# **Annexe J**

Lettre en réponse à la Danford Lake and District Property Owners Association



# LDC, GESTION ET SERVICES ENVIRONNEMENTAUX

December 23, 2005

Danford Lake and District Property Owners Association c/o Shannon Martin, President 1502-222 Queen Street Ottawa, Ontario K1V 5V9

Sir:

We wish to thank you for your association's continued interest in this project. You will find attached, the answers to your questions found in your letter dated October 27, 2005 and in the document that was hand delivered by yourself at the October 29 Public Consultation meeting for the project. The answers are provided in English and the French version will soon follow.

The Environmental Impact Study is in its final stages. LDC hopes to submit this study to the government by the end of January 2006.

We must stress that until the provincial government deems the Environmental Impact Assessment Study complete for official publication the project is subject to change.

Although consulting with the community may have caused some delays in presenting a final project, we feel it is worth the wait. It is with respect for peoples concerns that we wish to proceed.

Please accept Mr. Martin my most sincere season's greetings.

Denis Rouleau President

LDC, Gestion et services environnementaux

cc: Monsieur Thomas J. Mulcair

Ministre du Développement durable, de l'Environnement et des Parcs

LDC

**MRC Pontiac** 

Municipalité de Kazabazua

Municipalité de Alleyn et Cawood

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# ANSWERS TO LETTERS OF 27<sup>TH</sup> & 29<sup>TH</sup> OCTOBER 2005

# Danford Lake and District Property Owners Association.

# 1. Contamination of surface and groundwater

As you know, the impermeable system proposed at the bottom and on the walls of the Technical Landfill (TL) will be in all points in compliance with the requirements of the new Quebec regulation regarding landfill and incineration of residual matters which was published in the Official Gazette of Quebec on May 25, 2005. It will include from top to bottom, the following elements:

- A 500 mm thick drainage layer with a minimal hydraulic conductivity of 1 x 10<sup>-2</sup> cm/s and a minimal slope of 2 % in the direction of the leachate drainage pipe;
- > A High Density Polyethylene (HDPE) geomembrane 1.5 mm in thickness;
- A 300 mm thick drainage layer with a minimal hydraulic conductivity of 1 X 10<sup>-2</sup> cm/s and a minimal slope of 2 % in the direction of the leachate collection drains;
- A composite lower impermeable layer made up of a HDPE geomembrane of 1.5 mm in thickness over a geocomposite bentonite layer of 6 mm in thickness, and whose minimal hydraulic conductivity is of 5 x 10<sup>-11</sup> m/s.

This impermeable system thus includes two (2) levels of containment and two (2) levels of drainage which ensure, on one hand, a very good containment of leachate water inside the TL and on the other hand, their rapid and effective drainage towards the pumping wells to the water treatment system.

In addition, in order to ensure the conformity of all materials used and the quality of work completed, a complete and integrated quality-assurance programme will be put in place and carried out by a third party fully independent of the contractor to whom will be given the construction contract. This program will be in conformity with the MDDEP requirements and will be part of the documents of the environmental impact assessment study (EIAS).

Measures will also be taken at the start of the landfilling of each cell. These measures will, in particular, require that the first layers of residual waste, on the top of the 500 mm thick drainage layer, be lightly compacted and not contain dry materials or other large waste likely to damage the upper geomembrane. Special attention will thus be paid to the first layers in order to withdraw all matters likely to damage or perforate the upper geomembrane.

Despite all these precautions taken, there is still a small risk that some perforations could not be identified and hence not repaired. This is why a leak detection system

between the first and the second geomembrane (layer of 300 mm thick drainage sand) will be installed. The occurring leaks in the first layer will be then collected and pumped towards the leachate treatment system.

Finally, a network of nine (9) groundwater observation wells will be installed around the site from which it will be possible to take groundwater samples to ensure a periodic follow-up of the groundwater quality and to detect, if necessary, any significant fluctuation in water quality.

#### 2. Contamination of the Kazabazua and Picanoc rivers

In the *Notice of Project* which goes back to March 2005, the land surveys and other on site surveys were not yet completed. Since this date, with the information gained, the localization of the TL and the area reserved for the water treatment system is now indeed different from that presented in a preliminary way in the *Notice of Project*. Indeed, the area reserved for the water treatment system is now localized at the west end of the property and all treated water will be rejected directly into the Picanoc River via a closed control. We are examining the possibility of a Zero Reject (for leachate) by the recirculation of treated water in the bioreactor of the TL.

#### 3. Increase in road traffic on route 301

In order to properly address this question we must clarify a few issues that were raised in your question.

Firstly, the tonnage of waste expected at the landfill in Alleyn and Cawood is approximately 250 000 metric tones per year at the peak of operations. This amount includes de domestic waste from the city of Gatineau and the MRC's of the Outaouais and the ICI's (institutional, commercial and industrial) of the Outaouais.

Secondly, the project proposed in Quyon is entirely different in many aspects than the one proposed for Alleyn and Cawood and therefore does not constitute a fair comparison. Specifically with regards to truck traffic. In the Quyon project, it was expected the waste be hauled directly to the site using the waste collection (typical garbage trucks) vehicles. For the project in Alleyn and Cawood, the waste will be hauled mainly from transfer stations using large tonnage vehicle (floats), hence the difference in mentioned truck numbers. It should be noted that some waste will be hauled by smaller vehicles.

A study of the increase in the road traffic was carried out based on statistical counts from the Ministry of Transport of Quebec (MTQ, 2004). Compared to the MTQ's data for the year 2004 on routes 105 and 301, the study showed that the percentage of trucks on road 105 would increase by 2,5 % and of almost 9 % for the 301 between Kazabazua and the TL.

In addition, a noise impact study regarding this increase in volume of heavy vehicle traffic is under way and will be integrated into the impact study report which will be transmitted to you.

# 4. Disturbance of peace and quiet

The conditions of operations of the TL in terms of opening hours and all other requirements relating to its operation, as well as the maximum quantities to be received at the TL annually, will be fixed by a Governmental 'Order of Council' which will be emitted and which will be part of the conditions to comply with in order to obtain the certificate of authorization (C.A.) of the MDDEP.

As you know, the projected TL opening hours are Monday to Friday, from 7:00 am to 6:p.m. Opening hours for other infrastructures of integrated waste management like the recycling centre, the reception building and the temporary storage of hazardous domestic waste (R.D.D.) could possibly be different and could include for instance Saturday mornings, if requested by the community.

#### 5. Hazardous industrial waste

Only acceptable residual matters described in the new 'Règlement sur l'élimination et l'incinération des matières résiduelles' will be landfilled in the LT.

An inspection Area will be placed at the entrance of the LT to allow the inspection of suspect arrivals by the inspectors of the MDDEP and the personnel. The compactor's operator will be clearly informed of the type of residual materials that will be acceptable at the TL and in doubt, he will not proceed to landfill until MDDEP inspector(s) verify them and give their OK.

A complete register of the residual matters received at the site will be maintained and will contain the following information:

- the name of the transporter as well as the vehicle plate number;
- the nature of the residual matters; results of analysis, in the case of soils, to show admissibility:
- source of the residual matters, including the name of the producer and if they are industrial residual matters;
- quantity of residual matters, expressed in weight; the date and the hour of their arrival.

The residual matters generated out of Quebec cannot be eliminated in a TL located in Quebec and any load coming from Ontario will be refused. In all cases, the event will be

documented in order to take the procedures necessary towards the persons in charge, and this, jointly with the authorities concerned.

Radioactivity detector (sensor) will be also installed at the weigh scale in order to detect any substance of this nature.

# 6. Future expansion

As mentioned earlier, the conditions of operations of the TL <u>and</u> the MAXIMUM quantity of waste per year allowed to the landfill will be fixed by an 'Order of Council' of the Government that will be emitted and will be part of the conditions to comply with in order to obtain the certificate of authorization of the MDDEP.

In the case where the owners wish to modify any condition of their authorization, they will have to make an official request to the MDDEP. In the case where the owners wish to increase the capacity of the TL beyond the capacity authorized by the 'Order of Council' of the Government, they will have to submit officially the expansion project and are subject to the procedure of Environmental Evaluation already in force by the Environmental Quality Law, like the current project, with provision for a public hearing by the 'Bureau d'audiences publiques sur l'environnement' (BAPE) if it is necessary.

# 7. Site monitoring

It is up to the Government of Quebec to specify how the MDDEP will ensure the control and follow-up of the operations of all technical landfill sites in Quebec including the one in Danford Lake. We thus invite you to communicate with the authorities of the MDDEP of the Outaouais region in order to obtain precise details in this matter.

LDC intends to respect all requirements which will be contained in the 'Order of Council' of the Government, which may be issued by the Government of Quebec as well as any other standard which may be in force.

### 8. Negative Environmental Impact

An environmental impact assessment study (EIAS) is presently under way in accordance with the 'Directive' issued by the Minister of the MDDEP. A complete copy of this study will be transmitted to you, once the MDDEP has analyzed and accepted it as complete. As indicated in the 'Directive', this EIAS describes and evaluates all impacts which are negative or positive on fauna, flora, receiving medium and the surrounding population. The impact study being prepared must comply with all requirements contained in the 'Directive' of the Government of Québec.

Regarding detritivorous birds, different measures will be put in place in order to reduce the attraction of seagulls, gulls and other birds of this specie. One of these measures is to proceed with a daily covering of all waste with sand during operation, and to install several systems for startling the birds. New technologies appearing on the market are increasingly more effective.

In addition, the owners will insist that transporters having open box trucks add a cover or make provisions necessary in order to avoid the take-off of light waste before unloading at the TL. If the owners note frequent problems with a transporter, it will inform the latter and will refuse him access to the site until the situation is corrected.

# 9. Other technology

LDC will not install any industrial incinerator on the site of the CIEVO. The preliminary project of the Plasma Assissted Sludge Oxydation (PASO) system mentioned in the 'Notice of Project' is completely abandoned. There will be thus, no treatment of dehydrated waste sludge or sludge coming from septic tanks centrifuged in the Processing center of Kazabazua. No other thermal technology of this kind will be installed on the site.

The sole thermal technology which will be installed at the TL site is one required by the new regulation in order to ensure the total thermal destruction of the portion of biogases collected and not valorized.

Indeed, a project for the recovery and valorization of biogases to supply a wood kiln is being considered. It is hoped that this kiln will make it possible to keep the cut wood in the region and stimulate the regional forest industry of secondary transformation.

# 10. Description of the firm LDC, Management and Environmental Services

LDC is a duly incorporated company (Canadian charter) under the number 6062954 Canada inc.

It is registered in the province of Quebec as *LDC Gestion et Services Environnementaux* (see on the website www.req.gouv.qc.ca)

The shareholders are respectively a company called Cohen and Cohen (75%) and Mr. Denis Rouleau. (25%)

The President and General Manager of LDC is Mr. Denis Rouleau, B.A.Sc.

LDC mandated the sanitary landfill specialists from Teknika HBA to assist the company in the management and operations of the CIEVO. Fondex Outaouais recently joined the Teknika-HBA Group.

The vast experience in the field of technical landfill for residual matters of Teknika HBA, and the personnel of LDC that has more than 25 years of experience, will make it possible to operate the CIEVO in full compliance with the C.A. of the MDDEP.

### 11. Maniwaki's Landfill Site

LDC is not the owner of this landfill and thus does not have any rights to decide on the future of this municipal infrastructure. The expansion of an existing public site by a private company was excluded at the beginning by LDC.

# 12. Forest concession of Louisiana Pacific Inc. (LPA)

LPA has cutting rights granted by the Ministry of Natural Resources and Fauna of Quebec (MRNFQ). LPA finished cutting a mature wood area located directly on the site of the future CIEVO in July 2005. According to LPA's forest engineers, there is no more wood commercially ready to cut on this site before 2030.

### 13. Quyon and Bristol Mines

The Quyon project was located on a property owned by the Municiaplity (site of the existing trench landfill). The support of the municipality was therefore quintessential to the success of the project. When the Municipality decided to withdraw its support, The project was abandoned.

The Bristol Mine project was not an LDC project.

#### 14. Public consultation

It is our opinion that the taxpayers of the host municipality of Alleyn and Cawood were properly informed of the project starting in October 2004.

As concerned citizen, you will have a chance to voice your position on the matter during the official public consultation period which will be held by the BAPE (*Bureau des audiences publiques sur l'environnement*).

# 15. Septic sludge

The Powerpoint presentation referred to the PASO system to treat, not septic sludge, but the dehydrated sludge resulting from a septic sludge treatment process. As mentioned above, the PASO system was abandoned.

### 16. Water table

The depth of the water table was measured at depths raging from approximately 3 to 12 meters in twelve monitoring wells spread across the projected landifl site.

Estimates from tests conducted at the site indicate that it is not possible to withdraw from the unconfined aquifer at least 25 m<sup>3</sup>/hr (110 galUS/min).