TORONTO

Highland Creek Treatment Plant
Neighbourhood Liaison Committee
(HCTP NLC)
Meeting # 23
Monday, November 7, 2011
Highland Creek Treatment Plant Meeting Room
51 Beechgrove Drive
7:00 p.m.

Attendance

HCTPNLC:

Frank Moir	Co-Chair of HCTPNLC
Allen Elias	
Barbara McElgunn	
Bruce Smith	
Betty Smith	
Victoria Per-Inge Schei	
Michael Spencley	
Sherri Lang	
Jim Wakefield	
William Sheehan	
Keith Whalen	
Paul Lewkowicz	Centennial Community Rec. Association (CCRA)
Desmond Vandenberg	
Reg Marshall	
Zvon Marimic	
Karen Buck	
Ron Wooton	Coronation Community Association
Kimberley Milliard	
Heather Marshall	

City of Toronto:

Nancy Martins	City of Toronto Public Consultation Unit
Martin Shigeishi	Acting Manager of Highland Creek Treatment Plant
Ying Zheng	Compliance Field Representative, Toronto Water
Frank Quarisa	Director, Wastewater Treatment

1. Welcome and Introductions

Frank Moir called the meeting to order at 7:00 pm and all attendees introduced themselves.

2. Review of Agenda and Summary Notes

- **Agenda**

The agenda was adopted without amendments.

- **Summary Notes from April 18, 2011**

Frank Moir pointed out that two names were misspelled on page 1 of the summary notes: Barbara *McElgnun* should be Barbara *McElgunn* and Maureen *Reilley* should be Maureen *Reilly*.

Frank Moir inquired about the item at the top of page 7, stating that "the results for the emission tests would be provided with the minutes from the April 18, 2011 meeting." **Yin Zheng** clarified that these results were incorporated into the minutes from April 18, just below the statement.

Frank Moir referred to the 2nd paragraph on last page and asked if the necessary requirements for beneficial use of biosolids had been looked at more closely. **Frank Quarisa** replied that a key item is to confirm the plant digester capacity in order to ensure biosolids suitable for land application, under current regulations, can be produced.

William Sheehan asked why the extra capacity of the digesters was not incorporated into the plan when the rest of the plant was being built. **Frank Quarisa** said that he could not speak to the construction of the digesters, as they currently exist; however the analysis performed was in the context of total biosolids produced compared to the current capacity of the digesters. The conclusion was that additional digester capacity is likely required. **Martin Shigeishi** added that this is because the digesters need to be periodically taken out of service for cleaning and inspection, thereby decreasing the firm available capacity.

William Sheehan said that before the new structures at the top of the road went in, the literature stated that the reason for it was not to bring biosolids to the Highland Creek Treatment Plant, but to give council the option to bring it if it wants to. In his opinion, this does not justify the millions of dollars spent on the project, especially if it was not built to handle the job appropriately. Now that a big expansion is needed it seems like the City of Toronto was incompetent in its original design. **Frank Quarisa** explained that the intention behind building the digesters was not to haul in biosolids from other facilities; the intention was to use the digesters to reduce the total volume of biosolids produced at the plant to a level that the incinerators could handle. Back in the late 1990s when the design

of the digesters was carried out, there was likely little thought that the facility would process biosolids for anything other than incineration.

William Sheehan said that the way he understood it, the goal of the plant was to produce biosolids for the beneficial use program. He added that in the fall of 1999, when the ICMC (Implementation and Compliance Monitoring Committee) was just starting up, the new digesters were being pushed onto the Highland Creek Treatment Plant, to give City Council the option to switch to a beneficial use program in the future if they wanted to. Now that the plant is planning on moving towards a 100% beneficial use program (despite what the community wants) there needs to be a large, expensive expansion before it happens. **William Sheehan** concluded that this is either a money grab or the City was mislead due to an incompetent design built 6 or 7 years ago.

Frank Moir said that there is nothing that can be done about what has already been built. The City has identified a shortfall in the digestion capacity at the plant and the upgrades now need to be done in order to move forward.

Barbara McElgunn asked if the updates on the biosolids strategy were available. **Frank Quarisa** said that the updates are listed as attachments in the recent staff report. They are available as appendices on the website (http://www.toronto.ca/wes/techservices/involved/wws/biosolids/index.htm).

Frank Moir inquired as to whether the situation with the manhole odours had been resolved and whether or not the odour control devices had been installed. **Martin Shigeishi** said that Don Sorel, who had discussed the manhole odour problem at the last meeting, had given out his contact information so that people could contact him directly if there were any concerns about the odours. As of today's meeting, he had not received any complaints about odours from any of the 4 manholes in the neighbourhood that were previously a concern.

William Sheehan asked if the devices in the manholes were any electronic detectors. **Martin Shigeishi** explained that they were carbon filters used to help decrease the odours.

William Sheehan asked if the City used electronic detectors for odour detection in the sewers. He added that at a past ICMC meeting, it was stated that the City was not allowed to use anything electronic in the sewers for fear of explosions. **Martin Shigeishi** explained that electronic devices are only used for sampling and monitoring of sewage in the sewers, not for odour detection.

3. Plant Updates

- **Thickened Waste Activated Sludge Project**

Martin Shigeishi reported that construction for this project is now underway and is expected to take approximately 2.5 years. It will involve the refurbishment of the existing filtration buildings, the centrifuges and the storage tanks.

Jim Wakefield asked about whether there would be an increase in truck traffic associated with this work. **Martin Shigeishi** replied that he had not been made aware of anything significant in terms of truck traffic. A small part of the project involves removing some brick, which will need to be removed from the site, but overall there should not be a significant increase in trucks going in and out of the plant.

- **Headworks and Odour Control Project**

Martin Shigeishi reported that this project is still in the design phase. The design is approximately 50% complete and includes the new headhouse facility, the building north of the existing headhouse. This project is expected to be tendered in mid 2013 and construction should take approximately 3 to 3.5 years.

Frank Moir asked about the cost for this project. **Martin Shigeishi** said that he did not know but he would provide the cost estimate with the minutes from the meeting. *(Added to minutes following meeting: The revised value for the engineering design of the Headhouse/Odour Control project is $4,571,278.33 net taxes. Approximately 70% of this is for the headhouse, the rest is for odour control. Note that this does not include the cost of services that the engineering consultant would provide during the construction.)*

Frank Moir asked whether the odour control standards for the Highland Creek Treatment Plant are the same as those for the Ashbridges Bay. **Frank Quarisa** explained that an odour control study was conducted for each plant; therefore the individual measures and standards are different for each site. The MOE's initial position was that there should be 1 odour unit at the property line of the plant; however, to reach this level is virtually impossible. The MOE has agreed to a project specific basis so that all three of the City's Wastewater Plants have unique targets. Once the targets are reached, if there is still a concern about odour from the community, the City will continue to try to implement further odour control measures.

Frank Moir added that it would be interesting to note the actual targets for each plant to see how different they are, if at all. **Frank Quarisa** asked Ying Zheng if she could get a copy of the drawing of the Highland Creek Treatment Plant, which shows the odour reduction impacts for the various individual HCTP projects.

Jim Wakefield inquired about the rationale for having different odour limits at each plant. **Frank Quarisa** said that the reasons are basically economic; it costs an exorbitant amount of money to achieve significantly low odour units at the property line.

William Sheehan explained that the ICMC is a committee that had started in 1999 for the biosolids program and the mediation agreement for the Ashbridges Bay Treatment Plant. He said that the committee meets 3 or 4 times per year and

everyone at the HCTP NLC meeting would be welcome to join. One of the issues raised at an ICMC meeting was the odour unit study. **William Sheehan** explained that the odour units are subjective, so the numbers cannot be considered very reliable.

Keith Whalen asked if the odours at the plant change at all with incineration. **Frank Quarisa** replied that there is no difference in the odours whether there is incineration or not since the odours mostly come from the head works, which is the liquid part of the process.

Paul Lewkowicz asked if the plant was going to require more odour control facilities as the plant moves towards using biosolids for land application. **Frank Quarisa** said that the truck loading facility would require an odour control facility. He explained that when there is a discharge of biosolids into a truck bed, odour would be released. Ashbridges Bay has their truck loading facility contained within the building and the air is treated. **Paul Lewkowicz** inquired about the costs associated with these facilities. **Frank Quarisa** replied that the costs associated would be capital costs as opposed to ongoing costs.

Barbara McElgunn pointed out that Ashbridges Bay spent around 200 to 300 million dollars for their odour control upgrade. **Frank Quarisa** explained that there is currently no design for the new truck loading facility at Highland Creek; therefore he is unable to comment on the estimated cost.

Frank Moir asked if the odour control infrastructure for the truck loading facility will be an additional capital cost or if it has already been factored into the budget. **Frank Quarisa** replied that the truck loading facility is a separate project from the plant's odour control project. The truck loading facility will have an odour control component and will be constructed within the existing budget allotted to the truck loading facility.

Paul Lewkowicz pointed out that there were no odour complaints in 2011 and only one in 2010. He asked how this compared to the City's other treatment plants. **Frank Quarisa** said that the complaints are generally low for all the plants in the City.

Jim Wakefield asked if there would be an assurance that the new truck loading facility will not increase odours and would be constructed in a way that will control odours. **Frank Quarisa** replied that the Ministry of the Environment, through the approvals process, would set the limits

Keith Whalen asked if there would be public involvement or consultation pertaining to this negotiation. **Frank Quarisa** said that once the project is underway there would be a presentation for the HCTP NLC.

William Sheehan pointed out that the plant's move towards beneficial use of biosolids is a radical shift; he wondered if any other alternatives, such as gasification, were considered in the EA. **Frank Quarisa** replied that the biosolids

master plan looked at all alternatives and all reasonably possible technologies were screened. The biosolids master plan was completed in December 2009 and this information is included in the document. With specific reference to gasification, compared to other thermal technologies such as fluidized beds, it was determined to be unproven as a long term reliable option.

Frank Moir asked if the City plans to re-issue a report that relates to the public meeting that was held on October 3rd. **Frank Quarisa** said that the modification report and edit of the biosolids master plan would go out for a 30-day public review. He added that the document would respond to questions from members of the public that were asked at the meeting as well as questions that were submitted in writing.

William Sheehan expressed some concern about not receiving notification of the 30-day public review period. **Nancy Martins** explained that there have been two commenting periods and ads were put in the local papers each time in addition to being sent to those on the project mailing list. *(* Added to minutes following meeting: Previous commenting periods carried out September 2004 and October 2009).*

Frank Moir asked when the report would be completed. **Frank Quarisa** said that the document might be ready by the end of this year, but it will most likely be the beginning of 2012.

Barbara McElgunn asked why council is looking into the budget when the EA is not yet completed and the public has not been given a chance to comment. **Frank Quarisa** said that there are two processes being followed (1) the EA requirements within the context of the biosolids master plan and (2) the normal city budgeting cycle: unfortunately the two do not necessarily line up. **William Sheehan** suggested that City Council wait until next year once the EA process is complete.

Paul Lewkowicz asked when construction of the truck loading facility is expected to begin. **Frank Quarisa** said that until the capital budget is completed and approved, they will not know for sure.

Paul Lewkowicz said that from what he understood at the public meeting, the cost of the new trucking facility was insufficient to mandate a specific environmental assessment. **Frank Quarisa** explained that cost is not the factor that determines whether an environmental assessment is needed. The decision with respect to this solution was made within the context of the master plan, following an EA type process. Therefore, in terms of moving forward, the City's position is that the master plan is sufficient to move forward and building the truck loading facility itself will not require a new EA process. **Paul Lewkowicz** pointed out that the EA that has been completed was done on current practices and fluidized beds at HCTP; so with council's new direction towards beneficial use, there should perhaps be another comprehensive environmental assessment. **Frank Quarisa** replied that amendment to the master plan will try to

capture this. From a regulatory perspective, incineration and land use application are both highly regulated by the Ministry and as such both processes are acceptable under the circumstances.

- **Capping of the two Stub Stacks**

Martin Shigeishi reported that the design is nearly complete for the two stub stacks. They are now seeking building permit approval and expect to go to tender by December 2011. The first cap should be completed by the end of August 2012, and the second cap by December 2012.

Martin Shigeishi explained that the stub stacks are two shorter stacks used in emergency situations. There is currently some leakage out of these stacks due to their age and poor condition. The solution to this problem is put a cap over the stacks to seal the leaks.

Karen Buck inquired as to what was coming out of the stub stacks. **Martin Shigeishi** replied that it is emissions from the incinerator.

Jim Wakefield asked if anything would be able to come out of the stacks once they are capped. **Martin Shigeishi** explained that the stacks would still be functional when they are needed after they are capped, but they would no longer leak when not in use. **Frank Moir** added that the stub stacks should be used only in emergency situations because the emissions from these stacks bypass the scrubbers.

Desmond Vandenberg inquired as to when the leakage of the stub stacks was first discovered. **Ying Zheng** said that the stub stack leakage was first tested in 2008 and since then every year source testing has been performed on the emission from main stack and the leakage from stub stacks. The results have all been within acceptable limits. However, as per the C of A, it is required that under normal conditions emissions go through the main stack and stub stacks are fully closed without leaking. **Frank Quarisa** added that it has taken 4 years to repair this situation because the task of capping is very complex.

- **Incinerator Upgrades**

Martin Shigeishi reported that the incinerator upgrades would include minor repairs and the replacement of some components. It will be tendered in early 2012 and completion of incinerator #1 is expected to be in 2015. **Frank Quarisa** explained that the minor repairs to one of the incinerators are complete, and the next step is to do major upgrades to the second unit. They will not go back to do major upgrades on the first unit. The truck loading facility will be built when adequate capital funding is made available.

Paul Lewkowicz asked when the truck loading facility would be built if council approves it. **Frank Quarisa** replied that this is not yet known. A replacement of the existing multiple hearth incinerators needs to move forward quickly as it will

take time to implement the new capital works.

Paul Lewkowicz said that there were two costs associated with the truck loading facility within the capital budget: 188 and 222. He asked if this was a projected range. **Frank Quarisa** said that this refers to the end destination. There are operational costs included in these numbers, but right now they are only focusing on the capital costs. He added that some of the costs with respect to the digesters may be higher than the original estimate.

Frank Moir said that there should be clear information regarding the budget and how the money is being spent. He requested an outline of the budget for next 5 years. **Frank Quarisa** said that after the council's budget process is completed, there should be clear outline of the budget for Highland Creek. This will be a public document and may be available in time to append to the minutes from this meeting.

Paul Lewkowicz asked whether future changes in regulations with respect to air emissions would affect the way the truck loading facility is constructed. **Frank Quarisa** explained that air emission regulations referred to in the various staff reports apply only to the emissions from the current or a future incinerator. He added that plant has been consistently below the regulated emission levels and when regulatory limits change again in 2020, the plant should have an alternative to the multiple hearth incinerators in place.

Paul Lewkowicz asked for clarification on the fact that incineration and land application are both accepted and regulated by the MOE. He then asked if there were any plans for more stringent regulations regarding beneficial use. **Frank Quarisa** said that he was not aware of any further regulatory changes around beneficial use. He added that the Nutrient Management Act is relatively new and it is considered to be stringent.

Jim Wakefield asked if the air emissions from beneficial use are measured and regulated. **Frank Quarisa** said the air emissions from beneficial use are dealt with differently than those from incineration. The staff report contains an attachment that addresses the greenhouse gas emissions from beneficial use, which looks at the emissions from trucks and landfills.

Paul Lewkowicz asked if 100% of the sludge from Highland Creek would go to a landfill if there were no buyers for the product. **Frank Quarisa** confirmed that if there were no market, the only place for it to go would be to a landfill.

Karen Buck asked if the model used for the beneficial use greenhouse gas emissions was the Biosolids Emissions Assessment Model. **Frank Quarisa** said that it was. **Karen Buck** pointed out that this model would certainly indicate that beneficial use would come out ahead. Generally speaking, the truck traffic is a minor contributor to greenhouse gas emissions and the carbon sequestration on landfills mitigates the amount of greenhouse gasses emitted. She added that she had a copy of the Biosolids Emission Assessment Model from 2009, which

concludes that incineration would not be the preferred method for greenhouse gas reduction. **Frank Quarisa** said that the model in question relies on a number of variables to compute greenhouse emissions. The model, for example, considers haulage distances to determine the greenhouse gas contribution. The model does not prejudge emissions levels.

Sherri Lang asked about whom would be figuring out where the biosolids will go for beneficial use instead of being hauled off to a landfill. **Frank Quarisa** said that they are constantly searching for different beneficial use service providers. The base solution, which is agricultural land application, is limited in terms of total volume and the time of year that it can be applied to the land. Each alternative has advantages and disadvantages, and the goal is to maximize the beneficial use and minimize the disposal in a landfill.

William Sheehan asked why the City does not allow the use of biosolids within the city limits. **Frank Quarisa** said that he was not sure of the reason but he believes it may have something to do with a study done by Toronto Public Health. **Karen Buck** added that the study by Toronto Public Health concluded that biosolids could in fact be used within city limits for specific applications. **William Sheehan** said that in 1995, the City of Toronto was experimenting with biosolid as a fertilizer on a golf course and found that it was leaching toxins. After this, the City decided not to use biosolids within the city limits.

Barbara McElgunn added that a lot of the toxic chemicals found in sludge are persistent and bioaccumulative. The toxins in the sludge should not be applied to land, especially if they can be captured in a fluidized bed technology and dealt with appropriately. Some of these toxins, such as lead, mercury and cadmium have significant health risks associated with them, and after they are applied to agricultural land they get into the food grown on this land. The application of the sewage sludge on agricultural land does not make any sense from an environmental or health perspective. **William Sheehan** added that a lot of major food companies will not accept food that has been grown on land that as been treated with biosolids.

- **Commissioning of Dechlorination System**

Martin Shigeishi reported that the construction is essentially complete and they are now in the commissioning phase, which is a 30-day test run period.

- **Review of Odour Complaints**

Martin Shigeishi reported that there have been two complaints this year and only one was odour related. The complaint was not made to the City; the Ministry notified the plant of the complaint. The other complaint was a noise complaint, due to the volume of the P.A. system.

Allen Elias pointed out that about 10 years ago, there were many more odour complaints. But now that the work has been done on the extra scrubbers, the

odours have decreased significantly.

4. Other Business

Frank Moir asked about the high amounts algae along the shoreline in the late summer and wondered if it had any relation to the emissions from the plant. **Frank Quarisa** explained that the shoreline has an event every few years that stretches from Burlington to well past the Highland Creek Treatment plant. It is mostly influenced by the weather and lake biology and some years are worse than others.

Frank Moir asked whether there have been any power outages requiring emergency stub stack use. **Ying Zheng** said that she did not have that information available, but would add it to the meeting minutes.
*(*Added to minutes following the meeting: There were 15 power outages.)*

Keith Whalen inquired about the terms of reference for the HCTP NLC. **Frank Quarisa** explained that the Neighbourhood Liaison Committee is primarily intended to be a forum for the municipality and the plant to communicate with the local community about what is going on at the plant. The City gets feedback from the members about how the plant is impacting the neighbourhood and the objective is to minimize nuisance impacts on the community. **Frank Moir** added that the HCTP NLC meetings are generally held twice a year.

5. Next Meeting, Agenda items

The next meeting will be held in March 2012.