

Brief No. 1 to the Commission of the Bureau d'audiences publique sur
l'environnement concernant le projet de décharge à Danford Lake.

Submitted by:

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Born in Danford Lake (4th generation)

A cottage owner on the Picanoc River

A ratepayer in Alleyn & Cawood.

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Executive Summary

This brief highlights 3 key points of concern:

1. A major discrepancy between the answers given by LDC and the Ministry of Environment regarding the leak rate of untreated leachate through the liners of the proposed landfill.
2. A real world example of the damaging effect chemicals in untreated leachate can have on fish.
3. Reasons why serious questions should be asked regarding the credibility of data in the Environmental Impact Study submitted by LDC on the proposed landfill project.

1. During the question and answer phase of the hearings, both Mr. Michel Bourret, a hydrology specialist with the Ministry of Environment and Mr. Yves Gagnon, speaking for LDC confirmed that the proposed double liner system would leak untreated leachate into the ground. Ref DT1.1

MR. YVES GAGNON said that the liners would leak 250 litres per year. ref DT1.1
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Mr. MICHEL BOURRET, the Hydrology specialist from the Ministry of Environment answered that the primary liner would leak 1% to 10% of the leachate and that the secondary liner would leak 0.9% to 1%. He also stated that this leak rate would amount to 2 to 10 litres per hectare per day. ref. DT1.1 page 50

The proposed landfill site would be 38.5 hectares.

Therefore at 10 litres per hectare per day, the leak rate of untreated leachate through the secondary liner would be up to 140,525 litres per year.

The discrepancy between the answers given is huge.

MR. YVES GAGNON said 250 litres per year... Mr. MICHEL BOURRET said up to 140,525 litres per year.... 140,525 litres of untreated leachate untreated leachate that contains 34 chemicals that cause cancer, 22 chemicals that cause birth defects and 13 chemicals that cause genetic damage.....untreated leachate that will ultimately make its way into the Picanoc River...untreated leachate that will continue to leak at ever increasing rates for hundreds of years after the proposed 30 year post closure period.

The following is an example of an effect of just one of the chemicals in untreated leachate. **TCE is a carcinogen and one of the volatile organic compounds typically found in landfill leachate. It would take less than 4 drops of TCE mixed with the water in an average sized swimming pool (20,000 gallons) to render the water undrinkable (in accordance with drinking water standards). **Info source from a presentation By Dr. Dennis E. Williams, Ph.D. before The Board Of Supervisors Of San Bernardino County, California. May 9, 1995.

Any suggestion that the flow of the Picanoc River would be adequate to dilute 140,000 litres per year of untreated leachate cannot be supported when you consider that less than 4 drops of TCE will pollute 20,000 gallons (76,000 litres) of water.

Leaking liners is one of the main reasons why the whole concept of an engineered landfill is flawed...why the proposed 30 year post closure follow up period is completely inadequate when you consider just how long that 8 million ton mountain of garbage would be there.

To give you an idea of just how long it takes garbage to decompose Dr. Bill J. Rathje, Professor of Anthropology from the U of Arizona has been studying landfills for many years. He discovered that a newspaper that had been buried in New York City's Fresh Kills landfill...for 40 years ...was still legible. This gives you an idea of just how long it takes garbage to decompose...an idea of just how

long the landfill would be there and why untreated leachate would be finding its way into the Picanoc River for generations to come. . Ref article by Dr. Rathje in the National Geographic Magazine Vol. 179 No.5 May 1991.

2. The following is one example of what the impact of untreated leachate from an old landfill can have on fish.

ref article "Kingston Fined over Toxic Waste Dump" in The Globe and Mail , Feb. 25, 1999.

In the city of Kingston, Ontario, there is an old landfill on the shores of the Cataraqui River. The river flows into Lake Ontario. The landfill was covered with topsoil, and made into a golf course and park. The children of Mrs. Janet Fletcher would always get unidentified skin reactions each time they played in the park. Mrs. Fletcher sued the city. During the investigation, samples of the water were taken down stream of the park, to test for toxicity and the impact on fish. The normal test is to place live fish in the water sample and if they survive for 96 hours the water is considered acceptable. In this case, the fish died within 1 hour. Mrs. Fletcher won the case.

This is a real life example of the impact untreated leachate can have on fish.

This is a real life example of just how damaging the untreated leachate from the proposed landfill would be to the aqua fauna of the Picanoc and Gatineau River watershed and to the endangered and fully protected wood turtle found in the Picanoc.

3. The question of credibility. If LDC would give such an inaccurate answer (250 litres compared to 140,525 litres by the Ministry ref. 1 above) to a very important parameter relative to the long term environmental impact of the proposed landfill...an answer that is a factor of almost 600 times lower than the answer given by the Ministry....it raises serious questions as to the credibility of the environment impact study that has been submitted by LDC on the project...it raises the question; " what other data may have been presented in a similar way to make the proposed project appear environmentally acceptable?

It is not necessary to build yet another undesirable landfill to solve the problem of what to do with garbage in the Outaouais.

Plasma gasification by the Plasco Energy group of Ottawa can solve the waste management needs of the Outaouais by converting garbage, a valuable energy source, into electricity rather than burying it in the ground.

In fact, Mr. Andre Poulin said during the hearings that he is working on a plasma gasification project in Valleyfield and that “I am a strong proponent or user of that technology” and “I am an engineer proposing that technology”. ref DT6.1

My recommendations are as follows:

The Ministry should embrace the opportunity to apply the latest plasma gasification technology to solving the problem of waste management in the Outaouais.

The Ministry should identify the Outaouais as a special region within the province where plasma gasification would be fully evaluated as a first step in the possibility of applying the technology Province wide.

For these and many other reasons:

THE PROPOSED LANDFILL PROJECT SHOULD NOT BE APPROVED