MRC DES
COLLINES-DE-L'OUTAOUAIS

Regional Septic Sludge Treatment Facility Project

The facts …

The Council of Mayors presents this document in response to the citizens' concerns about the proposed Regional Septic Sludge Treatment Facility. During the next few weeks, the MRC will be posting additional questions and answers on its Website.

Cautionary note : The Council of Mayors notes that:

- **The MRC is presently reviewing the main elements of the project including the technology and the site. This review is a follow-up to consultations held last summer and this past winter.**

- **This review is being undertaken in order to fulfill the MRC's responsibility to choose the best option, taking into consideration questions, comments and concerns submitted by residents.**

- **Therefore, a final decision regarding the technology and site will not be made until the review process is completed.**

- **The answers provided in this document are based on the latest information available as of March 15, 2011.**

Introduction

Since its establishment in 1991, the Council of Mayors of the MRC des Collines-de-l'Outaouais has been concerned with the need to find an environmentally-friendly solution to the disposal of septic sludge produced within its territory. Because there was no septic sludge treatment facility in the MRC, the sludge was processed mainly at the City of Gatineau wastewater treatment plant.

However, in the summer of 2006, the City of Gatineau's facility lost a significant portion of its capacity to treat wastewater. Since then, this option, as a long-term solution for the MRC, has been in question, and raised the issue of septic waste management in our region.

Since 2006, the MRC has had several meetings with the City of Gatineau in order to find a mutually acceptable solution. The MRC has also consulted with other partners outside its territory in the hope of finding a viable and permanent solution. Unfortunately, the solutions proposed were either impossible to implement or unworkable for one or the other of the partners.

The City of Gatineau decided, effective December 31, 2010, it would no longer treat septic sludge from the MRC. This is now an urgent matter and the MRC des Collines-de-l'Outaouais **must** find a permanent solution for the treatment of septic sludge from its territory.

It must also be noted that the population in the MRC des Collines-de-l'Outaouais has significantly increased over the past several years. This growth is characterized by the arrival of more than 1,000 new residents annually and the construction of more than 400 new residences. Currently, more than 97% of residences are connected to one of the 20,000 private septic tank installations located on the MRC territory.

The MRC also considers that discharging non-treated wastewater into the environment is one of the most serious threats to the quality of our waters (lakes, rivers and underground), which is why the MRC has proposed a strategy for ensuring the protection of our water resources by taking the following measures:

- build a regional septic sludge treatment facility on its territory in order to provide a viable, environmentally-friendly and responsible solution for the management of septic wastes;
- improve knowledge of surface and underground water quality (e.g. *H_2O des Collines* project, and partnerships with watershed organizations) ;
- complete the inventory of septic tank installations and correct situations where untreated wastewater is discharged into the environment;
- develop municipal programs for mandatory septic waste disposal to ensure the efficient maintenance of the septic systems.

The MRC believes this territory approach will improve the quality of surface and underground water and protect our environment for the benefit of today's generation as well as future generations.

Questions and answers

1. What rate of flow is needed to send treated water into a river?

The Ministère du Développement Durable de l'Environnement et des Parcs (MDDEP) has not set a minimum rate of flow for the discharge of treated water. Proposals are assessed on a case-by-case basis, in order to ensure that the proposed discharge standard will not affect the uses of a given river (swimming, drinking water, canoeing, fishing, etc.) and its ecological integrity.

In the case of the MRC Regional Septic Sludge Treatment Facility (RSSTF), the MRC will consider only the best possible sites and technologies. A dilution factor of 1/100 000 was determined by CIMA+ and the MRC, therefore narrowing the choice to only major waterways. This proposed rate of dilution corresponds to blending one teaspoon of treated water into 3 barrels of water. The Gatineau River and the Ottawa River are the only waterways that allow for this rate of dilution.

Note !!! Solid wastes will never be discharged into the river. Only fully treated wastewater will be discharged into the river, and will comply with all provincial and federal standards. The rate of dilution of 1/100 000 does not refer to the dilution of sludge or untreated water. Also, the fact that the water flow of the selected river may at times decrease and result in a lower rate of dilution does not affect the quality of the fully treated water discharged into the river. These rare occurrences would have no environmental impact or repercussion on public health. It is to be noted that by combining high quality water treatment procedures with a high rate of dilution, the MRC is aiming to ensure the utmost safety of the septic sludge treatment process.

2. Could the regional septic sludge treatment facility accidently overflow, spill or leak?

Answer : No

In the city, most buildings are connected to a sewer system. This type of sewer system carries, on an ongoing basis, all wastewater (from showers, kitchens, toilets, etc.) to a wastewater treatment facility. Rainwater may sometimes enter the sewer system, especially following heavy rains or a rapid snowmelt. This unusual type of situation may overload the system and can result in an overflow of untreated wastewater to the river. In the National Capital Region, instances of untreated wastewater discharges within the last few years were due primarily to this situation.

In the case of the RSSTF, septic sludge (made up of solid and liquid wastes) is brought to the facility by pump trucks. The sludge is stored in a leakproof tank which will allow for the staggering and regulation of the incoming flow. Also, by staggering the number of inbound loads, the intake volume of liquids in the treatment process will be monitored, thus eliminating the possibility of spillage or overflow.

In the event of a heavy rain, only the rain falling directly into the aerated ponds can slightly increase the level of water in the ponds. It must be noted that rainfalls of 100 mm or more are fairly rare in the area and the water level in the ponds will be maintained at least 300 mm from the edge at all times. Also, note that the additional intake of rainwater could be beneficial in further diluting the wastewater to be treated in the lagoons.

Finally, a valve system will ensure 100% control of the flow of the treated wastewater to the river. All of the RSSTF components and equipment will be leakproof and will be inspected regularly.

Based on several levels of precautionary measures, and near 100% control of the treatment facility's intake and outflow volumes, it will be practically impossible to have an overflow, a spill or an accidental leakage.

3. Will the Regional Septic Sludge Treatment Facility (RSSTF) comply with all current and future provincial and federal standards for wastewater treatment?

Answer: Yes.

The proposed concept combines several proven technologies which will ensure the discharge of treated and disinfected wastewater will comply with the highest federal standards. It will also be possible to incorporate additional treatment systems to meet future standards.

In addition to these Federal standards, proposed legislation by the MDDEP – establishing effluent discharge objectives (EDO) – will ensure that the characteristics of recipient waterways are taken into account as well as the quality level required to maintain the varied water uses (swimming, drinking water, canoeing, fishing, etc.)

4. Which provincial and federal approvals are required for the construction and operation of a Regional Septic Sludge Treatment Facility (RSSTF)?

Federal regulations:

In the case of a navigable river, certain authorizations will be required for the construction of the discharge outlet. In accordance with the *Navigable Waters Protection Act* (L.R.C., 1985, ch. N-22) approval from Transport Canada is required to ensure that said discharge outlet will not be detrimental to navigation.

Approval from the Department of Fisheries and Oceans is also required in accordance with the *Fisheries Act* (L.R.C., 1985, ch. F-14) to ensure that the construction of the discharge outlet will not result in the net loss of fish habitat.

Furthermore, although the province of Québec has not yet officially endorsed the *Canada-wide Strategy for the Management of Municipal Wastewater Effluents*, the MDDEP requires that any new wastewater treatment facility be designed in order to comply with the standards set out within this strategy. In this regard, it is to be noted that the MRC is committed to meet the future standards as prescribed by the *Règlement sur les effluents des systèmes d'assainissement des eaux usées (Regulation respecting the effluents of wastewater treatment systems)*. These standards are not yet official since consultations are still ongoing.

Provincial regulations:

With regard to the MDDEP, authorization certificates are required in accordance with Sections 22 and 32 of Québec's *Environment Quality Act*.

Section 22 stipulates that an authorization certificate is required prior to undertaking certain work. This provision applies to buildings and industrial operations, likely to cause emissions, deposits, a release or discharge of contaminants into the environment. Furthermore, the MDDEP has taken a protective approach, based on effluent discharge objectives (EDO), as regards to the aquatic environment. The EDO, together with an assessment of the technologies chosen for a project, will determine the environmental requirements for the project.

Section 32 applies to all water supply projects and wastewater treatment devices.

Other regulations:

Depending on which site is chosen, additional authorizations may be required. For example, we refer to transport regulations (highway access), protection of agricultural land and activities, zoning and building permits. Since proposals are assessed on a case-by-case basis, regulatory requirements will be clarified once a site has been chosen.

5. How will the dry sludge be treated?

The MRC will call for tenders for the off-site treatment (composting, anaerobic digestion, gasification, thermal conversion, etc) of the estimated 2,000 metric tons of organic matter that will be generated yearly at the treatment facility.

The MRC has not issued any call for tenders in this respect yet. The MRC can not speculate on the result of this process at this time.

6. Has the MRC considered the possibility of having several smaller treatment facilities rather than the one facility for the whole region?

Yes, however, this option was not recommended by CIMA+, in their first report, for the following reasons:

- Existing aerated lagoon treatment systems are designed to process household sewage requiring Biochemical Oxygen Demand (BOD) over 5 days (BOD5) around 100 mg/L and could not be modified to treat an organic load at the rate produced by a dewatering process (the BOD5 for such loads is usually around 800 to 1000 mg/L). Existing purification tanks are designed for a liquid retention period varying between 7.5 and 15 days, whereas purification tanks for the filtrates resulting from a dewatering process usually require a liquid retention period varying between 25 and 30 days. Furthermore, major upgrades would be required for the existing aeration systems;

- The aerated sewage lagoons located in Quyon and Notre-Dame-de-la-Salette were lined with concrete side panels and therefore cannot be expanded. New, additional circular ponds lined with concrete side panels would be required;

- Restrictions related to the existing sites would be difficult to address, particularly at Notre-Dame-de-la-Salette where the purification tank is located below the surrounding land, and in Wakefield, due to restricted right-of-ways and in certain areas, the possible risk of landslides (LEDA clay);

- The existing facilities in Notre-Dame-de-la-Salette and Wakefield are located near urban areas and this could have an impact on the population nearby;

- An initial analysis of the capital costs associated with the construction of 3 treatment facilities, rather than one, has shown that the cost would be at least double, because of the fixed costs associated with the construction of a septic sludge treatment facility, such as road access for trucks, receiving areas, storage tanks, underground conduits, water level control stations and various buildings (dewatering process, administration, etc.);

- Statistics obtained from the MRC de la Vallée-de-la-Gatineau treatment facility, in Kazabazua, show that during 2009, that MRC spent $93,000 on salaries, $20,000 on maintenance and repairs, $32,000 on chemicals and $19,000 on electricity, totalling $164,000. Based on these figures, we estimate that a single facility in the MRC des Collines would cost approximately $250,000 per year in labour, operation and maintenance, considering the MRC facility would be twice the size of the facility in Kazabazua. Taking into account an average interest rate of 7% and inflation rate of 3% over 20 years, the compounded annual cost of $250,000 is $3.7 million in 2011 dollars. Bearing this in mind, if we assume that each of the three facilities in the region will cost $125,000 in labour, operation and maintenance per year, the escalated cost of a total annual expense of $375,000 is $5.5 million in 2011 dollars, or nearly 1.5 times the cost for a single facility.

7. Why does CIMA+ recommend that the treated wastewater from the future facility be discharged into a river rather than filtering it through the ground and water table?

An outlet is necessary for this type of infrastructure where the septic waste will be discharged as treated waste water. There are two technically, and legally, accepted options available to the MRC for disposing of treated wastewater, that is, by seepage to the water table or discharge into a river.

The following table serves to compare the advantages and drawbacks of each option.

Characteristics to consider with regard to receptors:

Characteristics	Water table	River
Knowledge of the medium	- Not much data available - Current data costly and difficult to obtain - Anecdotal historical data - Variable conditions depending on the geology of the area	- Extensive data available - Current data inexpensive and easy to obtain - Extensive and available historical data - Known and foreseeable conditions everywhere along the river
Recharge capability	- Water flow and change weak and slow	- Water flow and change considerable and rapid
Monitoring and testing	- Through dug wells surrounding the site - Stationary and localized sampling points - Complex and costly sampling process	- By direct sampling from the discharge channel or the river - Additional sampling stations easily set up - Easy and inexpensive sampling process
Principal uses of the receptor	- 97% of the MRC's drinking water (untreated) - Domestic water	- Recreation and tourist uses and swimming - Boating and sport fishing - Marginal drinking water supply requiring treatment prior to consumption
Receptor in-use performance	- Infiltration site subject to variable performance and clogging.	- Constant drainage channel with no risk of clogging
Ecology	- Waters in direct relation with the ecosystems	- Waters in direct relation with the ecosystems

Based on these observations, the MRC finds that discharging treated water into a river would provide an additional precautionary measure for the treatment facility.

8. What measures will be taken to limit the impact of possible odours?

In a treatment facility, such as the one proposed by the MRC, some odours may be caused when sludge is delivered. To remedy the situation, the MRC has agreed to add a collection and processing system for biogas emissions that may result from deliveries and the dehydration process (for example, operations carried out in a building under vacuum pressure)

Current techniques are effective, due part to the control of odours through peat fibre filters and carbon filters.

In general, aerated lagoons used throughout Québec do not have any significant impact as far as odours are concerned. This type of aerobic process produces very little odour. Good examples are the wastewater treatment facilities in Wakefield, Notre-Dame-de-la-Salette and the City of Gatineau where there have been few complaints.

The RSSTF will not be processing the solids extracted from the sludge. These solids will be transported to a waste treatment facility, to be determined in the future, through a bidding process. Since there are no plans to store solid wastes at the RSSTF, there will be no odours usually associated with a waste treatment process.

Should some odours be produced (in spite of the various collection and processing measures), the MRC will see to it that changes are made in order to minimize odours and maximize the distance separating the facility's equipment from residences in the vicinity (minimum 150 m).

9. Why does the MRC not design the treatment facility on the basis of a 3-year septic pump-out schedule rather than a 2-year schedule?

Section 13 of the provincial *Regulation respecting waste water disposal systems for isolated dwellings* (Q-2, r. 8) states:

> ***13. Emptying:***
>
> *A septic tank referred to in section 10 or in section 11 and used only for some part of the year must be pumped out at least once every 4 years.*
>
> *A septic tank referred to in section 10 or in section 11 and used year-round must be emptied at least once every 2 years.*
>
> *Notwithstanding the foregoing, where pursuant to section 25.1 of the Municipal Powers Act (R.S.Q., c. C-47.1), a municipality provides for the emptying of septic tanks, a septic tank may be emptied in accordance with the first and second paragraphs, or depending on the measurement of the scum or sludge layer. In the latter case, every septic tank must be inspected once a year and be emptied where the thickness of the scum layer is equal to or greater than 12 cm or where the thickness of the sludge layer is equal to or greater than 30 cm.*

For this reason, the MRC is required to build a facility that will comply with the minimum standards prescribed by the provincial regulation.

10. How do you calculate the demographic centre of mass area for septic tanks in the MRC?

The demographic centre of mass is a concept used in the field of logistics and transportation (for example, a strategic analysis for determining the location of a plant or a new warehouse).

By establishing weighted averages from geographic coordinates and the relative value of each point (for example, in terms of business revenues, number of consumers, etc.), we find a centre of mass which in turn provides us with an optimal solution.

It is necessary, however, to balance this gross value indicator against other factors. For example, when determining the location of a new plant, the weight used will be the number of users, in other words, the population.

Point-by-point theoretical method for calculating a barycentre :

1) Assign every septic tank abscissa (x) and ordinate (y) coordinates

Tank 1 = (x1; y1), Tank 2 = (x2; y2), […] Tank 20 000 (x20,000; y20,000), etc.

2) Determine the abscissa and ordinate average for the MRC's 20,000 septic tanks. The result determines the centre of mass area for septic tanks on the MRC territory.

Since each septic tank is represented by a point on the MRC maps and there are approximately 20,000 tanks, the calculations are done by computer. Geomatics software was used for these calculations, which enabled the MRC to determine its demographic centre.

11. What is the estimated cost of the project?

Cima+ estimates that the infrastructure and equipment costs for this project will be $5.4 million. In addition, there is the cost of acquiring a specific property along with site preparations.

12. How were the recreation and tourist zones determined within the site selection process?

The recreo-tourism zones were determined in accordance with the zone designations provided in the MRC des Collines-de-l'Outaouais *Schéma d'aménagement* (development plan).
(http://www.mrcdescollinesdeloutaouais.qc.ca/index.php/fr/services/amenagement/shema-damenagement)

12.1 Why was the Gatineau River not designated as a recreo-tourism zone?

The MRC's designated recreo-tourism areas are generally those which provide recreational and tourist facilities on a regional scale. Thus, the mere presence of natural elements does not give a recreation and tourist use designation to a specific zone. In this respect, it is to be noted that there are numerous natural attractions on the territory of the MRC, including many lakes and rivers which are not designated for recreational and tourist use. These natural elements exist across several designated land-use zones, generally characterized by a dominant use other than recreation and tourism (for example: agricultural and forestry). For these reasons, no specific land-use designation is attributed to the Gatineau River. The river crosses several designated land-uses on the territory and is naturally part of those areas.

13. What impact will the septic sludge treatment facility have on the environment, the population and the economy of the MRC?

By complying with current standards, and obtaining required authorizations from the competent authorities, the MRC is ensuring the RSSTF will have no significant negative effects. The MRC is convinced the RSSTF will provide great benefits environmentally, socially and economically.

Environmental considerations :

By treating the septic wastes produced on its territory, the MRC is acting responsibly by minimizing greenhouse gas emissions produced by transporting raw sludge outside the territory.

In addition to improving the quality of the environment, by managing septic wastes locally, the MRC will ensure that the RSSTF outlet (discharge point) complies with the effluent discharge objectives (EDO) issued by the MDDEP.

The following summarizes the objectives to be attained by using the EDO method for determining the degree of wastewater contamination:

> *The Ministère has developed a method for determining effluent discharge objectives (EDO) specific to each contamination source, based on surface water quality criteria, hydrodynamic conditions and the uses supported by the aquatic environment. This method permits the evaluation of concentrations and loads of contaminants potentially discharged into an aquatic environment without compromising water uses. These concentrations and loads, called effluent discharge objectives (or EDO) are determined from the characteristics of the receiving environment and the level of quality necessary to maintain*

water uses. EDO evaluates the environmental acceptability of existing or future discharges and can be used to justify additional interventions or modifications to projects.

Although the province of Québec has not yet officially endorsed the *Canada-wide Strategy for the Management of Municipal Wastewater Effluents*, the MRC is leading the way in choosing a treatment process able to meet discharge standards specified in the Strategy. In addition, the MRC is following up on comments and studying recommendations submitted by citizens of the MRC and certain technological enhancements still could be added.

As for other possible impacts, it is important to note that the MDDEP will carry out a thorough assessment of this project. Only then, and under strict conditions, in order to ensure environmental and public safety, will the MDDEP issue a certificate of authorization for the project.

It is to be noted also that the sludge treatment chosen by the MRC will include two tertiary phase treatment units, namely, dephosphorization by precipitant and also disinfection by means of UV (ultraviolet) radiation. Note that less than 50% of households in the province of Québec are equipped with secondary phase treatment units (less advanced than tertiary systems) and tertiary systems are uncommon. The Council of Mayors will continue to research and assess other treatment processes which could improve the quality of the treated wastewater discharged into the environment.

Social considerations:

The intended purpose of this project is to find a permanent and sustainable solution to treating septic sludge for the benefit of all citizens of the MRC.

In order to minimize the social impact, the MRC has restricted potential site locations to low density population areas near its demographic centre, in order to reduce the impact associated with transportation.

In addition to reducing distance runs, the possible sites are located no further than 2 km from provincial highways in order to limit the impacts associated with using sections of secondary roadways.

In the immediate area of the facility, the MRC will ensure, among other things, setbacks from nearby residences for its processing equipment and also implement visual impact mitigation measures as well as odour emission controls.

Economic considerations:

By treating the liquid portion of septic wastes locally, the MRC avoids transporting and transferring 38,000 m^3 of raw septic sludge outside its territory. We estimate that these reduced transportation costs would save us hundreds of thousands of dollars each year. In fact, there would be only 2,000 tonnes of solid waste per year to be shipped from the treatment facility to a waste reclamation site outside the territory.

In order to preserve a dynamic economy, the MRC has restricted potential site locations to areas beyond a 500 m setback from all recreo-tourism zones as shown on the MRC development plan. It is a fact that both of the sites proposed for further assessment are located 7 and 10 km respectively, north of Wakefield, near the Farrellton sector.

The MRC is also convinced that the overall environmental benefits stemming from this project will have a positive effect on the economy. The protection of our lakes and the availability of high quality underground water, for the needs of the population and various economic activities are excellent indicators.

The Council of the MRC is also committed to providing an affordable project for its residents. Applications to various grant programs will be submitted to help to finance this facility, in order to help alleviate its fiscal impact.

In building a RSSTF, the MRC is providing an infrastructure for its residents which will enable us to control the costs associated with the management of this residual material for years to come.

This infrastructure will support several local septic waste disposal companies, which will contribute to creating a healthy competition, thereby benefitting all property owners.

14. What impact will this facility have on people or municipalities who wish to obtain their drinking water from the Gatineau River? What about the effect of contaminants, such as pharmaceutical residues and hormones which may be discharged in the water?

Regardless of the waterway where water is collected for the purpose of human consumption, it is important to be cautious.

Generally, the quality of surface water varies greatly, even within a short period. It is risky to rely on laboratory test results that are not performed from the same day! This is the reason health department professionals have always emphasized either the use of an underground water supply or an excellent water filtration system and chlorination to destroy the maximum number of parasites that may be present in the water.

As for pharmaceutical products, hormones and endocrine disruptors, a characteristic of their molecular structure is that they take effect in low doses, which is why these substances must undergo intensive international studies. A document produced by the World Health Organization, entitled G*lobal assessment of the state-of-the-science of endocrine disruptors*, published in 2002, is possibly the best reference on the matter.

However, in our case, we would be building a septic sludge treatment facility, not a city wastewater treatment plant. The discharge into the river does not come from municipal sewers, which carry all the liquid portion of effluents from households, businesses, etc.

The situation in the MRC is not the same as a city wastewater treatment plant. The liquid portion is disposed of through the weeping bed or in the worst case (where there is no septic system) on the surrounding ground or a waterway nearby.

We agree that a little amount of contaminants could end up in the septic sludge but when that happens, the few particles would decompose through the filtrate treatment process. To summarize, the situation here is completely different from one where sewage effluents are discharged into a river. In this case, the quality of the water will not be altered.

In conclusion, the MRC considers that the RSSTF will have no impact on the quality of the water in the receiving waterway.

15. Which earthquake safety measures will be integrated into the design of this treatment facility?

The RSSTF infrastructure and buildings will be built according to the *National Building Code* requirements and according to the specific character of the seismographic zone WQU (western Québec).

The *National Building Code* requirements are meant to protect people and property.

16. Under what authority does the MRC have jurisdiction in this matter? Are all municipalities subject to this jurisdiction?

The answer to this question is found in by-law no.11-93**,** which stipulates the administrative and financial terms and conditions pertaining to the MRC's authority in the provision of waste disposal services.

Thus, the following is provided in accordance with this by-law:

Definition of waste:
Any residual material whose definition is included in that of sewage sludge, septage, solid waste or dry waste.

Authority :
The MRC has jurisdiction over municipalities with regard to the provision of waste disposal services and is therefore granted, for this purpose, the same regulatory powers as a municipality, with the exception of collecting taxes. As regards the exercise of this authority, the powers of the MRC are exclusive of those of the municipalities, the rights and obligations of which are not applicable to the MRC.

Exclusivity :
The municipalities must ensure that in any contract granted for the collection and transportation of solid waste, dry waste, sewage sludge or septage, the contractor is required to use the MRC waste disposal services exclusively, under threat of invalidity of contract, and comply with all regulations passed by the MRC.

Any municipality wishing to avail itself of its right to be excluded from the MRC's jurisdiction may do so in the following manner:

- *The right to opt out is exercised through the adoption of a resolution to this effect by the council of the municipality wishing to exercise its right to be excluded and the transmission of a certified true copy of this resolution, by registered mail, to the secretary treasurer of the MRC. Effective from the date of transmission, the municipal corporation excluding itself is not subject to the authority of the MRC with regard to this jurisdiction, no longer contributes to the payment of expenses and its representatives on the MRC council can not take part in discussions and subsequent voting related to the matter.*
- *The municipality exercising its right to opt out is still responsible for paying its share of the annual cost on principal and interest payments as provided in the amortization schedule of various loan by-laws in effect, in accordance with the Law, prior to the transmission of the resolution referred to in paragraph a) of this article, in accordance with the provisions of article 8 of this by-law.*

17. How is the MRC planning to implement a systematic program for the emptying and inspection of septic tanks on its territory?

The Residual Materials Management Plan (RMMP, 2005) of the MRC des Collines-de-l'Outaouais recommends that:

- every municipality establish an inventory and inspection program to ensure all septic systems located on its territory comply with environmental standards;

- municipalities establish a schedule for the disposal and periodic measurement of septic sludge.

Decisions related to the implementation of these programs and the ways and means of their implementation will be made by the local municipal councils in accordance with their powers.

Once the septic tanks have been emptied, the sludge must then be brought to the RSSTF, somewhat like the disposal of solid wastes which are currently taken to the transfer depot for household wastes or recyclables which are brought to the MRC recycling plant.

18. Is the proposed treatment facility compatible with « Juggler » type sludge trucks which reduce the volume of liquid?

As noted in the report following the first consultation held June 28, 2010:

Inbound loads of septic sludge arriving in « Juggler » type sludge trucks would be perfectly compatible with the proposed sludge treatment train.

It will be possible to adapt the treatment plant's capacity to incoming flows, according to future developments. However, regardless of developments, the proposed treatment train will be the same as the one presented in the report. To summarize, the use of more or fewer « Juggler » sludge trucks by waste disposal companies over the years will not affect the selection of the treatment process.

19. Will the municipalities favour this type of technology in their systematic program for the emptying of septic tanks?

It has been established that inbound loads of septic sludge arriving in « Juggler » sludge trucks are compatible with the proposed sludge treatment train. It has also been established that under these conditions, the ways and means of collecting the septic sludge are within the powers of the local municipalities to determine.

The municipalities may therefore favour « Juggler » type sludge trucks in exercising their authority in this matter.

However, it was noted in the report following the first consultation held June 28, 2010, that in this event, there are certain points to take into consideration which we see fit to repeat here:

- The MRC or the municipalities could require that operators of « Juggler » sludge trucks have proper operator's licenses. It is well known that operating a « Juggler » sludge truck requires specific qualifications in order to achieve very precise objectives with regard to volumes and concentration, whereas operating the usual type of pump truck does not require specific qualifications;

- It may be advisable to preserve conditions favourable to free enterprise and competition between companies currently operating on the territory. The purchase and operation of a « Juggler » sludge truck is expensive and some companies, unable to convert to this technology, may disappear. There would be the risk that a monopoly could then ensue.

- Following many discussions with several operators of « Juggler » sludge trucks, we have noted that some clients object to having a « Juggler » sludge truck empty their septic tanks and feel that they « don't get their money's worth » when they realize there is still some liquid left in the bottom of the tank after it has been "emptied". Information campaigns would be required.

- Regular pump trucks will still be required to empty holding tanks and for other specific operations.