

From: Joe Minor [mailto:jminor@cogeco.ca]
Sent: November 24, 2011 10:20 AM
To: clerk@hamilton.ca; O'Connor, Chris (ENE); Knapper, Geoffrey (ENE);
MOE.SAC.moe@ontario.ca; Minister.moe@ontario.ca
Subject: TIME SENSITIVE: fill being removed from toxic contaminated site

To: All City Councillors and the Mayor c/o the Clerk, the Airport Operator, the Niagara Peninsula Conservation Authority, Environment Hamilton, Ontario Ministry of the Environment, Environment Canada, Health Canada, Welland River Keepers

This communication contains information relating to the ongoing removal of fill from a toxic contaminated site at the Hamilton International Airport and the spreading of that fill around the perimeter of the airport property.

It will be followed over the next few days by more communications that will contain more information about the problem. I apologize for the multiple communications, but the information contained is time sensitive, for three reasons:

- 1) The spreading of fill from the toxic contaminated site is an ongoing process
- 2) I have been told that this activity would be investigated by a Ministry of the Environment Field Officer, and
- 3) We are entering a period of increased precipitation, which increases the mobilization of contaminants. (Forecast for 60mm+ of rain from Nov.27-29).

This communication relates to whether or not the Hamilton International Airport fire fighting practice pad (HIAffpp) is properly described as a “toxic contaminated site”.

The airport operator and the Ontario Ministry of the Environment have had in their possession data that directly relates to this topic since sometime before September 1, 2011. The quality of the public discourse about this subject could be greatly improved if either party would release this three month old data.

There are two reasons to believe that the HIAffpp is in fact a “toxic contaminated site”: 1) the first three sites sampled downstream of the HIAffpp are toxic, and 2) the history of activities at the site itself.

For data regarding to the toxicity of the downstream sites, please refer to the Ministry of the Environment report “PFOS in the Welland River and Lake Niapenco” (June 3, 2011). The technical threshold for toxicity is the LOEC, which is 5,000ng/L PFOS (perflourooctane sulfonate). Starting from the downstream end, site “Ditch 1b” (at Highway 6) is approximately 1,100m downstream of the HIAffpp. (Approximately because it is hard to measure creek meanders.) Ditch 1b was measured at 5,600 ng/L. Moving upstream to the airport fence, Ditch 1a is 450m downstream of the HIAffpp and was measured at 8,600 ng/L PFOS. Moving further upstream, the “pond on HIA” is just 35m downstream of the HIAffpp and was measured at 49,000 ng/L PFOS.

In order to visualize the data, let's take a walk starting at the downstream end (Ditch 1b) where the toxic contaminated ditch crosses Highway 6. I am about 5 feet 10 inches tall (on a good day). For purposes of illustration, we will take this height to represent the defined toxic threshold (LOEC) of 5,000 ng/L. I am carrying three flagpoles, each with a red flag on top saying "toxic contaminated site". I put the first flag down at Highway 6. It is only a little taller than me: 6 feet 6 inches. Dragging the other two flags with me, I walk 650m upstream to the airport fence (location Ditch 1a). I plant this flag at the fence: it is 10 feet tall. Hypothetically crossing the airport fence (because I do not have permission) I walk 400m up to the pond immediately downstream of the HIAffpp. I plant my last flag saying "toxic contaminated site": it is 57 feet 2 inches tall.

While I think it would be useful for educational purposes to plant this flag showing just how toxic the Hamilton International Airport fire fighting practice pad is, it cannot be done because it would endanger the safety of the flying public.

The level of toxicity at the Hamilton International Airport fire fighting practice pad is just one of many reasons why I am concerned about the ongoing practice of removing fill from this toxic contaminated site and spreading it around the perimeter of the airport property.

Perhaps this concern could be alleviated if the airport and the Ontario Ministry of the Environment would release the data they have had in their possession since sometime before September 1, 2011 that directly relates to this topic.

As for what I know about the history of the activities at the site, please refer to my previous communications. I have no substantiated reason to believe that any of that information is inaccurate. Again, the quality of the public discourse could be greatly improved if the airport would provide the details of what it knows about what has happened at the site. In this case, "the airport" refers to all operators of the airport over the relevant time period, which includes not only the current private sector operator but also the relevant bodies of municipal and federal governments. I have been asking for this information for 8 months now.

My next communication will outline the reasons why I think the fill material placed on the HIAffpp became contaminated with PFOS prior to being removed from the toxic contaminated site and spread at the airport perimeter fence.

Sincerely,

Joe Minor

To: The Mayor and All Members of City Council Care of the Clerk

I am forwarding to you my recent correspondence with the airport concerning an ongoing activity at the Hamilton International Airport:

The airport is removing large amounts of fill from the contaminated fire fighting practice pad and is spreading these materials around the perimeter of the airport property.

I had advised everyone (where everyone is defined as: "All City Councillors and the Mayor c/o the Clerk, the Airport Operator, the Niagara Peninsula Conservation Authority, Environment Hamilton, Ontario Ministry of the Environment, Environment Canada") about my concerns with this activity on May 11th:

"Fill materials (e.g., from runway resurfacing) are being stored on the toxic site. As the materials are mixed and processed on the toxic ground, they could be accumulating a toxic load of materials like PFOS. The toxic pad should not be used as a storage site for construction materials. No construction materials (including fill) should be removed from the toxic site until it is demonstrated that they are not contaminated. It would be particularly unintelligent if PFOS containing fill from the practice pad is being spread around the airport, magnifying the spatial extent of the toxic contamination of the airport property." (May 11th, 2011)

My concerns were never addressed, and now it appears that they were totally ignored. To say that I am unhappy about this is an understatement.

Council needs to act quickly and decisively in order to protect the City's interests.

Please keep in mind:

1) Fill from a highly contaminated site has been taken from within that site (which is currently (at least partially) protected by "short-term mitigation measures") and moved outside the "protected zone" to the edges of the airport property.

(The material is being spread just inside the fence line, directly adjacent to neighboring property. At a minimum, this is not neighborly.)

2) This movement of material from the contaminated site is not being done by the landowner, but rather by the tenant. This spreading of material from the contaminated site has likely decreased the value of the landowner's property. In 2036, when the lease expires, Hamilton will be left with the long term liability.

Expect further communications soon in which I will provide an estimate of the amount of fill removed from the contaminated site, and a time course for the removal of fill from the contaminated site, and provide other details about this mess. If Council receives information on any of these matters, please forward that information to me so that I will not continue to waste my time (as a volunteer) trying to provide information that could be

coming from the airport.

Sincerely,
Joe Minor

To: Frank Scremin, Hamilton International Airport Communications

Thank you once again for phoning and communicating with me about some of my concerns regarding perfluorocarbon (PFC) contamination at the Hamilton International Airport.

Again, your call was pleasant and professional in nature, and you clearly pointed out two factual errors in my eMAILs (which, for clarity, are reproduced unedited in full below). I have also myself detected a third error (the fill on the contaminated site was in fact on the southEAST corner). While an explanation of my understanding of the nature of my three factual errors will follow below, it is my current understanding that these errors relate to details that do not change my concerns (spreading fill from a contaminated site to the edges of the airport property, the potential for water inflow to the contaminated site at the road on the northeast corner). These concerns remain in light of the corrected information, and in fact in one case the corrected information increases my concern.

I apologize for taking up so much of your time, but I think that these eMAILs are in part due to the fact that there has not been an effective public information and public consultation process regarding the PFC contamination at the airport. In some part these eMAILs have been a substitute for the missing consultation process.

As for the occasional minor factual errors in my eMAILs, these stem from an inability to have a clear view of the contaminated site and the incomplete release of information regarding the contamination at the site. (In fact, there has been a 0% release of data regarding the degree of contamination of the fire fighting practice pad, "ffpp"). It is my commitment to you that I will do my best to correct any errors in my communications when they are pointed out to me (with substantiating factual information). As for your part, it is my opinion that much public good will could be restored if either the airport operator or the Ministry of the Environment would release the data they have had regarding contamination levels at the ffpp since some time before September 1, 2011.

The two factual errors that you pointed out to me were:

- 1) INCORRECT POSITION
- 2) INCORRECT TERMINOLOGY

1) INCORRECT POSITION

I incorrectly located a position outside the contaminated site where fill from inside the contaminated site was being deposited. I said:

“Attached is a picture showing the location that I am hoping you can help me identify. As we discussed, it appears to be on the western edge of the fire fighting practice pad. I would estimate the location to be approximately: 43.167055° , -79.940553° . If you can provide a better estimate of this location, please let me know.” (for complete text, see Nov.21st below)

You contacted me by phone the following day and correctly indicated that the location of the heavy fill moving equipment in the picture was not at the western edge of the ffpp (as I had said), but rather was just inside the western fenceline of the airport property.

I would estimate this location to be about: 43.167967° , -79.941060° . Again, if you can provide a better estimate of this location, please let me know. This location is about 100m to the northwest of the previously estimated position. Part of the reason for my error is that my vantage point (pretty much the closest publicly accessible location to the badly contaminated ffpp) was over 400m away.

This error in location resulted in a subsequent request that is no longer relevant:

“As we discussed this location is not a perimeter road, so I would be interested in the reason for adding fill material to this location.” (see below Nov.21st)

Since my original estimated location was incorrect, this is a moot point.

You indicated that the reason that fill material was being spread just inside the perimeter fence is that a new perimeter road was being constructed just inside the fence, and that the purpose of that road was to be able to monitor the fence to make sure coyotes do not get access the airport.

While I am not sure that a new road is required for this purpose, I do agree that a coyote being hit by an aircraft would be bad for everybody (and in particular the coyote). However, the airport might wish to consider if the presence of coyotes would deter geese, and whether on balance which problem is worse. A few years ago I saw a snowy owl adjacent to the east-west runway. Although I guess there is a risk of a raptor being hit by a plane, I suspect the overall risk to the flying public is decreased when raptors are present. (Please excuse the digression.)

The corrected position of where fill from the contaminated site was deposited only increases my concerns. It appears that the fill from the contaminated site is being moved to the very edges of the airport property, maximizing its spread from the contaminated site. (And also maximizing the odds of contaminating adjacent

properties.) I would like to know where all of the fill material from the contaminated site was spread, in case it becomes an issue in the future with respect to trying to resolve the nature of the widespread low level PFC contamination leaving airport property. Taking fill from a contaminated site and spreading it along the fence line next to your neighbor's property is not very neighborly.

2) INCORRECT TERMINOLOGY

I have long been concerned about trying to minimize the amount of water that reaches the ffpp and leaches PFCs out of it. The sources of this water are numerous, and include not only precipitation but also the lighting and extinguishing of fires that continued on the ffpp up to 2010. One of my concerns expressed at least as early as June 30th was that the access road at the northeast corner of the ffpp could be an ingress point for runoff to the ffpp. That was why I was pleased when I saw that there was a plug proposed at this location (Prop. Plug#2). I assumed that based on its location that this plug addressed my concerns. As a result I expressed support for this plug. What I failed to notice is that while "Prop. Plug#2" was exactly where I wanted it to be in two dimensions (at the road entering the ffpp from the NE corner), that in fact this plug was not where I thought it was in the third dimension (it was in the culvert under the road).

You correctly pointed out that I had failed to catch this important fact about "Prop.Plug#2". Again, I repeat that this was entirely my error, in that this fact is clearly specified in the proposed short term mitigation measures (from exp). Since "Prop.Plug#2" is not what I thought it was, my comments from Nov.22nd regarding "Prop.Plug#2" need to be corrected by deleting the term "Prop.Plug#2" and replacing it with "a berm to keep water from entering the ffpp along the road at the NE corner of the ffpp". For brevity, I will hereafter call this the "NE berm plug". My comments with respect to "Prop.Plug#2" being missing or damaged were not correct, since I had incorrectly used the term "Prop.Plug#2" for what I should have designated as the "NE berm plug". But since there has apparently never been a plan for a "NE berm plug", my concerns regarding the NE roadway entrance as an ingress point for water to the ffpp remain.

As for the purpose of "Prop.Plug#2", I very much appreciate your patient attempts to explain it to me. There is something about this spot that I am not comprehending, because despite your attempts I still do not understand. I also appreciate your offer to meet and try to explain this to me in person, because you correctly identified that trying to resolve this over the phone was not working. I look forward to being educated at our meeting.

In the course of preparing this erratum, I noticed that I made a minor error in the description of the location of the fill material stored on the contaminated site. I said (Nov.21st below): "fill materials that were for a period of time stored on the southwest corner of the fire fighting practice pad. I.e., around 43.166313°, -79.939364°". While the coordinates are correct, the correct description for the location should have read southEAST (and not southWEST). (This is the lowest, wettest corner of the ffpp.)

Thank you again for your time. If you ever know of any other inaccurate information in any of my communications, please let me know. Any data you would be willing to share regarding PFC contamination (or any other contamination) at the Hamilton International Airport would be appreciated. In particular, I would be interested in seeing the data that the airport and the MOE have had since sometime before September 1, 2011 regarding contamination levels at the ffpp.

Sincerely,

Joe Minor

November 22, 2011

To: Frank Scremin, Hamilton International Airport Communications

Yesterday (Monday November 21st) I observed heavy equipment driving back and forth across the spot that was supposed to have contained a raised berm ("Prop. Plug #2" from the exp. consultant's report WSL-00002226-00, June 14, 2011).

I have always thought that Prop. Plug #2 was a good idea, in that if functional it would reduce the amount of water reaching the fire fighting practice pad (ffpp) and washing PFCs (including PFOS) out of it.

E.g., from my June 30th eMAIL to most of you:

""Prop. Plug #2" is a good idea, and should be installed immediately. In addition, efforts to plug excavations and to keep precipitation from falling on the pad and mobilizing PFOS out of the pad (mostly to surface water, but also potentially to groundwater) need to be implemented as soon as possible"

It appears that "prop. Plug #2" is absent, or has had its functional integrity compromised by either removal or the repeated movement of heavy equipment across it.

I note that recently much heavy equipment has been moved across the proposed location of "Plug #2" where it was to have been installed recently, in order to remove large quantities of "reclaimed asphalt" from the contaminated site and to spread this material around the airport property (outside the area of the current "short term mitigation measures").

I am currently trying to reconstruct the amount of material removed from the contaminated area and the time course of the removal. If you have information about this that you would share it would save me the time of doing the calculations.

However, there is a more pressing need that currently prevents me from doing the

calculations now.

Plug #2 is designed to reduce the amount of contamination after a rain.

Plug #2 appears to be absent or damaged.

It is beginning to rain, and the forecast is for 20mm of rain in the next 24 hours.

Please expedite the restoration of a functional Plug#2 as soon as possible.

Joe Minor
905-527-2982

November 21, 2011

To: Frank Scremin, Hamilton International Airport Communications

Thank you for returning my call and for the pleasant and professional conversation.

Attached is a picture showing the location that I am hoping you can help me identify.

As we discussed, it appears to be on the western edge of the fire fighting practice pad.

I would estimate the location to be approximately:

43.167055°, -79.940553°

If you can provide a better estimate of this location, please let me know.

As we discussed this location is not a perimeter road, so I would be interested in the reason for adding fill material to this location.

I also appreciate your candor with respect to the source and disposition of the fill materials that were for a period of time stored on the southwest corner of the fire fighting practice pad.

I.e., around 43.166313°, -79.939364°

This is my understanding of what you told me in our conversation (again, if there are areas where you can improve the accuracy of the following, please let me know):

That the materials stored in this location had been there for approximately one and a half years.

That the materials are reclaimed asphalt from taxiways and runways.

That most of this material has been removed and used to improve the quality of perimeter roadways around the airport.

That this material was assumed to be uncontaminated based on its source.

Based on this assumption, that the materials removed from the fire fighting practice pad had not been tested prior to being removed and distributed around the airport.

Again, thank you for talking to me and if you can improve my understanding about any of this, or the nature of PFC contamination at the airport in general, please do not hesitate to contact me.

Sincerely,
Joe Minor, PhD