if the plots are being impacted by (leachate from) the existing WDG. If so please discuss the results of the investigation.
- b) In the soil log for TP3 it indicates that down to about 1.8 m you found mixed municipal waste. What does this refer to – is waste already buried there?
- c) In the “Signed Agreements .....” section you have copies of 4 letters to local residents and a copy of an agreement between the city and Marshall Freed. Is there only one agreement signed?

### **Response from the Proponent**

4. On September 25, 2009 a response was received from the Proponent, as follows:

- a) According to the CanadaGenWeb Cemetery Project; the first death date on a marker in the Felsenten Mennonite/Unger Family Cemetery is April 21, 1905 and there are approximately 28 plots at the cemetery. The approximate dimensions of the cemetery are 33 metres by 62 metres. There is no evidence of impact on the cemetery caused by the existing WDG. Potential impact on the cemetery by the proposed WDG will be mitigated by the leachate management system described in the previously submitted Environment Act Proposal documents.

The operator of the existing landfill has indicated that they have received no complaints or concerns from the owners of the Felsenten Cemetery regarding its proximity to the existing landfill. As the proposed WDG will be developed farther away from the cemetery than the existing WDG, it is not expected that the cemetery owners would have concerns with the development of the proposed WDG.

- b) As described in the original Environment Act Proposal submitted May 2008, construction and demolition debris has been disposed of at the site since the early 1990s.

It is noted that the soil log for TP3 indicates that the buried waste is underlain with the dense silt till that forms the base of the liner system for the proposed WDG. Therefore, downward migration of waste and liquid is mitigated.

- c) There are 2 signed agreements; one of the two signed agreements was previously submitted with the original Environment Act Proposal of May 2008. As discussed with your department (Tracy Braun, Siobhan Burland Ross, and Bruce Webb), signed agreements are not required by the Department. The City provided adjacent land owners with an informational letter to maintain open communication with their neighbours in relation to the proposal Development, in this case.

2. On October 8, 2009 further questions/comments were sent to the Proponent by Environmental Assessment and Licensing:

The report that was delivered to this office at the end of August was said to address outstanding site issues. The report requests a variance for the requirements for siting waste disposal grounds that are found in Manitoba Regulation 150/91, Waste Disposal Grounds Regulation. The Regulation, Section 8 (b) lists set back distances for dwellings, potable water wells, cemeteries and surface water. The proposed site does not comply with any of these requirements.

We would appreciate a discussion of the alternate siting locations that you may have considered for the waste disposal ground, prior to preparing the Environment Act proposal. Specifically, were any sites in the northern part of the Rural Municipality considered for the waste disposal ground location (i.e. in Township 7)?

### **Response from the Proponent:**

The City of Steinbach's development plan for the north half of Section 23-6-6 EPM is to make full use of the existing Class II Landfill on the NW 1/4 and to formally develop a Class I Waste Disposal Ground the NE 1/4 of the property, which is directly adjacent to the existing active Class II Landfill. This proposal minimizes disruption of planned development on land surrounding the City and in the R.M. of Hanover. Lands generally to the north of the City (Township 7) have been identified in the Steinbach Official Community Plan for commercial and residential development at this time, and the City of Steinbach's growth is also anticipated to continue northerly.

The City has concluded that the communities and landowners in the vicinity of the existing landfill continue to operate and exist with the knowledge that the City landfill operations will continue at this location. The City concluded that this site is the best option for continued landfill operations based on the following:  
The land is City owned.

Area development is adjusted to the existence of a landfill operation at this site. Development of this site is in accordance with the Steinbach Official

Community Plan (formally the Steinbach Development Plan). The Minister of Intergovernmental Affairs signed the Steinbach Community Plan approval on March 19th, 2009, and no objections to the landfill site (existing or proposed) were received from the public or Provincial agencies.

City infrastructure (Used Oil Filters and Containers EcoCentre, new sanitation equipment garage, and new landfill operations offices) exists at the current site. The site is considered suitable for waste disposal from an environmental standpoint, with impacts which are identified and mitigated through engineered facility design and operation

In addition, the City has approached each of the landowners that are directly adjacent to the proposed site to inform the residents of the City's plan and to discuss any concerns they may have with the proposed development. There have been no objections to the development of the adjacent property into a Class 1 Waste Disposal Grounds.

**Disposition:**

The draft licence addresses these concerns.

**PUBLIC HEARING:**

A public hearing was not requested and is not recommended.

**RECOMMENDATION:**

All comments received on the Proposal have been addressed through additional information or as licence requirements. Therefore, it is recommended that the Development be licensed under The Environment Act subject to the limits, terms and conditions as described on the attached Draft Environment Act Licence.

It is further recommended that enforcement of the Licence be assigned to Environmental Assessment and Licensing until construction of the Waste Disposal Ground is completed. Enforcement of the licence then should be assigned to the Eastern Region.

PREPARED BY:

Adrian Jackson, P. Eng.  
Environmental Engineer  
Municipal Industrial Hazardous Waste Approvals  
March 29, 2010

Telephone: (204) 945-7108  
Fax: (204) 945-5229  
E-mail Address: Adrian.jackson@gov.mb.ca