

## **SUMMARY OF COMMENTS/RECOMMENDATIONS**

**PROPONENT: NEEPAWA and PARTNERS**

**PROPOSAL NAME: Regional Integrated Waste Disposal Facility.**

**CLASS OF DEVELOPMENT: 2**

**TYPE OF DEVELOPMENT: Class 1 waste disposal ground**

**CLIENT FILE NO.: 4914.00**

### **OVERVIEW:**

On February 25, 2003, the Department received a Proposal from KGS Group, consultants on behalf of the Town of Neepawa, the Town of Minnedosa, the Town of Carberry, and the Rural Municipalities of Odanah, Lansdowne, Elton, Minto, North Cypress and Langford for the development and operation of a Regional Integrated Waste Disposal Facility.

The need for a new waste disposal facility in the Neepawa area was recognized in 1989 when a site selection study was carried out. In 1992 a proposal called the Carnep Project was prepared. In 1993 a preliminary on site soils investigation was completed. Progress was impeded by lack on funding. In April 2001 the above noted towns and RMs met to agree to a partnership and an application for funding was made to the Canada/Manitoba Infrastructure Secretariat on October 23, 2001. Approval of grant was received on March 28, 2002. A public meeting was held on November 13, 2002 in Brookdale. A draft Advice Document for the Preparation of an Environmental Assessment for a Regional Integrated Waste Disposal Facility was prepared in November, 2002.

On March 3, 2003 the Department placed copies of the Proposal and the Draft Advice Document in the Public Registries located at 123 Main St. (Union Station), the Winnipeg Centennial Public Library, the Manitoba Eco-Network, the Western Manitoba Regional Library in Brandon and the Neepawa Town Office. As well, copies of the Proposal and the Draft Advice Document were provided to the Technical Advisory Committee (TAC) members. The Department placed a public notification of the Proposal and the Draft Advice Document in the three local newspapers, the Neepawa Press, the Minnedosa Tribune and the Carberry News-Express on March 10, 2003. The newspaper and TAC notifications invited responses until April 8, 2003.

On April 7, 2003 the Department placed copies of the Environmental Assessment Report and the Detailed Site Investigation Report in the Public Registries located at 123 Main St. (Union Station), the Winnipeg Centennial Public Library, the Manitoba Eco-Network, the Western Manitoba Regional Library in Brandon and the Neepawa Town Office. As well, copies of the Environmental Assessment Report and the Detailed Site

Investigation Report were provided to the Technical Advisory Committee (TAC) members. The Department placed a public notification of the Proposal and the Draft Advice Document in the three local newspapers, the Neepawa Press, the Minnedosa Tribune and the Carberry News-Express on April 14, 2003. The newspaper and TAC notifications invited responses until May 9, 2003.

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

Comments were received from the public. The main concerns were with surface water drainage, ground water contamination, litter, odours, dust production on Highway 466, possible health effects, enforcement of Licence and impact of the Development on wildlife.

**Disposition:** Each letter was responded to by the Department. Concerns of a technical nature were forwarded to the consultant for response. See attached table of responses from KGS.

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

**Culture, Heritage and Tourism, Historic Resources Branch.** No concerns with regard to this project's potential to impact heritage resources.

**Agriculture and Food, Soils and Crops Branch.** No concerns were noted

**Industry, Trade and Mines, Mines Branch.** No concerns were noted

**Intergovernmental Affairs, Community Planning Services Branch.** No concerns were noted.

**Health, Assiniboine & Brandon Regional Health Authorities.** No concerns were noted as it was considered that the proposed mitigation measures outlined in Sections 6.4.7 and Sections 7.0 should minimize potential public health concerns.

**Energy, Science and Technology, Life Sciences Branch** Had a question concerning the Development – “has a comparative economic/environmental/social review been conducted.”

**Disposition:** The question was forwarded to the consultant and the report “Waste Facility Cost Analysis” was provided.

**Transportation and Government services** A concern was noted with respect to the access spacing to the Development. It was noted that the two access points were too close.

**Disposition:** The design of the access to the Development was changed to comply with the comment.

**Conservation, Sustainable Resource Management Branch** comments were received

**Disposition:** see attached table of responses from KGS.

**Canadian Environmental Assessment Agency**

The application of the Canadian Environmental Assessment Act with respect to this proposal is required. Western (Economic) Diversification is the Responsible Agency. A Federal Screening Decision Report has been produced.

**PUBLIC HEARING:**

A public hearing is not required.

**RECOMMENDATION:**

The Applicant should be issued a Licence, in accordance with the attached draft. Enforcement of the Licence should not be assigned to the Region until the facility is built and operational.

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June 26, 2003

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TAC Comments	KGS Reply
<p>The potential exists for lenses of sand/gravel within the glacial till. If these lenses are encountered during excavations or work on the site they should be incorporated into the groundwater monitoring network for the site. If wells are installed to monitor sand/gravel layers they should be screened only over the sand/gravel interval.</p>	<p>Sand and gravel seams were not intersected at the site during site investigations which included extensive drilling and test pitting. If sand or gravel seams are encountered during construction it would cause concerns over the ability of the compacted cell liners to function as intended. Therefore, any sand or gravel seams encountered during construction will be excavated to allow for proper liner installation. Additional monitoring wells will be added to the monitoring network and if granular seams are defined, with well screens intersecting potential water bearing seams will be installed.</p>
<p>Aerial photographs and land ownership records should be searched to determine if a farmstead was located at this location. If a farmstead is identified and its water source was groundwater an attempt should be made to locate the well for proper sealing.</p>	<p>The area neighbors have been assessing most every aspect of this proposal. These neighbors have been in the area for many years. The neighbors have not indicated that there was ever a farmstead or a well at the proposed development site and the government water well database (GWDRILL) does not indicate that there were ever any wells on the site. Reviewing air photos and land ownership records would have low potential to locate an old well site. Also, considering the current drill hole data base, it is unlikely that an on-site well would intersect any granular seams of significance.</p> <p>Contacting the current land owner, the person who cultivates the field every year, as well as one or more long-term neighbors would be an effective way of locating any potential old well site on the site. This will be done and a reponse will follow. If an old well can be located, it will be decommissioned using bentonite to backfill the well. If an old well site is encountered during construction, it will be properly decommissioned at that time.</p>

The water levels in the piezometers/monitoring wells should be recorded until static conditions are attained. Then slug test analyses of a complete data set can be performed to determine if the assumptions in the preliminary results are applicable. Disturbances to water levels (prior to Feb. 24 - MW1 and Feb. 26 - MW2) should be explained so that recovery tests can be analysed for undisturbed periods of recovery. Horizontal and vertical gradients should also be re-evaluated once static conditions are reached and transport times reassessed.

Water levels in all site piezometers and monitoring wells have been monitored regularly since early February, 2003. Currently, water levels are being recorded every three (3) weeks. Only MW2, MW4, and MW12B have stabilized as of May 21, 2003.

It is expected that similar results will be attained by conducting a slug test or a rising head test. The site monitoring wells will have to be sampled for baseline quality data, therefore, it is preferred to conduct rising head tests. The slug test has the disadvantage of introducing foreign water or the slug test apparatus into the wells which could effect the baseline water chemistry analysis (Because of the very slow recovery rates, wells will not be purged prior to quality sampling). Rising head tests will be completed as part of the baseline water quality program.

The disturbance to the water levels in MW1 and MW2 in late February were a result of recovering several liters of water from each of these wells for chemical analysis. The recovery tests presented in the Detailed Site Investigation Report (April 2003) only included recovery data from the period after the samples were collected. Otherwise, the displacement graphs provided in the report would have shown the disturbance to the water levels.

The horizontal and vertical gradients and transport times will be re-evaluated once static conditions are reached. The fact that most site wells still have not reached static conditions is a good indication that the average permeability at the site is even lower than that presented in the Detailed Site Investigation Report.

<p>The reports state that there is an upward gradient at MW13 monitoring well nest based on the initial information. The other two monitoring well nests currently do not give the same results. The wells should be allowed to come to static conditions before the vertical gradients are assessed.</p>	<p>Current information still indicates that there is an upward gradient at MW13 but these wells have not fully stabilized. Currently, MW12B (medium depth well) is stable at 472.09 masl. MW12C, which is screened deeper than MW12B has not yet stabilized but the water level in MW12C (472.23 masl) is already higher than in MW12B. This indicates an upward gradient at this location based on current data. The nested wells at MW14 are not stable yet and a reasonable assessment of the vertical gradient can't be made. We agree that the wells in the nested sets should come to static levels before the vertical gradients are fully assessed. The information given in the Detailed Site Investigation Report was the best information available at the time the report was produced.</p>
<p>There should be a documented plan that is followed for decommissioning the monitoring wells within the footprint of the facility as the cells are developed and land filling progresses.</p>	<p>A well decommissioning plan will be part of the site operating plan. The present plans for the initial construction phase should not destroy any of the wells. If a well is damaged during construction, it will be repaired or properly decommissioned as outlined in the Operating Plan (under development).</p>

The groundwater analytical results did not contain results for calcium or basic estimates of analytical integrity such as charge balance of the samples. The EQL for each analyte was not given. This information should be made available if accessible. Dissolved organic carbon and any other leachate indicating parameters (i.e. redox) should be added to the analytical suite so that full background conditions can be determined prior to monitoring an active landfill.

The groundwater analytical results provided in the Detailed Site Investigation Report did contain results for calcium (See Appendix C in the report), however, the calcium concentration was inadvertently left off the summary table in the report. The estimated quantitation limit (EQL) for each analyte was listed on the laboratory reports in Appendix C of the report but not included on the summary table.

Routine groundwater analyses for major ions can be included in future sampling events to enable ion balancing to be completed by the laboratory. Neither major ions nor dissolved organic carbon (DOC) was included on the list of parameters to be analyzed given in the Guideline for Siting a Class 1 Landfill in Manitoba. Therefore, these specific analyses were not performed. DOC may be included in future groundwater monitoring events if required. All wells and selected surface water locations will be monitored prior to the site becoming active so that background conditions are better defined.

The high piezometric surface of the shale needs to be better defined over the extent of the landfill footprint. The screen of the deep piezometer at site 13 is set in both the clay and shale formations so there is some confusion as to what this piezometer actually reflects. In the well logs the formation is described as clay but much of the discussion in the report describing the piezometer deals with a shale anomaly.

There is approximately 17 meters of low permeability clay till overlying the shale encountered in MW13C. The well logs describe the stratigraphy below 17.10m as shale material. The shale was competent from 17.10m to 17.22m, heavily fractured and wet between 17.22m and 17.58m, and competent again from 17.58m to 17.68m. Auger refusal occurred at 17.68m.

The basal clay till above the shale did not make any water during drilling. The fractured shale (shale gravel) did make water during drilling and the split spoon sample recovered was wet. There is only 12 cm of competent shale between the basal till and the water bearing fractured shale. It is very unlikely that a sandpack and bentonite seal could have been installed in this 12 cm window with any degree of confidence that the basal till was effectively sealed off from the shale. Given that the fractured shale was making water during drilling and the overlying clay till did not make any water over the time it took to drill the hole (approximately 5 hours), it is reasonable to expect that MW13C is quite representative of the flow regime within the shale. Furthermore, proposed water sampling from the borehole is expected to be different from the local overburden groundwater in quality.

There is also an upward vertical flow gradient at the site which is evident from monitoring well nests MW12 and MW13 as discussed above. The shale formation was not intersected in MW12C or MW14C to a depth of 18.3 meters. For nearly all groundwater levels in bedrock, the piezometric surface does not vary measurably over a small distance such as the area of the landfill footprint. It was a surprise to intersect bedrock so shallow in the area but it does not impact the landfill hydrogeology in any significant way. In fact the upward flow gradient precludes any downward flow into the bedrock. Also, there is no evidence that an aquifer exists in the general area. The Provincial Groundwater Availability Map Series for the area indicates that where a groundwater source has been found in the past, the water quality is very poor. For this reason, the regional water supply system has been installed.

Defining the piezometric surface of the shale will not affect cell design or operation. The piezometric surface from the shallow wells define the groundwater table below the landfill cells and this surface will be defined when the site monitoring wells and piezometers stabilize.



<p>Each waste cell will be excavated approximately 2.5m below surface grade as part of the preparation for compaction of the cell floor. More discussion is warranted on the overall design of the waste cells, particularly cells 4 and 5, where there is an approximate 4m drop in elevation across the cell.</p>	<p>Detailed cell design is being prepared. The 4m drop across cells 4 and 5 will be mitigated as part of cell base preparations. Topographic relief across a cell will be incorporated into the cell design to aid in leachate collection by gravity feed. The natural slope of the land is from west to east, therefore the base of the cells will also slope west to east. It is desirable to have some topographic relief across the cells to assist in leachate collection.</p>
<p>Surface runoff from the facility will be controlled by use of a stormwater retention pond. This will allow for controlled discharge to the natural drainage system on the property and ultimately to the Whitemud River via the Kaspick Creek Drain. More information should be provided on the expected quality of the discharge water from the retention pond and on the background water quality of the receiving waters just upstream and downstream of the facility.</p>	<p>Background water quality sampling is planned prior to the facility going into operation. Depending on the amount of precipitation this summer, it may prove difficult to collect an upstream surface water quality sample because the runoff channel across the site is usually dry. Downstream, Kaspick Creek is also dry at most times. Upstream and downstream water samples will have to be collected after a reasonable heavy rain in order to have enough water to sample. For this reason, the background water samples can be expected to have fairly high suspended solids and possibly show effects from application of fertilizers, herbicides, and pesticides from agricultural applications. The stormwater pond collects water from around the landfill site which has not come into contact with waste. The pond is designed to settle out suspended solids from the site ditch system. The ditch system will be seeded with grass to prevent excessive sediment loading in the runoff going to the stormwater pond. Releases from the stormwater retention pond are expected to have lower suspended solids and minor impacts from the use of pesticides, herbicides, and fertilizers compared to the naturally existing runoff entering the runoff channel crossing the site.</p>

<p>It is indicated that there is a used pesticide storage container area included in the design of the facility. Initial groundwater sampling should include the relevant pesticides at the adjacent piezometers to the storage site and also at a control site. Periodic sampling for pesticides over the 100-year life cycle of the facility should be incorporated into the overall monitoring requirements.</p>	<p>Pesticides were analyzed for at two locations (MW1 and MW2) as part of the initial baseline sampling. The analytical results were included in the Detailed Site Investigation Report. Both samples returned non-detectable concentrations of pesticides. Some limited additional pesticide sampling is planned. Periodic sampling for pesticides in a monitoring well located down gradient from the pesticide container storage depot and at a control site (MW1 or MW2) will be incorporated into the Operating Plan for the facility.</p>
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More details should be provided on the quality of the leachate produced on the site. As this leachate may be transported to an offsite wastewater treatment facility details should also be provided concerning whether this offsite facility has both the hydraulic loading and organic loading capacity to deal with this leachate now and in the future.

The proposed RIWDF as a Class 1 landfill is relatively small such that leachate quantities and qualities are not expected to pose any significant impacts to facilities already handling leachate. Brandon landfill leachate is handled by the Brandon sewage treatment plant and BFI in Winnipeg hauls to Selkirk. The licensed facility in Selkirk has indicated that they could receive leachate produced at the proposed RIWDF. We have discussed hauling the leachate to the Brandon facility but have not received a formal response from the City of Brandon.

Leachate strength is expected to be similar to the leachate strength encountered at the St. Clements landfill. Based on the leachate quality from the St. Clements landfill after three years of operations, the leachate strength at the proposed RIWDF should not pose concerns for treatment for the first five years or more. St Clements leachate sampling completed in 2001 for metals, major ions, and BOD indicate that that all parameters analyzed are below the Canadian Drinking Water Quality Guidelines(CDWQG) except for dissolved iron (2.08 mg/L) and manganese (1.21 mg/L) and total dissolved solids (600 mg/L). The CDWQG aesthetic objective for dissolved iron and manganese are <0.3 mg/L and <0.5 mg/L respectively and the aesthetic objective for total dissolved solids (TDS) is <500 mg/L. The iron, manganese, and TDS levels will not pose any problems for a wastewater treatment facility at these concentrations.

The cell design and progressive closure of cells will minimize leachate volumes. The site leachate pond is being designed with approximately triple the capacity of the expected annual volume of leachate and the area has an average net evaporation of approximately 250 mm. These two factors will minimize the volumes of leachate which will have to be transported offsite for treatment. Also, if the plan to make use of leachate in the soil remediation process receives approval, there will be a further reduction in the need to transport leachate offsite to a licensed treatment facility.

<p>It is stated that there will be no disposal of biomedical waste at the landfill. This may cause some difficulty for area hospitals since Manitoba Health, Manitoba Conservation and the Regional Health Authorities are currently working on phasing out the small biomedical waste incinerators that exist at local hospitals throughout the province. Alternative methods of disposal of biomedical waste are being reviewed, including disposal at local secure landfills. In addition, there does not seem to be any distinction in this proposal between treated and untreated biomedical waste. Would it be acceptable to the proponent to dispose of treated biomedical waste at this landfill?</p>	<p>Untreated Biomedical waste will not be disposed of at the RIWDF. Treated biomedical waste which is approved for disposal at the facility by the regulatory authorities can be disposed of at the RIWDF.</p>
<p>Information is required on the location of the nearest neighbours to this site.</p>	<p>Information about the location of the nearest neighbour to the site was included in the EAP. The nearest residence belongs to Mr. Dave Bold and is located approximately 700 m southeast of the proposed waste disposal ground.</p>
<p>If the site access and on-site roads are gravel additional dust control could be achieved in the future by paving and regular cleaning, if required.</p>	<p>There are dust control measures planned for the access and site roads.</p>

<p>The greenhouse gases from the landfill are just to be vented. Has an estimate been made of the annual greenhouse gas emissions over the life of the landfill?</p>	<p>The volume of greenhouse gas produced at a landfill is largely dependent on the composition of the waste entering the landfill particularly the amount of organic materials. The average landfill in Canada produces 117 kg of CH<sub>4</sub> per tonne of waste (Canada's Greenhose Gas Inventory, Environment Canada, 2002). Therefore, the volume of CH<sub>4</sub> which could be produced at the proposed RIWDF is 81,900,000 kg over the life of the landfill. Composting programs will significantly reduce the volume of CH<sub>4</sub> produced in the landfill.</p>
<p>At least three potholes will be impacted by the construction of waste disposal cells 6, 7 and 9. The removal of these potholes and the construction of the drainage and storm water retention system will require a Water Rights License.</p>	<p>The pothole on proposed cell 7 (NE corner of waste disposal ground) will not be affected until the later stages of the estimated 100 year lifespan of the facility. The potholes identified on cells 6 and 9 have been cultivated during past years of agricultural activity, therefore all natural habitat has already been destroyed. The pothole on cell 6 was cultivated the year that the airphoto was taken. The potholes on cells 6 and 9 were both cultivated in 2002.</p> <p>An application for a Water Rights License will be made to the Whitemud Watershed Conservation District upon receiving an Environmental License for the proposed RIWDF.</p>

The proposal does not adequately address the disposal/treatment of the leachate. It is suggested that the leachate will be disposed of either by evaporation or by treatment in an offsite wastewater treatment facility. An offsite wastewater treatment facility has not been identified and no information regarding the type of treatment system, degree of treatment and treated effluent disposal methods has been provided. The feasibility of an evaporation system was not indicated and the preliminary design of the leachate collection pond does not indicate that it is appropriate for evaporation.

The EAP discusses the disposal/treatment of leachate on page 44 and 45. Leachate will be disposed of by evaporation in an on-site leachate evaporation pond with excess transported to a “licensed waste water treatment facility”. As identified in the EAP the Town of Selkirk has been contacted regarding the possibility of receiving leachate from the RIWDF. Mr. Randy Borsa (Director of Operations with the Town of Selkirk) has indicated that they are capable of receiving leachate from the proposed RIWDF for a cost of approximately \$8.11/1000 gal (See Appendix I). The Town of Selkirk currently receives leachate from BFI Canada.

Environment Canada data from Brandon indicates that an average year has 516.3 mm of total precipitation versus 772 mm of evaporation. Therefore, on average there is approximately 256 mm of net evaporation in the region-

Typical leachate production rates in the Province of Manitoba (BFI in Winnipeg, City of Brandon, and Mid-Canada in Ile des Chenes) vary from 570 m<sup>3</sup>/ha/yr to 950 m<sup>3</sup>/ha/yr, the estimated leachate volume for the proposed RIWDF was calculated as follows:

Portion of active cell producing leachate	37.5 m x
150 m = 0.56 ha	
Yearly Leachate Production	950 m <sup>3</sup> /ha x
0.56 ha = 532 m <sup>3</sup>	

This calculation takes into consideration that the use of multiple leachate collection lines on the bottom of individual cells and progressive closure of active cells will reduce leachate production within a 75 m x 150 m cell by 50-percent.

The required size of leachate evaporation ponds was calculated as follows:

Area = Yearly Leachate Production / Average Net Evaporation =  
532 m<sup>3</sup> / 0.26 m = 2050 m<sup>2</sup>

	<p>The planned leachate pond will have a capacity of approximately 1,500 m<sup>3</sup> (triple the expected leachate volume production). The extra capacity will be achieved by making the leachate ponds deeper.</p> <p>Uses for leachate - It is anticipated that some leachate will be used at the soil remediation farm. Moistured content is a limiting factor in soil remediation. Given that the remediated soils will be utilized as daily cover at the landfill, using the leachate at the soil farm will not cause any short term or long term negative effects on the surrounding environment and will create a use for a waste product. It is expected that at least 50 percent of the leachate produced at the facility can be used in this fashion. Therefore, the approximate size of the leachate pond is 30 m x 35 m x 1.5 deep (approximately 0.1 ha in size). <i>As additional cells are developed the leachate pond can be increased in size if necessary. Closed cells are expected to produce minor volumes of leachate compared to active cells.</i></p>
<p>It is suggested in the proposal that the soil remediation farm will receive some type of contaminated soil. However, the source or type of contaminated soil is not indicated and no information is provided on the source and type of compost material and how the compost facility will be operated.</p>	<p>The soil remediation farm will receive hydrocarbon impacted soils only. Typically these soils will come from hydrocarbon spill sites and from properties such as gas stations, tank farms, and industrial sites undergoing soil remediation programs.</p> <p>Compost material will come from residential yards (leaf, grass, and kitchen waste) and possibly from some commercial supplies such as the straw beds out of livestock transportation vehicles. The operation plan for the compost facility and soil farm has not been developed yet. The plan will be submitted to and approved by the Director of Environmental Approvals prior to the compost facility or soil from receiving any waste.</p>

<p>The destruction of installed groundwater monitoring wells may be required in order to construct the facility components such as the waste holding cells. These wells must be adequately decommissioned and the location/construction of new monitoring wells must be pre-approved.</p>	<p>Monitoring wells which are destroyed during construction activities will be adequately decommissioned by backfilling the wells with a bentonite slurry. Any required new monitoring well locations and construction details will be pre-approved by Manitoba Conservation.</p>
<p>1. The operation of the landfill will cause additional trucks to pass along PR 466. There is a concern by some members of the public that dust from this road will cause a problem for local residents. There is also a concern of increased accidents on the road as it is only 21 feet wide in places.</p> <p>As this sort of concern is not addressed in the Environment Act Licence, are you aware of any plans by Neepawa and Partners to take action to mitigate the dust problem?</p>	<p>Yes, there will be additional trucking along PR#466. As previously discussed, dust control measures will be in place along the access route where there were no dust control programs previously. This would suggest that the dust program along the access route should improve if the RIWDF is constructed. PR #466 is a Class BI highway capable of accommodating truck traffic.</p>
<p>2. Several times it has been stated that there are wells on and just west of the ½ section. It is said that one well is ½ mile west of the site.</p>	<p>There are old well sites west of the proposed site as identified in the EAP. All these wells are up gradient of the site and beyond 400 m from the waste disposal ground as required.</p>



3. The citizen who lives just across PR 466 says he is concerned that the dugout he has on his property, that sometimes has small minnows in it, may become polluted from surface water from the landfill.

Can you reply to this concern? What is the possibility of this “ecosystem” being affected?

As discussed previously, only clean water is directed to the storm water retention pond which acts as a settling pond and has a secondary back-up of water sampling and analysis prior to release. Additionally, the leachate ponds have the capacity for up to a 1 in 100 year storm event. As such, under most conditions and even heavy rain events it is unlikely that any run-off will impact surface water quality in off-site receiving waters or any neighboring dugouts.

<p>4. A similar question is regarding wildlife (deer, muskrat, water fowl), and how the landfill will interfere with their safety and livelihood.</p>	<p>As discussed in sections 4.1.8, 4.1.9, and 6.3.8 of the EAP report the site was previously disturbed by agricultural land use and therefore the proposed development will result in very little loss and disturbance of wildlife habitat. With agriculture surrounding the property the type of available habitat typically only supports small mammals or rodents, while the surrounding potholes support waterfowl. Manitoba Conservation, Conservation Data Centre has no listing of any endangered or rare species at the site or immediate surrounding area.</p> <p>Construction activities and equipment may have minor effects on small and burrowing mammals in the area however, these will be confined to previously disturbed areas. Increased vehicle traffic associated with construction and operation of the facility may result in increased vehicle – wildlife interactions and associated wildlife mortalities. The effects of the facility on wildlife mortalities were assessed to be minor and steps to reduce mortalities include receiving waste only during daylight hours and enforcing existing speed limits. Any waterfowl and migratory bird habitat that is affected would be replaced by new habitat created and re-vegetating disturbed or reclaimed areas. Additionally landfill components will be located away from any migratory bird habitat and construction activities scheduled outside of critical nesting and rearing periods. The residual effects on wildlife safety and livelihood were determined to be insignificant.</p>
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<p>5. The operation of the landfill will cause additional littering and “dumping” of garbage on private property when residents come to the landfill with their refuse and find the gate locked.</p> <p>Again, as this sort of concern is not addressed in the Environment Act Licence, are you aware of any plans by Neepawa and Partners to take action to mitigate the illegal dumping problem?</p>	<p>There will be waste disposal bins and recycling bins available near the site building which will be accessible 24 hours per day to help prevent dumping of garbage on private property. In some cases, if illegal dumping occurs, the perpetrator can be identified from the contents of the garbage bags and fines can be levied.</p>
<p>6. The guideline requires the landfill to be at least 400 m from a residence. The house to the east of 466 is closer than 400 meters.</p>	<p>The Guidelines require that the waste disposal cells be at least 400 m from the nearest residence. The nearest residence is located approximately 700 m from the waste disposal ground. There is a distinction between the waste disposal ground and the property boundary. The closest component of the RIWDF to the residence is the stormwater retention pond which is approximately 575 m away from the residence. There is no specific spacing between the stormwater retention pond and residences.</p>
<p>7. The municipal waterline runs the entire length of the north side of the ½ section. What would happen if there is a watermain break?</p>	<p>The municipal water line does run along the north side of the ½ section. If the water line should break, the water would not flow into the waste cells or come in contact with contaminants because it would flow around the site in the perimeter ditches and be directed to the stormwater retention ponds.</p>

<p>8. Are the leachate collection ponds going to be a breeding place for spreading the West Nile Virus?</p>	<p>Considering the size of the leachate ponds and the stormwater retention pond relative to the available surface water in the surrounding area, they will not significantly increase the breeding area for mosquitoes. Additionally human illness from West Nile Virus (WNV) is rare, even in areas where it is reported. In the Marquette Health Region (now part of the Assiniboine Regional Health Authority) there have been no positive results from 5 dead birds tested to date in 2003. In 2002 and 2001 8 out of 23 and 0 out of 2 dead birds tested positive for WNV, respectively. It is unlikely that the collection ponds at the proposed facility will increase the spread of WNV considering the many natural potholes in the area.</p>
<p>9. The property just north of the facility (SE ¼ 14-14-17) has a dugout and there is a concern that the facility will affect the water quality. It contains fish.</p>	<p>As discussed previously and in Question 3 above, under most conditions and even during heavy rain events it is unlikely that any run-off will impact surface water quality in off-site receiving waters or any neighboring dugouts.</p>
<p>10. In addition to this concern, the landowner states that he rents out the land and that the renter requests in writing a statement of who is responsible for the cost of fixing his equipment if it is damaged by blowing litter such as plastic bags that get caught in the equipment?</p>	<p>The plan for compensation to landowners for problems encountered as a result of the RIWDF will be developed by the RIWDF Steering Committee and the R.M. of Odanah Council. This is the purpose of the \$4.50/tonne to be paid to the R.M. of Odanah. The R.M. of Odanah has been requested to provide information on how they intend to use the \$4.50/tonne compensation fund.</p>

11 Wind Data from Carberry?.

There is no weather station listed for Carberry, Manitoba. The closest weather station to the proposed site for the RIWDF is in Neepawa, which currently does not have wind data listed. Therefore, wind data was collected from the Brandon Airport.