Implementation and Compliance Monitoring Committee (ICMC)

Steering Committee Meeting #8

January 30, 2013
6:30 p.m. to 8:30 p.m.
Room 313A, Metro Hall, 55 John Street

Attendance:

Karen Buck	Citizens for a Safe Environment, NLC Co-chair
Dalton Shipway	Watersheds United
Michael Rosenberg	Economics of Technology Working Group
David Done	Safe Sewage Committee
Hans Looije	Local resident
John Hopkins	
Jim Neff	
Daniel Andrade	Observer
Andressa Sirino	Observer
Jeff Dobbin	Observer
Simon Wills	AECOM
Jean Yves Urbain	AECOM

City of Toronto

Nancy Fleming, P.Eng	Senior Engineer, Toronto Water
Kate Kusiak	Public Consultation Unit

1. Welcome and Introductions

Kate Kusiak called the meeting to order and all attendees introduced themselves.

- **Review and approval of Agenda**

Michael Rosenberg would like to add an item to the agenda. He requested that the selection of a person for the RFP review committee be discussed. **Kate Kusiak** said that this would be discussed.

Kate Kusiak explained that item #4 on the agenda is confidential and the committee members will be asked to sign a confidentiality agreement to ensure that the City abides by their purchasing policies.

Dalton Shipway approved the agenda and **Karen Buck** seconded the approval.

2. Presentation by AECOM on UV Conceptual Design Report

Simon Wills from AECOM gave a presentation on the "Present Disinfection Practices and Solution for the Future of Ashbridges Bay Treatment Plant" and asked that questions be held until after the presentation.

- **Questions and Answers**

Q: Dalton Shipway discussed the synergistic effects chlorine can have on the environment and explained that there are various by-products formed when environmental elements react with chlorine. If chlorine is going to continue to be used as a disinfectant and released into the lake, it will have deleterious effects on aquatic wildlife.

A: Simon Wills explained that chlorine will not be used at all on the secondary treatment side (the UV side), which is about 95% or 96% of the total flow. **Nancy Fleming** said that the primary bypass will be treated with sodium hypochlorite. The chlorine will be removed prior to being discharged into the lake, using sodium bisulphite. Right now, the water being discharged into the lake contains some chlorine, however, the federal government's new wastewater regulation mandate requires dechlorination before discharging all wastewater.

Q: Dalton Shipway asked if sodium bisulfite has any effects on aquatic species.
A: Simon Wills explained that sodium hypochlorite and sodium bisultfite quench each other; meaning there is nothing left after they react together. He added that there is not very much flow on the primary side, but when it does occur, it will be dechlorinated and there will be less than 0.02 mg/L of chlorine (which is the legal requirement), before it is discharged into the lake. This system will be much better than what is currently being done.

Jean Yves Urbain added that under normal conditions (i.e. no heavy rain), everything will be treated with UV disinfection. If and when there is a large amount of heavy rain, some of the water will bypass and go to primary treatment, where chlorination and dechlorination treatment will occur.

Q: Dalton Shipway pointed out that as a result of climate change, there will be a higher frequency of intense storm events, which means that the use of chlorine disinfection will also be more frequent.

A: Jean Yves Urbain explained that the City is working on various other projects to accommodate an increase in management capacity, such as building more tankage to take care of the Combined Sewer Overflow (CSO). This will allow the excess rain to be contained in the tanks until there is more room in the system after the rainfall event, instead of going into the bypass.

Q: Michael Rosenberg asked what the concentration of chlorine would be inside the disinfection chamber.
A: Simon Wills replied that this number will vary, however the highest level would be about 16 mg/L.

Q: Michael Rosenberg asked about the amount of chlorine that would be removed by the dechlorination process.
A: Simon Wills explained that the amount of chlorine being discharged into the lake will always be less than .02 mg/L, which is the allowable limit. **Nancy Fleming** clarified that the UV system does not use any chlorine. The primary bypass is the only time that chlorination will be used and the regulation standards require the chlorine residual be less than 0.02 mg/L.

Q: Michael Rosenberg asked if chlorination/dechlorination would be used for the Coxwell trunk and the new treatment facility for that outfall.
A: Nancy Fleming replied that the new wet weather flow disinfection method has not yet been decided.

Q: David Done asked if the chlorine discharge regulation of 0.02mg/L is from the Canadian Environmental Protection Act.
A: Nancy Fleming replied yes.

Q: David Done asked if the UV system would be done before the outfall, because if they are not done in tandem, there will be a 5 year gap between the projects.
A: Nancy Fleming said that the UV system would move forward right away, well before the outfall due the large capital expenditure associated with the outfall..

Q: Karen Buck said that in 2011 there was only approximately 5 million litres that were bypassed. She asked if tertiary treatment has been considered for this relatively small volume of flow being bypassed.
A: Simon Wills replied that overall, there is not a lot of flow being bypassed however, it often occurs over very short periods of an hour or two. The design for a facility that is to treat this type of massive inflows must be able to accommodate these conditions and the facility must have a very high capacity. The primary flow treatment capacity is almost 2500 MLD and any additional secondary or tertiary treatment would be for a massive amount of flow. Going straight to disinfection would make the most sense.

Comment: Dalton Shipway said that it is important to maintain a conversational interchange between the City and the residents. There have been suggestions about using stormwater ponds and wetlands to mitigate stormwater runoff. He suggested that it would be worth considering these options again. For example, putting a lake into the Portland area just south of the Keating Channel, north of the ship channel, and west of the Don roadway. This would provide stormwater clean up because of the plants and remove some of the stormwater that needs to be treated at the plant. Furthermore, it would provide the public with a great natural space to enjoy. He suggested sharing this idea with councillors Gord Perks and Paula Fletcher to see if they would be interested.

Q: David Done said the original EA had stated that there would be a pumping station for the new outfall. He asked how the new outfall will accommodate the new pumping station.
A: Nancy Fleming said that detailed information about the pumping station is not yet available, however it will be investigated by the outfall monitoring consultant in as they undertake their assignment.

Q: Michael Rosenberg asked about the maximum flow rate in the new wet weather flow system.
A: Nancy Fleming said that it was 600 MLD

Q: Karen Buck asked about the impact of taking the clarifiers out of the primary system.
A: Simon Wills replied that the clarifiers are rated for about 100 MLD each, which takes the capacity of that side of the plant form 1600 down to 1400 MLD. That 200 MLD can easily be spread amongst the other 7 clarifiers that will still be there, therefore the capacity would not be reduced.

Q: Jim Neff asked if the presentation will be available on-line.
A: Kate Kusiak said that she will forward the presentation to all the members in an email and try to make it available on-line as well. She also made sure that everyone in attendance received a hard copy of the information provided.

3. Review and Approval of ICMC SC minutes

- **Meeting #7, March 7, 2012**

Dalton Shipway requested the name of the limnologist from LGL referred to in the 3rd paragraph on page 4 of the meeting minutes.

Karen Buck provided Kate Kusiak with a marked up copy of the minutes adding some minor changes and pointes of clarification. **Kate Kusiak** said she would amend the minutes with Karen's changes before submitting them for approval at the next meeting.

Dalton Shipway referred to the first paragraph on page 5, where Daniel Olsen stated that *the depth of the water influences the dilution factor*. **Dalton Shipway** pointed out that there are deep water species that require cold, clean water and they would be affected by this. He requested that the minutes mention the importance of this water to these species. **Kate Kusiak** suggested adding a footnote stating: ***Dalton Shipway*** *noted that the depth of water influences the dilution factor and is also the habitat for deep water species.*

David Done requested that Safe Sewage Committee be added after his name on the attendance list.

Nancy Fleming asked the ICMC to vote one member of the committeeto review the disinfection proposals. She explained that a lot time will be needed to review the proposals. The proposals will need to be evaluated within a certain time frame, after which City staff will come in for a full day of evaluation of the proposals. She added that the RFP will close in about 6 to 8 weeks to give everyone a chance to prepare a proposal. After the proposals are received by Toronto Water, they will then decide how much time will be needed to review and evaluate the proposals (usually about 3 weeks). This will likely be sometime in June or July, 2013.

Jim Neff asked if there would only be one ICMC member selected to sit in on the RFP. **Nancy Fleming** replied yes. **Jim Neff** suggested that the committee select an alternate member, is case the first one is unable to attend. **Nancy Fleming** said that would be fine, however once an ICMC member receives the proposals, they are the member responsible for review and evaluation.

Karen Buck said that Karey Shinn volunteered to sit in on the RFP proposal. The committee voted for Karey Shinn to sit in on the RFP. **Jim Neff** offered to be the alternate. The committee voted for Jim Neff to sit in on the RFP, in the event that Karey Shinn is unable to attend the meeting.

4. **Review Draft Scope of Work for UV Disinfection**
    - Continues: 10:00 – 12:00 p.m. on Feb. 4, 2013, Room 19K5-6, Metro Hall, 55 John Street

Kate Kusiak explained that since the work has not yet been issued to the public and tendered, the ICMC members will be asked to sign a confidentiality agreement before receiving the binders for review.

Kate Kusiak distributed copies of the RFP document to all ICMC members who signed the confidentiality agreement. She also provided comment forms that the members could submit to her after they were finished their review. She added that the members were invited to participate in a second opportunity to review the document the following Monday. While collecting the confidentiality agreements, **Kate Kusiak** said that she could provide a copy of the agreement to those who wanted one.

5. **Adjournment & Next Meeting**

Nancy Fleming said that the committee would be notified about the next ICMC meeting, which would be sometime in June or July 2013.

The meeting was adjourned at 8:30.