



**Highland Creek Treatment Plant  
Neighbourhood Liaison Committee  
(HCTPNLC)**

**Meeting # 22**

**Monday, April 18, 2011  
Highland Creek Treatment Plant Meeting Room  
51 Beechgrove Drive**

**7:00 p.m. – 9:00 p.m.**

**Attendance**

HCTPNLC:

Frank Moir	Co-Chair of HCTPNLC
Allen Elias	
Barbara McElgunn	
Bruce Smith	
Betty Smith	
Wayne Hilborn	
Gisselly Anania	
Reg Marshall	
Clary Dias	Conservation Chair of CCRA
Ron Wooton	Coronation Community Association
Maureen Reilley	

City of Toronto:

Maogosha Pyjor	City of Toronto Public Consultation Unit
Samir Demian	Manager of Highland Creek Treatment Plant
Thomas Huang	City of Toronto Technical Services
Don Sorel	Toronto Water Manager
Ying Zheng	Compliance Field Representative, Toronto Water
Frank Quarisa	Toronto Wastewater Treatment Director
Clarito Gonzales	Senior Engineer, Highland Creek Treatment Plant

## 1. Welcome and Introductions

**Frank Moir** called the meeting to order at 7:05 pm and welcomed everyone. All attendants introduced themselves.

## 2. Review of Agenda and Summary Notes

- **Review of agenda**

**Frank Moir** went over the agenda and asked if there were any other items to be added. **Samir Demian** suggested discussing the manholes early on in the meeting.

- **Review of notes from September 20, 2010**

**Frank Moir** pointed out that the correct spelling of the name of one of the Committee Members is: Desmond *Vandenberg*, not *Vanderberg*.

**Frank Moir** said that on page 3, under Action Item #1, the word “the” should be insert before “motion” in the second last sentence.

**Frank Moir** said that in the 3<sup>rd</sup> paragraph on page 5, the 2<sup>nd</sup> sentence should read, “is located” instead of “locates.”

**Frank Moir** inquired about the accuracy of the statement in the 2<sup>nd</sup> last paragraph on page 6 stating: “*Frank Quarisa says there is no budget for this at this time, however the ongoing major maintenance work is included in the capital program...*” **Frank Quarisa** clarified that the current budget includes the refurbishment work. He added that there is a placeholder for further work as needed. However his sense is that this will not be within the 3-year horizon and the rate model is based on 3 years. The statement in the notes is accurate and should be left as is.

**Frank Moir** asked Frank Quarisa to clarify his response to the question from Jim Wakefield in the 2<sup>nd</sup> paragraph on page 7. **Frank Quarisa** explained that the original thought was to start on the first fluidized bed unit right away and to commission the second unit by 2020. This would ensure compliance with 2020 regulator requirements.

**Frank Moir** inquired about the use of the terminology “odour units” used on page 9, in the first paragraph under the Odour Control Project. **Thomas Huang** explained that this was correct and that it reflects the modeling that is now being used as part of the project.

**Frank Moir** referred to the discussion about bisphenol A in the 3<sup>rd</sup> last paragraph on page 13, and asked if Samir Demian had received the article he had sent him. **Samir Demian** confirmed that he did receive the article.

## 3. Action Items Follow-up

**Don Sorel** reported on Action Item #1 from Meeting #21. He explained that the odour problems on Beechgrove have been addressed by putting manhole inserts of activated charcoal into 4 maintenance holes. There is currently a monthly maintenance schedule, which seems to be working. However, if the odours return, the maintenance frequency could be

increased. **Don Sorel** asked the local residents to report any return of odours directly to him. He provided his contact information to the committee.

**Frank Moir** asked where the treated manholes were located.

**Don Sorel** said that the 4 manholes were:

- 1) Right by the storage location
- 2) At Beechgrove and Janellan Park
- 3) At Beechgrove and Janellan Terrace
- 4) At Beechgrove across from Satok Terrace

**Barbara McElgunn** said that she had noticed odours from a manhole on Lawrence near the bridge, just before Paulander Ave. **Don Sorel** made a note of this.

**Don Sorel** said that the charcoal has been replaced once a month since they were first installed in January 2011. There have been no odour complaints since this time. However, if there are any new concerns about the odour, the charcoal will be changed as often as needed.

**Maogosha Pyjor** will forward Don Sorel's contact information to the members of the NLC.

#### 4. Update on the biosolids strategy for the HCTP

**Frank Quarisa** distributed copies of the staff report that was posted on April 18<sup>th</sup> 2011. He explained that the report is from April 7<sup>th</sup> and will be going to the April 26<sup>th</sup> PWI meeting. The attachments in the report update a lot of the technical information in the Biosolids Master Plan.

The website contains a report from Toronto Public Health with respect to emissions and health issues. The TPH report did not use the updated information found in the new Toronto Water staff report; most of the comments in the TPH report come from a report June 2010 report.

A legal confidential report includes the legal opinion on the status of the EA-type process.

**Frank Quarisa** said that he does not aware of the contents of the legal opinion, but the input that he gave was the same as what he gave at the last meeting.

**Frank Quarisa** informed the committee that the staff report summarizes the Biosolids Master Plan and tries to educate the new City Councillors who are not familiar with the plan. There will also hopefully be an opportunity to meet one on one with interested council members on the history of the plan. Ultimately, the final decision about the future of the plant will come from the City Council, not the Public Works Committee.

**Frank Quarisa** said that the four attachments in the report contain updates on the technical information. The air emissions report is very technical and the other three attachments are relatively straightforward and easier to understand.

The report recommends fluidized bed incinerators and suggests commissioning the first unit by 2015 while the existing unit continues to operate as backup between 2015 and 2020. By 2020, the second unit would be commissioned. This approach would spread out the cashflow needs and would make sense better economically sense.

The report also lays out recommendations for maximum scrubbing technology. The goal is to target the best available technology and voluntarily set emission standards that are more stringent than the current applicable Ontario regulations.

There is a detailed cost analysis in the report outlined on pages 17 to 19 of the report, comparing the various options. The cost analysis presents fluidized beds as the least costly option.

**Allen Elias** said that he felt the report presented good news. He inquired as to which parts of report the City Councillors might have difficulties with. **Frank Quarisa** said that the report is longer than usual and the technical attachments have been included to provide background and credibility. The recommendations are clear and the background information is provided in great detail; what the Councillors choose to do with the information will be up to them. NLC members are invited to make deputations at the Public Works meeting in April 26<sup>th</sup>.

**Allen Elias** said that he would be attending the Public Works meeting. He asked if there was anything specific that the members should do or say at this meeting.

**Frank Quarisa** replied that based on his observations at the last meeting, the NLC members did a good job presenting.

**Frank Quarisa** explained that a truck route review is also contained in the report. This includes the assessment of local roads with a focus on the big-picture issues with respect to schools, road conditions, restrictions on trucks for daytime haulage and conditions of the roads.

There is also a report on the new incinerator air pollution equipment upgrade options. This part contains the technical information with respect to emissions control in terms of impact on the community. This is described in very technical language; however it is a very important component of the report.

The third attachment in the report focuses on the recasting of greenhouse gas emission numbers. It has been determined that the incineration option has the potential of being the lowest greenhouse gas emitter. It was determined to have the lowest tonnage per year:

- The fluidized bed option has 4000 tons of CO<sub>2</sub> per year;
- Digestion with hauling to a landfill has 6000 tons per year;
- Digestion with land application has just less than 5500 tons per year.

**Frank Quarisa** said that the Biosolids Truck Loading and Odour Control Facility Report is the one that changes the numbers and the revisions will likely be criticized. The reality is that the Biosolids Master Plan started in 2002 with a focus on Ashbridges Bay, without much consideration for Highland Creek. With the change of focus now to Highland Creek, there needs to be a reassessment of the numbers.

**Frank Quarisa** invited the members of the NLC to come to the meeting on April 26<sup>th</sup> 2011.

**Allen Elias** thanked Frank Quarisa for all his work.

**Maureen Reilly** asked where the sludge would be transported to if it is taken off the site.

**Frank Quarisa** said that the report states that there is currently no beneficial use capacity

and nowhere to take the sludge. If beneficial use of the sludge is mandated, it will displace the Ashbridges Bay biosolids. Since there is no capacity, it can therefore only go to a landfill.

**Maureen Reilly** pointed out that the use of the term “beneficial use” is contentious. The term should be changed to “land application” because it is important that the language used accurately reflects what is being discussed.

**Frank Quarisa** agreed with this suggestion; however he explained that council has chosen the terminology of “beneficial use” and “incineration,” and they will likely continue to use these terms.

**Maureen Reilly** asked where the calculations in the report assumed that sludge would be going. **Frank Quarisa** said that for the greenhouse gas emissions, the calculations assumed a 300 km radius of transportation. However, the reality is that beneficial use capacity does not exist. Assumption would therefore be the Green Lane landfill. Green Lane landfill has a limited capacity for biosolids due to the minimum ratio of biosolids to solid waste. Also, Green Lane functions as the contingency site for the ABTP beneficial use program and as such Highland Creek biosolids may displace ABTP biosolids.

**Allen Elias** pointed out that the total greenhouse gas emissions would go up, the further the sludge was transported from Highland Creek. **Frank Quarisa** said that this was correct. The report takes the position that greenhouse gases should be minimized.

**Barbara McElgunn** asked whether the report from Toronto Public Health was received before the latest evaluation was done. **Frank Quarisa** said that his report was due 2 weeks ago at which time he also saw a draft of the report from Toronto Public Health. The health report refers only to information from the Toronto Wastewater reports of 2010 and 2009 and does not contain any updated responses with respect to new the technical memos.

**Maureen Reilly** asked about the distance between the houses and the proposed truck loading stations. **Frank Quarisa** said that this was not a major focus in the report; however it is implied in the context of the haulage report. The report points out the fact the Highland Creek neighbourhood is much more residential than the more industrial neighbourhood of Ashbridges Bay. Furthermore, a biosolids truck is much different from local industry trucks in the area.

**Reg Marshall** asked whether there has been any consideration given to the possible effects of an accident involving a biosolids truck in the neighbourhood. **Frank Quarisa** said there was nothing in the report that referred to costs associated with an accident. However, there is a discussion about the risk associated with road haulage, with respect to spills and accidents. Minor spills can result from the stopping and starting of the vehicles, and biosolid waste can fall off the wheels and undercarriage of a truck.

**Gisselly Anania** pointed out that the comparable costs for the biosolids projects outlined in the report were very similar. **Frank Quarisa** said that the numbers in the report are based on the best information available. The summary was radically different from what was in the original plan.

**Maureen Reilly** pointed out that the impacts relating to the health of all potentially affected communities should be carefully examined. **Frank Moir** agreed that this is an important issue.

**Frank Moir** requested that the NLC members email him any additional questions about the report during the next week. He will forward these questions to Frank Quarisa.

**Frank Quarisa** shared the agenda for the PWI meeting on April 26<sup>th</sup> 2011. He informed the committee that the agenda is very full and the Highland Creek treatment plant will likely be scheduled for the afternoon.

## **5. Plant Updates**

### **1. Thickened Waste Activated Sludge Project**

**Thomas Huang** reported that the contract for this project is now being awarded and tender is closed. The project will involve an upgrade to the waste thickening building and the holding tanks.

### **2. New Headworks and Odor Control Project**

**Thomas Huang** reported that the concept for this project is completed and they are now working on the detailed design. This project involves working on the new truck routing system as well as a new headhouse, just north of the existing headhouse.

**Frank Moir** asked how long the waste activated sludge project would take. **Thomas Huang** said that the original estimate was around 2 years but he expects that will be around 3 years.

### **3. Review of Odour Complaints**

**Samir Demian** reported that there have been no odour complaints in 2011. He added that there has not been a single complaint since the last NLC meeting in September 2010.

### **4. Incinerator Repair**

**Frank Quarisa** said that the incinerator repairs are still proceeding according to the original plan, until they know what is going to happen next.

**Barbara McElguun** inquired about the stub stack leakage and a sealing problem with the bypass dampers, which was discussed at the last meeting. **Thomas Huang** replied that the original intent was to fix the stub stacks under the major repair contract with the incinerator. They are still working on the design for this and it is still on track. However, they do not know the timing at this point because there are still some questions with respect to the C of A.

**Thomas Huang** went on to explain that stub stack #1 was recently patched up to last another 3 or 4 years so that they can work on #2 for the major repairs and then go back to completely repair #1. The work is not as simple as it sounds because the caps are very heavy. However, he added that it is a priority.

## **6. Other Business**

**Frank Moir** asked about the emission tests. **Ying Zheng** replied that the emission tests were done in November and October of 2010 for both units. The results were similar to those of 2009 and were all below the limits for Canada-wide standards.

**Frank Moir** requested that the results for the emission tests be provided with the minutes from today's meeting. **Ying Zheng** and **Maogosha Pyjor** agreed to this.

**Ying Zheng** reported that the results for the main stack when #1 incinerator was in operation:

- D &F (dioxins and furans) = 5.97 (limit is 100) pg TEQ/Rm<sup>3</sup>
- Mercury = 38.8 (limit is 70) µg/Rm<sup>3</sup>

The results for the main stack when #2 incinerator was in operation

- D&F = 7.9 pg TEQ/Rm<sup>3</sup>
- Mercury = 46.6 µg/Rm<sup>3</sup>

The leakage from the #1 stub stack unit was:

- D &F = 2.43 pg TEQ/Rm<sup>3</sup>
- Mercury = 52.8 µg/Rm<sup>3</sup>

The leakage from the #2 stub tack unit was:

- D &F = 8.75 pg TEQ/Rm<sup>3</sup>
- Mercury = 47.5 µg/Rm<sup>3</sup>

**Frank Quarisa** added that moving to fluidized beds would further reduce these emissions.

**Maureen Reilly** asked if any information about emissions is included in the staff report. **Frank Quarisa** said that they had decided not to include the details as the emission discussion is technically complex and can be very confusing given the terminology.

**Betty Smith** confirmed that the terminology used when discussing emissions is usually difficult to understand. It is important to make things as simple as possible when presenting the information to the City Councillors.

There was a brief discussion about mercury emissions. **Frank Moir** stated that most of the mercury in the waste water system comes from dental offices using mercury amalgams. **Frank Quarisa** said that a lot of educational effort has been put towards the use and disposal of mercury in the dental industry.

**Allen Ellias** asked about where mercury goes after leaving the controlled environment of the dental office. **Frank Quarisa** said that, if not properly captured at the dental office, the left over material can go directly to the sewers. **Maureen Reilly** added that most pieces of mercury are collected in the spit sink. The bits are then picked up every few days by a Haz-mat car. **Frank Moir** pointed out that a lot of the smaller pieces get into the sewage and come into the plant. Some of it then ends up in the effluent and some in the landfill. Capturing the mercury on-site through incineration and scrubbing would lower the emission levels of mercury.

**Frank Moir** asked if anything else was tested in the emissions test. **Ying Zheng** replied that BPA was also tested because a higher level of BPA in raw sludge had been stated in a previous literature review by a consultant and the Plant would like to identify its impact on the emissions. . Samples were taken from the emissions as well as from the digester sludge; the BPA in the emissions was not detectable and the BPA for the blended digester sludge was 0.07 mg/L. This amount is far below the data found in the report.

**Barbara McElgunn** pointed out that the composition of the sludge varies so much from day to day because anything containing toxic material dumped into the system can affect the levels. **Ying Zheng** agreed with this. **Barbara McElgunn** asked if there have been any studies done on the dioxins in sludge. **Ying Zheng** said that this has not been looked at.

**Maureen Reilly** asked whether the sludge meets the biosolids application requirements. She pointed out that if the Public Works Committee decides that the sludge will be going to “beneficial use” it had better meet the necessary requirements. **Frank Quarisa** said that this is something that will need to be looked at more carefully if they decide to haul the sludge off-site.

**Frank Moir** pointed out that there are many other chemicals that aren’t checked for in the sludge. This will have to be done if the sludge is going to ever be used for land application or even hauled off to a landfill.

**Maureen Reilly** gave the example PFOA used in the making of Teflon, which has been found to have long-term toxic effects. It was applied to fields in Alabama and they are now testing people for elevated levels. This same chemical has been found near Hamilton. **Barbara McElgunn** added that this chemical has been found in blood and breast milk. It is also considered to be estrogenic and can alter hormone levels at levels as low as parts per trillion.

There was a brief discussion about the new compost guidelines that were just released. **Maureen Reilly** explained that up until now, sewage sludge could not be composted with leaf and yard waste. With the new guidelines, it will be possible to add sewage sludge to regular compost, creating higher levels of toxins in the compost.

**Maogosha Pyjor** thanked everyone for attending the meeting.

The next meeting was set for Monday September 19<sup>th</sup>, 2011 at 7:00 pm.