



**Ashbridges Bay Treatment Plant (ABTP)  
Neighbourhood Liaison Committee  
Meeting #84**

Mennonite New Life Centre, 1774 Queen St. East  
Tuesday, January 8, 2008  
7:00 p.m. – 9:00 p.m.

**Attendance:**

Karen Buck	Citizens for a Safe Environment, Beaches Resident
Connie Demb	Beach Resident, ICMC Member
Bob Kortright	Toronto Field Naturalists, Beach Resident
Jim Neff	Citizens for a Safe Environment
Michael Rosenberg	Economics of Technology Working Group, ICMC
Karey Shinn	NLC Community Co-Chair
Aliss Terpstra	International Institute of Concern for Public Health, Citizens for a Safe Environment
Steven Whyte	ICMC, Resident of South Riverdale

Ray Monteiro	Toronto Hydro Energy Services
Tony Biglieri	Toronto Hydro Energy Services
Jack Simpson	Toronto Hydro Energy Services
Jean-Yves Urbain	EarthTech

**City of Toronto:**

Shabbir Dato	ABTP Engineer, Toronto Water
Nancy Martins	Public Consultation Unit
Christopher Mroczek	Toronto Water
Katie Rabinowicz	Public Consultation Unit
Emily Zegers	Toronto Water

**Regrets**

David Done

**Minutes**

Joshua Zucker

Karey Shinn called the meeting to order at 7:05.

**1. Welcome and Introductions**

The following items were added to the agenda:

- Reimbursement for committee members' transit costs for 2007
- Coatsworth Cut Consultation Meeting
- Public Works & Infrastructure (PW & I) meeting, January 9<sup>th</sup>, 2008
- **Aliss Terpstra's** motion regarding hydrofluosilicic acid (HFSA)
- Next meeting of the Lake Ontario Park Group

The agenda was approved as revised.

## **2. Toronto Hydro Energy Services Inc. Presentation on potential for co-generation at the ABTP (Attached)**

**Christopher Mroczek** said that Toronto Hydro initiated the plan for a co-generation facility and approached Toronto Water. They have investigated the commercial viability of using excess fuel from the ABTP and burning it more efficiently and funding has been established.

**Jack Simpson** said that Toronto Hydro Energy Services is the competitive arm of Toronto Hydro. It is owned 100% by City of Toronto and any project benefits will go back to the City. They have other generation projects underway and are an experienced developer. The purpose of the project is to utilize available biogas at the Ashbridges Bay site in order to provide a portion of the emergency power the Plant needs. The facility is designed to eventually produce 8 – 10 megawatt hours (MW). For the City to pursue this on their own would be costly. They have received Council and committee authorization to go ahead with the project and will be returning for final approval. It has been a 2 ½ - 3-year process to get to this point.

**Ray Monteiro** said biogas or digester gas is produced by the decomposition of organic matter. The ABTP's wastewater treatment process includes sending sludge to the digesters. One of the things produced in this process is biogas, which is typically composed of 60%+ of methane and the balance is largely carbon dioxide. He said cogeneration means taking a single fuel source (biogas) and producing both electrical power and thermal energy to be used by the ABTP, maximizing the amount of valuable energy in the fuel. He said that right now that 60-70% of the available digester gas is used by boilers in the plant to heat water and keep sludge warm in the digester tanks. What they can't use is flared, which is essentially burning natural gas. This plan would direct this gas to engines, convert it to electricity, and produce electricity and heat for the ABTP.

**Ray Monteiro** said they will be utilizing a small portion of City property on Leslie St. which is contiguous with the ABTP. This way they don't have to go through the ABTP site, reducing congestion, and allowing for independent site control and access. **Jack Simpson** added that this is City land that Transportation now utilizes for storage and they have gotten positive feedback from them about using the site. Transportation are currently looking at other options for this storage.

**Jim Neff** asked if the type of energy breakdown is interchangeable and **Ray Monteiro** replied that while it depends on the equipment being used it is more or less 43% heat and 37% electricity. **Christopher Mroczek** said the plant needs heat all year round to heat the sludge to maintain digestion. **Emily Zegers** asked if the electricity generated will be used by the plant and **Ray Monteiro** replied that it will provide 60-70% of the total electricity consumption of the plant but that the amount of electricity at the ABTP fluctuates up to about 16-18 MW.

**Connie Demb** asked about the distance they will have to pipe the gas and **Ray Monteiro** said that while at this site the distance was not ideal, having looked at three to four sites, this offered a greater balance. There are capital costs related to this site but logistic problems with the other options that made them unviable. He added that to pump gas this distance is not a huge concern. It will also be heating water and won't lose much heat because it will be underground. **Jack Simpson** said this site was arrived at jointly with Toronto Water. **Karen Buck** asked if they had looked at the parking lot on the plant's north side as a possible site and **Ray Monteiro** said no.

Regarding the layout of the site, **Ray Monteiro** presented preliminary drawings laying out the concept of the site and equipment that will be required. It runs approximately 40 metres along Leslie St. and the building itself is about 25 metres of this. The building is 8 ½ metres tall. **Connie Demb** asked how high the stacks were and **Ray Monteiro** said 15 ½ metres. They are working with environmental consultants around air emissions and are planning for 6 stacks right now, with a provision for 7.

**Connie Demb** asked if they considered adding other types of generation potential such as photo-voltecs (PV) or wind. **Jack Simpson** said this project is made possible by the Toronto Power Authority's request for new capacity and renewable sources, which this project is optimized for. He said they are not contemplating PV or wind, this is a biogas project and that there is also a 10 MW limit for this plant.

**Bob Kortright** asked if they have looked at storing gas for high value times. **Ray Monteiro** said the space you would need for storage would be tremendous and go beyond the required footprint. They have looked at different technology for low or high-pressure gas storage but it has not proved practical. **Jim Neff** asked about compression and **Ray Monteiro** said there are issues with compression ratios, not to mention the issues that come along with filling a large vessel with explosive compressed gas.

**Karen Buck** asked where the stacks were going to be and **Ray Monteiro** said they would run east west on the north side of the plant. **Karen Buck** said the NLC was concerned that whatever is built on the site looks good and whether it would be possible to have the stacks on the interior side. **Jack Simpson** said the City Planning Group is going to be involved with design and will likely come with the same perspective but that moving the stacks would require rotating the

building and therefore is not possible. He added that this is a small generation plant and will look like a warehouse in the area.

**Jim Neff** said a major community issue for years has been trying to reduce stacks and emissions. **Ray Monteiro** said that as far as emissions go they will be scentless, and that digester gas is not a particulate emission. The plant will meet all provincial regulatory requirements for air emissions and the emissions will be low or lower than most natural gas plants. He said there is no local CO<sub>2</sub> increase because the gas they will be using is just being flared right now and there is a CO<sub>2</sub> reduction associated overall. **Jean-Yves Urbain** said the plant would be under provincial regulation 147 regarding air emissions. **Jim Neff** said that provincial regulations currently aren't all that comforting.

**Ray Monteiro** said the plant will have sound attenuation equipment (silencers) to maintain the current ambient levels. Models have been submitted to the Ministry of the Environment (MoE) for review and approval and include sound at different times of day. He said the sound level wouldn't be any different from a car driving by at 50 km/h, 5 – 10 metres away.

**Ray Monteiro** said the greatest benefits of this project are that it maximizes utilization of biogas, a renewable resource; it will produce 8MW of emergency power capacity available to ABTP, 2/3 of what would be needed in an emergency situation; and it replaces over 60% of the electricity drawn by ABTP from the grid, meaning a net emissions reduction of 10,000 – 15,000 tonnes of CO<sub>2</sub> per year, based on the net mix of Toronto Hydro sources.

**Connie Demb** said she is pretty happy with the plans, as they have been presented. She quoted from the NLC Mediation Agreement (MA) signed in 1999 and approved by Council, which reads, "the City agrees that it will optimize energy use of the plant including the utilization of biogas within the parameters of this Mediation Agreement including the guiding principles in Resolution 1" (page 56, "Resolution on Plant Optimization") and "the City agrees that it will consult the NLC/ICMC around any cogeneration proposals". She said this presentation was in line with the MA in this respect and thanked the presenters. **Ray Monteiro** said they do have a copy of the MA and intend to read it but haven't yet had a chance.

**Jim Neff** asked if the (slideshow) presentation would be made available and **Nancy Martins** said she would post it on-line tomorrow (posted at [http://www.toronto.ca/water/wastewater\\_treatment/treatment\\_plants/ashbridges/nlc.htm](http://www.toronto.ca/water/wastewater_treatment/treatment_plants/ashbridges/nlc.htm))

**Jim Neff** said that the proposed area for the plant is a central area for migratory birds given its proximity to the Leslie St. Spit and the Don Valley and so he would like to see the buildings kept low. **Ray Monteiro** said they would have exterior lighting that addresses this and will incorporate these concerns. **Jack Simpson** said that Toronto Hydro is a strong supporter of FLAP (Fatal Light Awareness

Program) such that when they considered building wind turbines and some of the feedback was concerning this issue it affected their decision.

**Karey Shinn** asked if Toronto Hydro was in contact with the landscape consultants working on the ABTP Landscape Plan. She said there is a plan for site redevelopment near where the proposed location of the cogeneration facility and that consistency of design is important, and that something connected stylistically to the gas control building would be good. **Ray Monteiro** said there are two elements to this: the building itself which they want to make pleasing, and the landscaping around the perimeter where they are looking at organic material for fencing and a wall structure. He added that they have not arrived at the point of retaining an architect.

**Karen Buck** said she is very interested in how storm water is being looked after and maintained and that use of trees, vegetation and permeable concrete is important. She asked about NO<sub>x</sub> emissions and **Jean-Yves Urbain** said they will have to put some NO<sub>x</sub> reduction measures in. **Karen Buck** asked if they had thought of burning with pure oxygen instead of air and **Ray Monteiro** said this is something that people talk about but it is not commercially possible. He said NO<sub>x</sub> emissions only happen because you have nitrogen mixing with oxygen and that there will not necessarily be any net increase or decrease.

**Jim Neff** asked if they had factored in thermal inversion and said that whatever they're emitting will be forced down to the ground. **Ray Monteiro** said the prevailing winds come from south or west so emissions will get blown across the plant and **Jack Simpson** said they'll have to model that carefully with an emissions consultant. **Connie Demb** suggested they look at the Zorix odour control study completed in 2002 because they use the meteorological average information modeling. She said that anything they can do to control NO<sub>x</sub> and CO<sub>2</sub> emissions is good.

**Michael Rosenberg** asked why they are using six smaller generators instead of two to three larger ones. **Ray Monteiro** said the manufacturers available to service these generators are limited and that if the grid goes down the biogas would no longer be available, since the compressors would not be running and so their plant would flip onto natural gas. They wanted to pick the biggest engines to keep the cost down and have the smallest footprint. In order to serve the key functions of using biogas and being an emergency power supply, these were the biggest engines they could get.

**Bob Kortright** asked about the compressors shutting off if the grid went down and **Jack Simpson** said they need the ability to run on natural gas if the biogas was not available. It's just a redundancy; they would hope to continue to burn biogas during a grid failure but would likely have to switch to natural gas.

**Connie Demb** asked about the timeline for the project. **Jack Simpson** said they are hoping to begin construction this year and are just awaiting approvals and permits that are still needed. They hope to be in service sometime in 2009.

**Tony Biglieri** said that if everything goes through there will be a public consultation process with the planners concerning zoning, the site plan and other matters.

### 3. Mini-updates

- **Pelletizer**

**Shabbir Datto** said the Pelletizer is still running 24 hours/day, 7 days/week except when dealing with commissioning and maintenance issues. In December it ran for 26 out of 31 days, for a total of approximately 500 hours. The Pelletizer is still in single dryer operation mode but Veolia is planning on doing some full capacity testing this month, depending on how commissioning goes. He said the Secondary Testing start date was originally scheduled for January but has been delayed until sometime in February. In the meantime, some required software upgrades on Toronto Water's side are now complete and once Veolia is ready, Veolia would begin the 66-day test. Veolia now has a project manager in place, and are now fully staffed with training ongoing. He added there is a shutdown planned for this month to undertake some upgrades to the natural gas feed line that serves the pelletizer.

**Karey Shinn** asked if anything had changed in the digestion process and **Shabbir Datto** said no. However, the Plant is in the process of converting digesters 1-8 from secondary digesters into primary digesters. **Connie Demb** asked about sludge quality and what the purpose of secondary digestion was. **Christopher Mroczek** explained that the secondary digesters were used as decanters and plants are trying to get rid of them in most cases. Once the conversion is complete, the length of time sludge is treated will actually increase since the conversion to primary tanks will possibly result in higher retention times (HRT).

**Stephen Whyte** asked if hydraulic retention times will go up once they've finished converting the tanks. **Shabbir Datto** said when they finish digesters 1-4 they will bring them online and take down 5-8. In 3 years when they finish 5-8, the volume of available digesters will go up so retention times will increase as well. **Michael Rosenberg** asked why secondary digesters do not contribute to digestion time and **Christopher Mroczek** said it is because they're not heated and just serve as decanters.

**Jim Neff** asked if the product coming out of the Pelletizer is "useful product" and **Shabbir Datto** said yes, it is intended to be used as fertilizer.

**Karen Buck** asked if there has been any change in the dewatered quality of the biosolids going to the pelletizer or any bacterial change and **Shabbir Datto** said no.

- EA

**Shabbir Dattoo** said representatives from the City contacted the Ministry of Environment in December and were advised that a decision package had earlier been forwarded by MoE staff to the former Environment Minister's office. Following the 2007 elections, this package has now been re-sent to the new Environment Minister's office, and that a decision can be expected soon.

- **Odour Control Project**

**Shabbir Dattoo** said he spoke to the Project Manager and received the following schedule breakdown:

- M & T building: in the detailed design stage, hoping to tender in April 2008, start construction in summer 2008.
- D building: in the detailed design stage, tender in August, start construction in the fall of 2008.
- Aeration tanks Ducting to Stack: completed pre-design, hoping to tender in the fall of 2008, start construction in first quarter 2009.
- Aeration tank retrofit & tank covers pilot (on one tank): in the pre-design stage, hoping to tender in fall 2008, construction Q1 2009. There will be a one year pilot test period for this tank's covers.
- Aeration tanks 2-6 and tanks 7-11: in the pre-design stage. There will be two tenders, the first one is hoped to be scheduled for Q4 2011
- Truck loading facility: completed pre-design, tendering in fall 2011.
- P building: request for proposals to be issued in the first quarter of 2008, pre-design summer 2008, design time of 1 ½ years.

He added that the Project Manager had indicated that she might bring a Project update presentation to the NLC in March.

**Karen Buck** asked if they had scrapped the biofilter idea and **Jean-Yves Urbain** said there will still be two biofilters for the D building. **Connie Demb** said according to **Mark Rupke** there wouldn't be any biofilters on the aeration tanks, which have been identified as a major source of the problem. **Shabbir Dattoo** said that what had been decided was that they would initially direct odourous aeration air up the main stack and see how that worked, leaving the option of putting in a biofilter later, if necessary. **Connie Demb** asked that if they're doing a pilot study on the aeration tanks, would that also include a measure of the odour impact from the stacks. **Jean-Yves Urbain** said that the Pilot would have no impact on how the odor was collected or dispersed. He said the City wants to ensure they select the right covers for the tanks, which is a \$25 million question, so they want to try one tank and see how that works for one year. With respect to odours, whether or not the covers were changed, they would still collect the odourous air from all the tanks starting next year. **Connie Demb** asked whether they are building-in the cost of potentially having to install a biofilter sometime in the future. **Jean-Yves Urbain** said the cost of setting up a filter is about \$90 million for a removal efficiency of about 40%. The improvement in odour impact,

in his opinion, can not justify that capital expenditure. Odour reduction would be from 2.2 odour units to 1.3 odour units.

- **Landscaping**

**Shabbir Datto** said he spoke with **Roman Kaszczij** who said Phase 1 is now complete. This phase involved characterizing contamination and risk management issues (a Risk Management program is scheduled to begin shortly), a comprehensive site review, site traffic review, identification of on-site security issues, review of circuit alignment and connections, confirmation of recreational requirements, background review for interpretive program, preliminary storm water management issues & requirements, irrigation report, selection of artists and a landscape heritage evaluation. A Stage 1 summary report is to be completed by the end of January. The project is on schedule and on budget. Phase 2 – (preliminary design) has now begun. **Nancy Martins** said a meeting is tentatively scheduled for February 26 but information will be sent out when this is confirmed.

- **Biosolids**

**Shabbir Datto** said the peer review panel met on December 4 for their third and last meeting. The panel and a facilitator are now working on a report to be presented to PW & I after which it will be released to the public. **Karey Shinn** asked if this item would be on a PW & I agenda and **Shabbir Datto** said he believed it would be, which **Nancy Martins** confirmed.

#### **4. Review of Action Items & Motions**

**Meeting #83 Action Item #6:** **Shabbir Datto** to inform Veolia that the NLC requests information regarding the bio-ethical issues related to the effects of the use of corn to make ethanol on food prices, as raised by **Connie Demb** in Meeting #82.

**Connie Demb** said the action item should read as follows:

**Shabbir Datto** to inform Veolia that the NLC requests information regarding issues related to the effects of use of corn to make ethanol, including, the bio-ethical issues, environmental impacts such as aquifer depletion and effects on food prices, in addition to concerns raised by **Connie Demb** in Meeting #82.

This remains an outstanding Action Item.

**Connie Demb** said another key issue is that if Veolia is proposing to sell pellets as fertilizer for corn designated for ethanol production, there are serious questions being raised by ethanol producers as to the financial viability of corn for ethanol. If this is the case, then the market for these pellets may disappear, which raises another issue in the contract; if pellets are not to be used for this purpose there is a financial penalty to the City.

**Shabbir Datto** said that he didn't know whether Veolia was using the pellets as fertilizer **specifically** for corn designated for ethanol production, and that he didn't believe that there would be a financial penalty to the **City** if this market were to disappear, and that it was probably the other way around (i.e. penalty to Veolia).

**Karey Shinn** asked **Shabbir Datto** to look into getting a response from Veolia and he said he could forward the request but that he doesn't think they are qualified to answer. **Karen Buck** said the NLC needs the actual agreement between Veolia and the City.

Action Item #1: <b>Shabbir Datto</b> to inquire about getting a copy of the final contract between Veolia and the City of Toronto that went to City Council.
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**Shabbir Datto** said Veolia has not yet begun production i.e. they are still technically in the commissioning stage. He is looking at having a Veolia representative attend an NLC meeting in April/May (following the completion of Secondary Testing)

#### **Motion #1**

**Aliss Terpstra** presented a motion regarding hydrofluosilicic acid (HFSA) in drinking water. (Attached)

The following changes were suggested:

- The phrase "warm water seasons" should be changed to "March – December".
- Clarification of what happened on the Health Committee's first report.
- Another "WHEREAS" paragraph regarding the Health Committee's statement that a referendum would be required for a suspension of fluoridation. Related to this, clarification that the motion calls for a pilot project suspension as opposed to a discontinuation of fluoridation.
- Correction of typos.

**Aliss Terpstra** accepted these changes as friendly amendments.

**Shabbir Datto** asked if the Motion was asking to turn off fluoridation for 6-9 months and do a concurrent study on wastewater and effluent. **Aliss Terpstra** said those assays are already being done. What they want to know is if suspending HFSA would result in a decrease of metals in biosolids. **Shabbir Datto** asked if this was the right forum since the request is for a change in drinking water and not waste water. **Karey Shinn** said it is because it effects biosolids. **Karen Buck** said they have asked in the MA for continuous improvement of the biosolids being land applied and it is important that metals and non-nutrient metals are at their lowest. She said a September 2007 study

about metals in biosolids said the fluoride emissions from the ABTP were equivalent entering and leaving the plant. She said they were misinterpreted and are concerned with metals in the effluent.

The Motion passed.

**Action Item #2: Aliss Terpstra** to send an amended Motion #1 to **Nancy Martins** for distribution to ABTPNLC chair and co-chair .

**Action Item #3:** Meeting #84, Motion #1 to be sent to **Lou di Gironimo** and CC'ed to the Public Works and Infrastructure Committee and the Department of Health.

## 5. Review and Approval of Minutes, #83

This item was deferred.

## 6. Other Business

**Karen Buck** reported on issues related to the January 9 PW & I meeting:

- People who still have lead connections in their pipes should contact Toronto Water for testing.
- A community program has been finalized for storm water management grant approvals (2007 grants).
- Water efficiency measures are being implemented in parks, forests and recreation facilities.
- Island water treatment plant damages and basement flooding work is planned.
- The NLC would not be able to depute on anything at this meeting because 24 hour notice is required for deputations. The next PW & I meeting is February 8, 2008. It would be a good idea if committee members want to depute to plan the future meetings around PW & I meetings.

**Stephen Whyte** asked if there were any critical agenda items expected at the February 8<sup>th</sup> PW & I meeting. **Nancy Martins** said if there is anything on the biosolids peer review she will notify the NLC. **Connie Demb** asked if any of the motions passed at the NLC have appeared on PW & I meeting agendas. **Karey Shinn** said they are often attached but not as separate items. **Karen Buck** said the NLC should show more interest in addressing issues when they come up at PW & I meetings. **Stephen Whyte** suggested striking a subcommittee to keep track of PW & I meetings.

A subcommittee was struck for this purpose.

Members: **Connie Demb, Jim Neff, Karey Shinn, Steven Whyte, Karen Buck.**

**Karey Shinn** said the next meeting of the Lake Ontario Parks Committee is February 21, 6-9 p.m. at 620 Bay St.

**Nancy Martins** said the ABTP landscape project team is ready to present to the NLC again before going to the public at the end of February (they are looking at the 26<sup>th</sup> for their public meeting). The Landscape team would be able to meet with the NLC on February 12.

## **7. Next meeting date, agenda topics and adjourn**

The next meeting of the NLC was set for Tuesday, February 12.

The meeting was adjourned at 9:18 p.m.