

Composition_of_landfill_leachate

The toxic and poisonous substances that our landfills consist of, are outlined in *'Environmental Health Perspectives-Vol 108, Supplement 1-March 2000'* *'Health Effects of Landfill Sites'*.

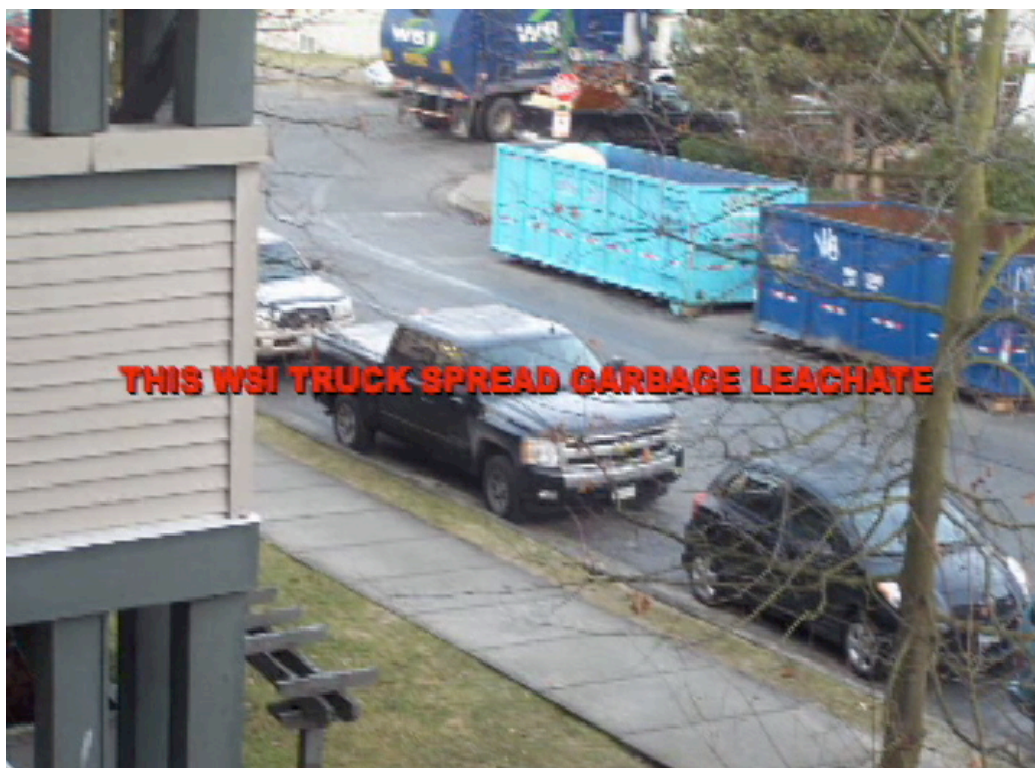
These chemical combinations contained in landfill sites were put there by these same compactor garbage trucks. In many cases these chemical combinations are being drained all over our communities before reaching the landfills. Garbage leachate being systematically spread on to the streets and lanes of our communities in this manner winds up draining into the creeks, rivers, lakes and oceans. In most cases our cities drain what is on the streets through the sewer systems that flow directly into waterways.

In cases where the streets have no sidewalks, curbs or sewers, as is seen in the top of the following 2 photograph, the fluids puddle and then soak into the soil with much of it draining into the ground and the groundwater.











The above photographs, taken on February 3, 2009, show garbage leachate being spread on to the streets of this community when the children were going to school. My letter and photographs documented how this truck drained leachate throughout this community and although letters, videos and pictures were sent to the Mayor and Council after each spill, to date I have not received an answer. No level of Canadian Government, Civic, Provincial or Federal, have stopped garbage leachate from being spread all over the streets and lanes of Canadian cities and towns where these compactor garbage trucks are being used. This has been occurring for so long and is so widespread it's very frightening.



I have to question the 'Environmental Sustainability' concept put forward by the Canadian politicians and others. There is nothing resembling Sustainability in our Environment at this point in time and every politician in the the Canadian Federal Government, the British Columbia Legislature, every Environment Minister Provincial and Federal in Canada and Vancouver City Hall's Mayor and Council have known we are being poisoned, for many, many years, as is shown in the information presented in the following flickr link. In the following link you will see the documentation regarding this issue from 1991 to 2003.

<http://www.flickr.com/photos/bharbara/collections/72157603541114578/>

I am sending you information so you can access Petition 277, titled '***Impact on marine life and habitat from garbage compactor truck leachate draining into sewers and waterways***', which was published on the website of the Environmental Sustainability Department in the Canadian Auditor Generals Office, May 15, 2009.

http://www.oag-bvg.gc.ca/internet/English/pet_277_e_32988.html

February 24, 2004, I received the following letter from Christiane Morin on behalf of David Anderson, Federal Minister of the Environment.

"From ')">"Morin,Christiane [NCR]" <Christiane.Morin@ec.gc.ca>

Sent Tuesday, February 24, 2004 8:34 am

Subject On behalf of David Anderson - Au nom de David Anderson

Dear Ms. Gudmundson:

Thank you for your e-mail of December 31, 2003, regarding garbage leachate onto the streets of major cities.

As indicated in my letter of July 19, 2003, the problem of spillage onto city streets falls under the responsibility of municipalities.

I am confident that city officials will continue to respond to complaints such as those you raised in your e-mail and enforce the bylaws in cases where there is garbage leachate onto city streets.

I appreciate your having taken the time to write and hope that the information provided is useful."

From 1999 until the present I have been appealing to every Canadian Member of Parliament in the Federal Government, the Federal Ministers of the Environment (as well as all of the Provincial Ministers of the Environment in Canada), the Federal Ministers of Health, the Federal Ministers of Fisheries and Oceans and the Federal Ministers of Justice. For most of the past ten years when I have sent a letter to the Federal Government, I have sent that letter to all of Canada's Federal Members of Parliament, all of the B.C.M.L.A.'s, the G.V.R.D. and Vancouver Mayor and Councillors. I have done this to make sure everyone totally understands that garbage leachate is being spread all over North American communities where compactor garbage trucks are being used. I also felt that somewhere in all of those political representatives there would be someone or a group of people who might care enough to do something to assist in stopping the release of garbage leachate from compactor garbage trucks, doing harm to all living things.

The following are the questions I asked of the Canadian Minister of the Environment in Petition #277 and the answers from the Canadian Minister of the Environment which was sent to me on September 25, 2009. How can something so serious be allowed to continue?

**Environment Canada's Response to Environmental Petition No. 277,
regarding the release of garbage leachate from waste collection
vehicles in Canadian cities and towns**

Introduction

As mentioned in Environment Canada's replies to your correspondence of October 30, 2007 and February 25, 2008, on the subject of liquid released from garbage trucks, in Canada the responsibility for municipal solid waste management is shared among the municipal, provincial/territorial and federal governments. Municipal solid waste refers to recyclables and compostable materials, as well as garbage from homes, businesses, institutions, and construction and demolition sites. Collection, diversion (recycling and composting) and disposal operations are the responsibility of municipal governments, while the provinces and territories are responsible for the approval, licensing and monitoring of operations.

For its part, the Government of Canada is engaged in municipal solid waste management issues related to international movement, air emissions (including linkages with greenhouse gases), toxic substances, and federal lands and operations.

With respect to responsibility for water issues, the provinces and territories have primary jurisdiction over most areas of water management and protection. In addition, most principal water uses in Canada are licensed or controlled by provincial water management authorities. Federal jurisdiction applies to the conservation and protection of oceans and their resources, fisheries and fish habitat, navigation, regulation of toxic substances, environmental assessments, and international relations, including responsibilities related to the management of boundary waters shared with the United States. Therefore, I encourage you to contact your provincial and municipal government representatives to share your concerns regarding garbage liquid release from garbage trucks.

Question 1: Does Garbage Leachate not qualify as a deleterious substance?

Response: Environment Canada is responsible for administering subsection 36(3) of the *Fisheries Act*, which states that:

...no person shall deposit or permit the deposit of a deleterious substance of any type in water frequented by fish or in any place under any conditions where the deleterious substance or any other deleterious substance that results from the deposit of the deleterious substance may enter any such water.

A deleterious substance is defined by the *Fisheries Act* as any substance that, if added to water, makes the water deleterious to fish or fish habitat or any water containing a substance in such quantity or concentration or has been changed by heat or other means. The classification of a deleterious substance is undertaken on a case-by-case basis.

Leachate is a complex, highly variable mixture, consisting of various organic and inorganic compounds and micro-organisms, which is formed as water percolates through a landfill. The quantity of leachate generated depends upon many factors, including the quantity of waste landfilled, precipitation, amount of moisture in the waste itself, effectiveness of daily/interim/final covers, temperature and landfill operations. As such, the appropriate terminology is "landfill leachate." Modern sanitary landfills are designed to minimize the potential impacts of leachate on the environment.

The liquid from garbage trucks described in your petition is different than landfill leachate, as the material in the trucks has not had time to decompose. Therefore, in this response Environment Canada will be using the term "garbage liquid."

As mentioned in the Introduction above, municipalities are responsible for residential waste collection. Typically, municipalities have household hazardous waste programs to collect and dispose of these substances in accordance with provincial/territorial and municipal legislation. The garbage liquid found in garbage trucks may be rainwater that has collected in containers before being emptied into the truck. The waste itself may also contain small quantities of such liquids as fruit and vegetable juices, milk and cooking oil, as well as meat juices. Garbage trucks are typically designed to avoid any dripping, provided the operators maintain the trucks as required by the manufacturer.

In the event that any garbage liquid is accidentally released onto the street, it will either evaporate quickly or be diluted by rainwater. If this liquid enters the wastewater collection system, the quantity and/or concentration would be very low, and would be mixed with other types of substances and treated before being released to the environment.

Question 2: Does the Federal Government have any analysis of this type of garbage leachate?

Response: Environment Canada has not specifically studied liquid from garbage trucks.

Environment Canada's Water Quality Monitoring and Surveillance Division has permanent and seasonal monitoring sites in rivers and lakes. These sites monitor water quality, measuring common substances such as nutrients (nitrogen and phosphorus), metals, organic compounds (pesticides, PBDEs, PCBs, etc.) and some chemicals of concern identified through the Chemicals Management Plan.

The Department's aquatic monitoring and surveillance program is focused on assessing aquatic conditions in transboundary waters and other federal waters, but mostly in natural rivers and lakes and not directly related to specific sources of contamination like landfill leachate.

Question 3: Assuming the Federal Government does have analysis of this type of garbage leachate, what will all responsible departments do to address this issue?

Response: As noted in the response to Question 2, Environment Canada has not specifically studied liquid from garbage trucks.

A Canada-wide Strategy for the Management of Municipal Wastewater Effluent was endorsed by the Canadian Council of Ministers of the Environment on February 17, 2009. Environment Canada is pleased with this outcome, as the Department considers the Strategy to be a sound and comprehensive approach that will guide all orders of government in reducing the risks associated with effluents and overflows released from wastewater systems. The Strategy will facilitate the development of a harmonized regulatory framework for the management of wastewater effluents in Canada. Further information can be found on the Council's website at www.ccme.ca.

In your own community, Metro Vancouver has developed a Liquid Waste Management Plan that is updated every two years. This plan has been designed to protect the region's outstanding livability and environmental quality and lays out the steps needed to enhance the current wastewater collection system as the population increases. More information is available on the website at www.metrovancouver.org/services/wastewater/planning/Pages/default.aspx.

Question 4: Section 32 of the Canadian Fisheries Acts, 1999 states "No person shall destroy fish by any means other than fishing..." We know that this garbage leachate drains directly into our creeks, rivers, ponds, lakes and oceans. I am asking all responsible departments, why garbage leachate containing many known and unknown combinations of chemical

substances, bacteria, viruses, moulds, fungi and parasites, that's been repeatedly compacted and drained from compactor garbage trucks, has been allowed to continue to flow into our sewer systems?

Toxic chemical combinations found in landfill garbage leachate arrive at the landfill in these same compactor garbage trucks. Many compactor garbage truck drivers knowingly spread the most potent of these toxic chemical combinations etc. all over the communities they travel in. In the youtube film you can see some slight leakage and some much heavier leakage. All spills in this film are five feet from the sewer drain that travels directly into the Vancouver Harbor. The film <http://www.youtube.com/watch?v=8kedPvxNUbw> was created to better define for Canadian Federal Ministers who are responsible for this, what is continuing to occur because they did not stop garbage leachate from being repeatedly released into sewer systems that flow directly into creeks, rivers, ponds, lakes and oceans from compactor garbage trucks as they travel through our communities. As outlined in the Canadian Fisheries Act, 1999 you have the ability to address this issue.

Response: Fisheries and Oceans Canada is responsible for section 32 of the *Fisheries Act*, which deals with the protection of fish habitat. However, the issues you raise regarding pollution are dealt with under section 36 of the *Fisheries Act*, an Environment Canada responsibility. The classification of a deleterious substance is undertaken on a case-by-case basis under section 36 of that Act.

Question 5: When are the responsible departments going to use the system as outlined in the Canadian Fisheries Act, 1999, to ensure this practice of releasing garbage leachate from compactor garbage trucks and drained into the sewer system, is stopped?

Response: Information obtained from the private sector indicates that the garbage truck industry is aware of the possibility of leakage and is improving truck designs every year. Current equipment is designed to retain liquid from garbage, and regular maintenance is required to ensure that it continues to work as intended. Furthermore, households should dispose of residential waste in closed containers, in order to prevent the accumulation of rainwater with the garbage during the collection period.

Question 6: After seeing the information in the flickr sites, I have prepared, I am asking responsible departments, who's going to ensure that the Federal, Provincial and Municipal governments protect the Earth's

waterways from the release of extremely toxic substances found in garbage leachate being drained from compactor garbage trucks as they travel through Canadian communities?

Response: Canadian citizens are responsible for collecting and disposing of their household hazardous waste in accordance with provincial/territorial and municipal legislation. Provinces and territories are responsible for approving, licensing and monitoring disposal operations and municipal governments are responsible for residential waste collection as well as for wastewater systems and treatment.

In 2006, the Minister of the Environment and the Minister of Health announced the Government of Canada's Chemicals Management Plan, a program committed to ensuring that chemical substances are properly managed to protect Canadians' health and the environment. As part of this plan, environmental monitoring and surveillance being undertaken in air, water, sediment, fish, birds, landfills, and wastewater treatment plants at various sites across Canada. Monitoring and surveillance are important components of the Chemicals Management Plan because they can help to inform decision-making and to measure the efficacy of preventive and mitigation actions. Further information about the Chemicals Management Plan can be found at www.chemicalsubstanceschimiques.gc.ca.

Question 7: I am asking all responsible departments, when governments are not willing to do their jobs, who is going to protect Earth and all that live on this Earth from warming through spontaneous chemical combustion due to this release of garbage leachate?

Response: As previously mentioned, all orders of government in Canada work together to protect the environment.

Question 8: When we understand combinations of some chemicals create spontaneous chemical combustion and mixtures of many types of bacteria, viruses, moulds, fungi and parasites can be lethal, how can all responsible departments, justify allowing unknown combinations of chemical substances, to be repeatedly spread all over Canadian communities since they were first advised this was occurring in 1999?

Response: Typically, municipalities have household hazardous waste programs to collect and dispose of these substances, in accordance with provincial/territorial and municipal legislation.

Question 9: When will the individuals in responsible departments be held accountable for the harm their inaction has caused? In the case of the Vancouver Council for 18 years, for 14 years in the case of the Provincial government (with the exception of Gordon Campbell who has responsibility since he was Mayor of Vancouver in 1991) and 10 years in the case of the Federal government?

Response: The Government of Canada is engaged in municipal solid waste management issues related to international movement, air emissions (including linkages with greenhouse gases), toxic substances, and federal lands and operations. The Canada-wide Strategy for the Management of Municipal Wastewater Effluent mentioned in our response to Question 3 will facilitate the development of a harmonized regulatory framework for the management of wastewater effluents in Canada.

