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Subject:To: The Mayor and All Members of Hamilton City Council c/o the Clerk

Date:Mon, 25 Apr 2011 11:00:40 -0400

From:Joe Minor <jminor@cogeco.ca>

To:askcity@hamilton.ca, publichealth@hamilton.ca, websolut@hamilton.ca,
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To: The Mayor and All Members of Hamilton City Council c/o the Clerk

This letter is to inform you of an active and ongoing spill of a persistent bioaccumulative toxic pollutant (pfos) exiting City property. I am also formally requesting that the City publicly release all information it has with respect to how this spill occurred and what is being done to end the persistent and continuing pollution of a local creek (a tributary of the Welland River). I am also concerned that the location of the spill (in a designated sensitive groundwater recharge area) makes it possible (even likely) that groundwater is also being contaminated on an ongoing basis.

On April 9th, 2011 I collected a sediment sample from a small flowing creek at the fence line of the airport. The location as determined by a WAAS-enabled GPS unit (Lowrance iFINDER H₂O) was:

N 43.16274° W 79.94191°

This sample was submitted to a certified testing laboratory and the Certificate of Analysis **RESULTS OF ANALYSES OF SEDIMENT** was:

Perfluoro-1-Octanesulfonate (PFOS) 170 µg/kg (ppb)

Perfluoro-n-Octanoic Acid (PFOA) 4.6 µg/kg (ppb)

This is an extraordinarily high level of pfos contamination of sediment, and appears to represent the highest publicly available published value for pfos contamination of sediment. The next highest value in the literature is 51 ppb, which was the single highest value recorded in Lake Ontario sediments amongst 83 samples tested. The level of pfos contamination of sediment immediately downstream of the City owned Hamilton Airport sets a new world record, in that it is more than three times higher than the old record.

This world record concentration of pfos sediment contamination corresponds with the levels of pfos contamination in carp living downstream of the Hamilton Airport contamination site. Data from the Ontario Ministry of the Environment's Guide to Eating Ontario Sport Fish (2011-2012) indicate that all tested carp over 45cm in length living in Lake Niapenco (where the Hamilton Airport ongoing pfos contamination flows to) have muscle tissue (fillets) contaminated in excess of 640 ppb. The next highest value from the publicly available published literature was 297 ppb (Saginaw Bay, Michigan). Carp living downstream of the Hamilton Airport are also world record holders (the most pfos contaminated carp in the world), more than doubling the previous world record.

City staff have referred to the pfos contamination as "historical". This is an imprecise term serves only to confuse (rather than educate) the public. How long ago does "history" start? When was pfos applied to City property? Where was it applied? How much was applied? All of this important information is obscured by the term "historical".

Due to the paucity of information from the City, significant doubt remains about when, where, and how much pfos was applied to City property. In contrast, there is absolutely no doubt that City property continues to contaminate at least one surface stream (a tributary of the Welland River) on an ongoing basis. The sediment sample I collected was a recently deposited, unconsolidated, water saturated (39% moisture) sediment sample collected from the bottom of a flowing stream. The high level of pfos contamination, in conjunction of what is known about the partitioning of pfos between fresh water and sediment, means that the water and suspended sediment flowing through and under the fence (exiting City property) carry significant levels of pfos on an ongoing basis. To continue to ignore the probability that pfos is also exiting City property in groundwater constitutes a failure to exercise due diligence.

The City should have at its disposal a large quantity of high quality, recent information regarding this area. A large number of City staff and a very large number of outside consultants were paid to prepare a Secondary Plan and three Environmental Assessments for Aerotropolis (aka the "Airport Employment Growth District", AEGD). Considering this project was promoted as a "Green Eco-Industrial Park", certainly the assembled professionals did intensive research and reporting on the past, present, and future sources of pollution from the AEGD's anchor tenant. I am asking that the City release this information to the public, because somehow it did not make it into the publicly released package of information Council considered prior to voting to expand the airport.

In addition to not mentioning pfos, the publicly released portion of the staff/consultants package regarding the expansion of the airport did not mention other ongoing pollution problems such as glycol (de-icing solution), zinc, and salt. I am asking that the City release any information it may have about pollution at the airport, particularly if that information was "provided under separate cover" outside the public process. I find it a bit odd that it is even necessary make such a request, but ever since airport operations were privatized much information about the airport is received by

Council (or committee) *in camera*, and the public has no way of knowing what Council has been told.

To repeat, I am requesting that the City investigate when, where, and how much pfos was released at the City airport, and that the City inform the public (and me) of its findings. I pose some more specific questions below, and I provide some information that I have found out that might help focus the City's investigation.

On the morning of Friday April 22nd I met with Robert Koroscil (representing airport operations) at the site of the pfos contamination. Mr. Koroscil also expressed concern about the contamination, and offered the following observations (these are not direct quotes, but are my best recollection of his comments):

A) fire fighting exercises at the airport ended "about a decade ago",

B) to the best of his knowledge, any use of pfos at the airport would have been more than 15 years ago,

C) while he will continue to investigate what has happened at the airport in the past 15 years (and report his findings publicly), prior to that any knowledge about what has happened at the airport would have to come from the City. Mr. Koroscil indicated that information about past airport operations was "not available to him" and "was held tightly by the City".

The site where the 170 ppb pfos in sediment was recorded was selected because it is immediately downstream of the fire fighting practice/training pad. Any knowledge about activities at this pad would be invaluable in trying to get a handle on the magnitude and timing of the pfos contamination. I visited the Maps Library in the Mills Library of McMaster University. Examination of the aerial photographs reveals that this pad was constructed between the times aerial photographs were taken in 1978 and 1985. Any information about the construction of this pad will aid in determining the magnitude of groundwater contamination. The area where the pad was built is a "sensitive groundwater recharge area", meaning some groundwater contamination is likely. The magnitude of the contamination would be expected to increase greatly with the depth of the gravel pad that was placed on the site. Perhaps the greatest levels of infiltration would be expected if there was excavation of the site prior to the placement of the gravel pad. The City needs to see if it has any records on the construction of this pad. In particular, I am requesting that I be sent a copy of the building permit(s) for this pad and the associated structures that are on it. Any information that can be found will decrease the amount of money that will need to be paid to consultants in order to reconstruct what happened at the site if the information is "missing".

The City needs to investigate what records exist regarding what happened with respect to fire fighting exercises that occurred on the site. The equipment (e.g., pumper trucks), materials (e.g., pfos foam), and personnel engaged at the site all cost money and there should be some mechanism of accountability. In particular, any "lost" pfos would have to be replaced, and pfos was never free. How much pfos has been purchased by

and/or delivered to the airport? (This type of analysis should be easy for an accountant to perform.) Another key time point for an inventory would be at the time when airport operations were privatized. Assuming there was some professional effort made to protect Hamilton taxpayers in this transaction, there should have been an inventory of assets (including pfos) at the time of transfer. How much pfos did the privatized airport operator “inherit”? And finally, how much pfos is at the airport now? A reasonable first approximation for the total amount of pfos applied to city airport property would be:

(Total pfos delivered to the airport) – (Total existing stocks) = (Total amount “missing”)

“Missing” probably means “released” somewhere on airport property, because if significant amounts of pfos were deliberately exported off site, there should be records for this as well. A quick *caveat* - some of these categories have fuzzy edges that change with time, for example: the airport is currently exporting pfos continuously under the fence at N 43.16274° W 79.94191°.

The airport may also be exporting pfos at other locations, and the City needs to investigate what those sites might be and have them tested. It is possible that the fire fighting pad described above is not the only place where pfos was released on airport property. I have been told that there were other places on airport property where fire fighting was practiced. One site that has been described to me was an old tank inside of which fires were lit and then put out. I would like to know where this and any other fire fighting practice sites were, and what materials were used inside of them.

It is time for the airport to come clean and disclose when, where, and how much pfos it has released to the environment. It needs to do this as soon as possible. More importantly, immediate efforts need to be taken to stop the ongoing contamination of the surrounding environment by the badly contaminated airport property.

If any of this is unclear, please do not hesitate to contact me. I eagerly await any information the City may wish to share with me regarding this environmental disaster.