

Gardiner East Contaminated Soil Monitoring and Review Committee (GECSMRC) – Meeting #7 Minutes

South Riverdale Community Health Centre, 955 Queen Street East October 22, 2009 6:30pm – 8:30pm

Attendance

Paul Young William Brown Dalton Shipway South Riverdale Health Centre Resident Task Force to bring back the Don

MPP Peter Tabuns Councillor Paula Fletcher Kathy Anderson John Minor Barb Lachapelle Al Jones Agata Zurawska David Nagler MPP, Toronto-Danforth City Council – Ward 30 Toronto-Danforth Ontario Ministry of the Environment City of Toronto – Technical Services City of Toronto - Public Health City of Toronto – Technical Services City of Toronto – Technical Services City of Toronto – Public Consultation

<u>Agenda</u>

The following agenda (seven parts) was provided:

1. Welcome and Introductions 6:30-6:40

2. Brief Overview of Committee History

6:40-6:50 - David Nagler

- 2002 Council Report, handout of clauses
- Outstanding soil reports to be provided to South Riverdale **Community Health Centre** by John Minor
- Minutes April, 2006 (action items to be addressed)

 3a. 2009 Soil Report Overview - Barb Lachapelle, John Minor 3b. Soil Report Discussion review comments/questions submitted 	6:50-7:15 7:15-7:45
4. Signage for the site	7:45-7:55

4. Signage for the site
 referred to Public Health to prepare

5. Terms of Reference Discussion / Overall Process for Soil Testing 7:55-8:05

City Council report, Jul 30, 31, Aug 1, 2002 -

"Council refer the following motion to the Commissioner of Works and Emergency Services for resolution in consultation with Councillor Layton:"

"It is recommended that the South Riverdale Environmental Liaison Committee Monitoring Sub-Committee develop terms of reference bearing in mind suggestions contained in the communication dated June 24, 2002, from Councillor Layton (as embodied in this clause.")

Concerns:

- o not complete/ open-ended duration
- o specified meeting schedule
- o schedule and type of soil testing
- o limitations in visual inspections
- o future soil testing
- o Confirm formal process needed to define a "final ToR"

*Process: Referred to expertise of City Clerks to formally review and advise on next steps.

- 6. Big Picture Questions and Recommendations 8:05 8:25 (sites A and B) and Portlands Waterfront Toronto (Soil Management Facility handout)
- 7. Confirm Next Steps 8:25-8:30 (Future Testing, Terms of Reference (clerks) Signage (TPH), Minutes, Next Meeting)

Minutes

1. Welcome and Introductions

David Nagler welcomed everyone at 6:35 pm. The other meeting attendees introduced themselves.

2. Brief Overview of Committee History

David Nagler went over the evening's proposed agenda. A handout was provided detailing clauses coming from the City Council report of July 30, 21, and August 1, 2002. The purpose of the meeting was: to follow up on the most recent soil and groundwater monitoring report for sites "A" and "B" and to confirm steps going forward, to address questions and concerns put forth by community members, and to confirm completion of action items stemming from the last meeting in 2006.

Dalton Shipway said that the capping of contaminated soil is a problem more generally, and he'd like to discuss changing the overall monitoring policy.

David Nagler said this concern would be addressed in the agenda under Agenda item number 6. In regards to this, he highlighted a handout outlining Waterfront Toronto's proposed plan for a Port Lands Soil Management Facility.

Councillor Paula Fletcher added that the council motions determined the authority and scope of the Gardiner East committee, and council's decision cannot be changed. The discussion this evening should be focused on the specific scope of monitoring sites "A" and "B" as prescribed by Council.

David Nagler reported that the draft minutes from last meeting are posted online. The action items were:

Meeting 6 Action Item 1 : for subsequent Ground Water reports to have a cumulative results table.

This item was subsequently addressed by John Minor.

Meeting 6 Action Item 2 : for David Nagler to provide copies of the reports.

Copies of the most recent report and the 2006 report had previously been provided. The 2009 report is posted on the project website:

http://www.toronto.ca/wes/techservices/involved/transportation/gardiner_east/index.htm

John Minor will provide hard copies of all background reports for the last 5-6 yrs to Paul Young. Those reports will be stored at the South Riverdale Community Health Centre and made available online. John

Minor asked if there was a preference for electronic copies. He noted that some of the older reports would need to be scanned in order to make them available electronically. **Paul Young** volunteered to ask various stakeholders if they had a preference.

New Action Item 1: Paul Young to advise David Nagler whether electronic copies would be required.

David Nagler confirmed that he had forwarded information to Dalton Shipway, and he volunteered to send that same information to **Paul Young** for storage at the Community Health Centre. The document is approximately 50 pages long. **Kathy Anderson** added that if anyone would like something specific from that file, she can help.

<u>Meeting 6 Action Item 4 - John Minor to provide synopsis of new major points of brownfield regulations</u> as they apply to sites A&B at the next Committee meeting

A synopsis had been provided and additional questions can be directed to John Minor who indicated he would be pleased to give more info if needed.

<u>Meeting 6 Action Item 5 - Councillor Fletcher's office (Richard Deiter) to work with Committee</u> <u>members to find archives of: amount of soil removed from site, contamination levels of that soil, and the</u> <u>location it was moved to</u>

This item was covered by John Minor who will provide all reports to Paul Young (as noted in the new action item #1).

<u>Meeting 6, Action Item 6: provide David Nagler with Regulation 153 information for distribution to</u> <u>Committee.</u>

This was covered above by Kathy Anderson.

<u>Meeting 6 Action Item 7: David Nagler to make changes to draft signage reviewed at April 18 meeting</u> and distribute to Committee Members for additional comment, and David Crichton for review.

New Action Item #2: The matter of signage has been assigned to Barb Lachapelle at Toronto Public health. Wording will be reviewed at the next meeting.

<u>Meeting 6, Action Item 8: **Bill Brown** to draft recommendation on behalf of Committee for a) soil testing</u> above the cap to establish a baseline b) soil testing every "x" number of years for comparison to baseline c) funding for such testing.

This matter was discussed in the general discussion.

<u>Meeting 6, Action Item 9: The next meeting agenda to include an opportunity to brainstorm or discuss</u> <u>lessons learned from the GECSMRC process.</u>

New Action Item #3: This brainstorming session was deferred to the next meeting.

Meeting 6, Action Item 10: **David Crichton** to direct Shaheen and Peaker to identify trend of soil contamination in their next report. (see item 1), note: Shaheen and Peaker are now known as Coffey Environmental)

David Nagler told the group that **John Minor** would speak to this matter. (John addressed this later in the meeting).

<u>Meeting 6, Action Item 11: Key lessons learned by Committee to be shared with Community –</u> <u>Discussion of best methods to disseminate information at next meeting.</u>

William Brown said that the original method to disseminate information to the large community was via the South Riverdale Environmental Liaison Committee, which has been relatively inactive lately. He suggested it restart. **Dalton Shipway** added that the Gardiner East Soil and Ground Water Monitoring 3

committee was started to deal with the effects of taking down the Gardiner, and in describing a situation where a worker was digging footings, water had rushed in, and an odour was observed. The job site was closed. Public meetings were held, and had it not been for the public, none of this work would have been done. Mr. Shipway specifically requested that the minutes note the process was Community driven.

See New Action Item #3

3. 2009 Soil Report Overview and Discussion (please note that items 3a and 3b overlapped)

Barb Lachapelle (Toronto Public Health) summarized the sampling.

- Soil sampling was conducted between December 18th and 22nd, 2009. Ten locations were sampled in property A, and 20 locations on B. The samples were taken at 20-22 metre intervals on property A. On property B they were taken in a grid pattern. Two different depths were sampled: 1-15 centimetres for surface soils, and at 15-30 cms to determine the depth and soundness of the cap.
- John Minor showed the specific sampling locations on a map.
- **Barb Lachapelle** noted the samples were composites which meant they would better represent overall site conditions. All samples in the top layer met MOE table 3 standards. 2 samples, 1 from property A and 1 from property B at depths of 15-30 centimetres slightly exceeded table 3 standards, reporting 210 ppm versus the standard of 200. **William Brown** pointed out that somewhere one of the sampling depths was listed as being at 15-20 cms. **John Minor** said it was a typo and would be corrected. He thanked Bill for highlighting this on the map.
- **Barb Lachapelle** went on to say that Public Health had assessed the risk posed by the exceedance and determined that no risk was posed to site users. Most users are biking or walking across the area, there is no gardening, no exposure through dust. The exceedance is at a depth that poses no risk of exposure.
- Six groundwater monitoring wells were tested (the 5 other wells were covered in ice and snow, and so were inaccessible). Four of the wells were in property A and 2 in property B. All of them were within table 3 criteria, but there was a slight exceedance in PAHS. Public Health has looked at the contaminant levels and trends over time. It is unusual for PAHs to appear since they tend to be immobile. The exceedances were not expected. In terms of risks to regular site users though, most PAHs do not "off-gas", so site users will not be exposed to vapours. And there are no drinking water wells on the site, so the levels of PAHs do not pose a risk.
- **Dalton Shipway** said that he attended the International Brownfields Convention, where it was said that groundwater migrates. The water in Toronto is moving. Also, The Crombie Commission has said that these matters need to go beyond human health and consider the bigger picture and issues like biodiversity.
- John Minor said he would speak to groundwater shortly, but in Toronto, groundwater is controlled by the lake for the most part. The area close to the lake is all fill, but farther north, you do get more flows.
- **Barb Lachapelle** added that there was no risk based on values found and the usage of the site and the water. There are no pathways of exposure. **William Brown** commented that Toronto's drinking water comes from Lake Ontario and this groundwater was going to Lake Ontario.
- Barb Lachapelle noted that in general PAHs have low water solubility.
- **Paul Young** noted that some of the samples from the cap contained lead. He assumed that the fill used for the cap was clean and wondered where the lead would have come from.
- **John Minor** replied that they didn't have any reports on the quality of the soil used for the cap. And they don't have a trend line to see if the lead is new or existing.
- **Paul Young** suggested that the nearby Canada Metals site could be responsible for the lead.
- Al Jones mentioned that he had extensive experience with monitoring lead. In the 1980s, lead was a concern in South Riverdale, and there was a clean up done at that time. But lead is immobile, so they were primarily concerned with surface lead, not lead at depth. Minor traces of lead may be found today in shallow soils due to vermicular action. But, in this case, the lead is in the bottom 15 centimetres and since the site is covered by vegetation, there is no risk of exposure to the lead itself. In the '70s and '80s there was an issue with kids playing in lead contaminated surface soils. But lead --in this area--is fortunately not a serious public health issue today. Al Jones added that the standards for lead have changed considerably with time.

In the 1980s, the Ministry of Environment cleaned up soils to a standard of 500 ppm, but today's standard is 200 ppm. Regardless, at depths greater that 15cms, results show the cap is working.

- Al Jones added that trucking the soil out is **not** a low risk option, since the soil is then exposed to air, and an exposure pathway opened up. The exposure to air in this case would allow for wind-blown dust and tracking of contaminants into the nearby residential communities
- **Dalton Shipway** suggested that bioremediation or Thermal technology may be able to remediate the soils on site.
- Al Jones said that some technologies are effective at removing some contaminants. However, they are ineffective for metals or PAHs since they are not biodegradable. The best way to manage the risk posed by this soil is to ensure there is an effective barrier installed and procedures in place to handle and treat the site.

John Minor volunteered to give a brief overview of the waterfront remedial action team, who are looking at all options being discussed.

- A consulting team is being hired by Waterfront TO, and they will develop a contaminated soil and groundwater management strategy.
- Kathy Anderson added that it is not that hard to believe there is lead in the soil, since lead is naturally occurring and some lead in a clean cap is not unexpected. Al Jones said that background natural levels of lead range around 100 ppm. Paul Young clarified that he was more interested in knowing if there was a trend. Barb Lachapelle said without baseline data, they cannot confirm if there is a trend. John Minor added that natural error can happen, but there are no spikes, so there is not a concern in this regard.
- **Paul Young** asked about the issue of institutional memory. Are there protocols in place for maintenance people etc? Are there mechanisms which would trigger something?
- Dalton Shipway suggested that a database of all contaminated sites be available to the public.
- **Barb Lachapelle** said there is a historical land use database, with connected records of municipal addresses and any land uses at these addresses.

John Minor gave a brief history of his involvement and the monitoring reports:

- Four years ago and was asked to look into monitoring of soil and groundwater at the sites and summarize the state of affairs. He found that some of the historical data was missing and eventually reviewed all records. **John Minor**'s role was to identify any data gaps, fill them, and generate a report. One and half yrs later, the report is complete. Aquaterra has reviewed each previous report and summarized them in the first 5-6 pages of this report. The purpose of this work was to establish a baseline, and the conclusion is that the first 30 cms of soil is good and meets the recreational and parks standard for clean soil. The intent was to ensure the cap had been built to depth, so when taking samples they measured to 29.5cms. All but 2 of the samples came back good. And the 2 that exceed are just barely over the limit. The conclusion is that the cap was built to 30cms or better, and soil meets current day standards. Now we have a baseline, and clean condition.
- For the groundwater, there were no surprises. The findings were similar to the previous data except for PAHs. It is not clear where the PAH's came from, but they could be a laboratory error. They intend to sample the groundwater wells again, including the ones they were unable to test last time and they have an expectation that the PAHS will come back down. In response to a question from **Dalton Shipway**, **Kathy Anderson** clarified that the same safety standard applies to both parkland and residential land. The results from the next round of groundwater testing should be confirmed in February or March 2010.
- Some members expressed concern that the plants were taking up contamination through their roots. John Minor and Al Jones assured the members that uptake through vegetation is very limited. Barb Lachapelle added that when soil is acidic, some contaminants can be taken up by plants, but soil in these sites is not acidic
- **MPP Peter Tabuns** said he appreciated report. He knows of some cases in London where they are dealing with PCBs, and in those cases the excavation of soils is problematic. He added if there was to be further sampling looking for a trend, he would be interested in the results.
- John Minor added that this site is only one of 15-20 files which he looks after, and in comparison to those other sites, the contamination on this site is minor. He said he will certainly provide updated information to MPP Tabuns and the group here this evening and place future reports on the public record (website).

- John Minor said, the cap exists and appears to be intact, which is good. Conditions on the site are the best they have been and they are expected to stay that way. Waterfront Toronto now understands what a huge job soil management will be for them, and they will be looking into a variety of options for dealing with soil on the waterfront. It's likely their work will see them take over some of the management of this site too. This report will be put online. http://www.toronto.ca/wes/techservices/involved/transportation/gardiner_east/index.htm
- When the results are in from the next round of sampling, they'll hold another meeting.
- In response to a question from **Paul Young**, **John Minor** replied that they would be sure to get out soon and sample all the wells. And if there is an early snow storm, they have flagged the wells and so shouldn't have difficulty locating them.
- When asked when might be a good time for the next meeting, **John Minor** thought he would have results and a draft report ready for February or March, 2010.

Action Item 2: the next meeting was tentatively scheduled for the 1st week of March, to be held before the March break in 2010.

John Minor then spoke to Regulation 153.

• Reg. 153 came into effect in 2004/5, for sites A and B which are owned by the City. These properties are defined by the City as road allowances, they are considered to be roadways, and have not been rezoned to parkland. The industrial/commercial standard applies to these properties, but in this case, the samples are being compared to the more stringent parkland/residential standard, and the land is clean to the parkland standard with the exception of a few narrow exceedances. **William Brown** said he wasn't concerned about the zoning and definition as long as the properties are clean. **Paula Fletcher** remarked that the land could be rezoned to parkland.

John Minor then spoke to corporate memory.

- Since Regulation 153 came in to effect, landowners have been responsible for their sites, and the City is the owner of these sites. The City is putting systems in place and adopting procedures to deal with this and other sites. Any workers that are not city employees require road permits if they wish to work on these sites, and when they get their permits they also get a brochure which details how to handle the site. There isn't currently a program in place across the entire city, however. Dalton Shipway remarked that the community would likely support a city-wide clean up policy. John Minor clarified that in many cases the City does risk management rather than clean up, since removing and relocating material can be hazardous.
 William Brown remarked that the city does a study, and the residents deal with the risk. Dalton Shipway suggested that the definition of "management" needs work. John Minor agreed, saying a practical solution is needed, one that protects workers too.
- **Paula Fletcher** suggested the report make greater mention of the community involvement in this process. Aqua Terre needs to capture that this has been a community driven process. **John Minor** said mention of the community would be added to the next report.
- **Dalton Shipway** said he'd like there to be a larger discussion about these issues. This site should serve as a test case for other sites. **David Nagler** said time could be set aside at the next meeting to discuss the larger issue.
- Paul Young said that one of challenges faced by the advisory group is interpreting the tables. They are primarily looking for exceedances, but they don't understand all the tables. For example, in table 6, it appears that chromium 6 may be an exceedance. Al Jones clarified that in this particular table, the problem is that the Detection Limit exceeds the standard. This is not likely to be of concern, however, since there is no pathway for exposure at this site since the choromium is three to four metres deep. Also, the standard for groundwater that flows into surface waters is much higher that the standard for groundwater directly. Barb Lachapelle noted that the table they were looking at was from 2001, and in 2009, the samples from those locations were below the standards. Al Jones commented that these numbers could indicate that groundwater has improved. Paul Young said that the health centre is between the community and the experts, and they need to know how to interpret these and other results. They need to explain why the detection limit is above the criteria. Paul Young asked if a note about this could be added to the tables. Kathy Anderson said that these types of notes usually present in tables but these tables are a historical synopsis, so they didn't follow Reg. 153. All new reports would be different and would have a different table that is clearer. Paula Fletcher

asked that there be a supplemental report which highlights these types of matters, that explains how to read the tables, and details the formatting used to denote exceedances. She suggested an executive summary be written which can list all the matters of relevance to the community. **Kathy Anderson** added that all the exceedances could be listed in 1 table. **John Minor** agreed that it was a good idea.

NOTE: Subsequent to the meeting, Al Jones and John Minor determined that the values reported for hexavalent chromium in groundwater were erroneous. A review of Shaheen & Peaker's previous monitoring reports revealed that there was never any analysis for this contaminant. This was also confirmed by a review of the laboratory certification sheets included with the reports.

Action Item 3: For **John Minor** to ensure an executive summary is prepared and attached to this report and the one pertaining to the next round of groundwater samples, highlighting the exceedances, the standards, relevant terms, formatting, and other issues of interest to the community.

4. Signage for the Site

David Nagler explained that the responsibility for preparing a sign has been delegated to Toronto Public Health. They have the best communications department in the city for such issues and will handle the sign for this site, taking into account the various versions drafted previously. **William Brown** commented that a sign would certainly help with the institutional memory. **Paul Young** asked if there should be a sign where the Gardiner used to be, telling people that air quality is affected by the high volumes of traffic. **Paula Fletcher** said that the scope of this committee is to deal with properties A and B, and she would like to see sign up sooner rather than later.

5. Terms of Reference Discussion / Overall Process for Soil Testing.

David Nagler asked William Brown about some concerns he had brought up.

- The first matter was the long term plans. **William Brown** had understood that the terms of reference stated the plans were to monitor for 2-5 years, but he would like to see continued work after that as well. **Paula Fletcher** said on all sites like this one, there is a perpetual care requirement. **John Minor** added that long term post monitoring inspection will continue after the short term is completed. The site will be inspected yearly, and there will be a requirement to deal with issues when they arise.
- Dalton Shipway asked if there could be a centralized database containing information about sites under perpetual care which could be accessed by the public. John Minor replied that there is a file that contains information about all sites with Regulation 153 requirements. John Minor said that the idea that City owned sites be listed on a publicly-available database was not something he could speak to personally, but he would take Dalton Shipway's idea back for consideration. He also added that one of the 3 deliverables for the consultants hired by Waterfront Toronto is to figure out how to document all their work, so there will likely be some recommendations coming from them. Kathy Anderson said that new sites are listed under the registry for brownfields. William Brown commented that people who live in the area have no idea that these sites are contaminated.
- **David Nagler** said that the City clerks had been asked to look in to the terms of reference and they are to report back. **Paula Fletcher** said that the recommendations came from council, so the Clerk needs to clarify them. Once done, the environmental liaison can take over.

6. Big Picture Questions and Recommendations

John Minor indicated that as he understood it, this group is to report out about how the community can play a role in these types of matters. **Paul Young** said that they have the environmental liaison committee, but that committee hasn't met for over a year. Typically, when there is an issue, they would put couple of items on an agenda, advertise the meeting in the paper, and about 20 people would attend. **Dalton Shipway** suggested that the environmental liaison doesn't have enough gravitas to spread the word. **Paula Fletcher** said they need a system by which the important information goes to a number of different bodies: to city hall, to the local community, and to all other stakeholders. **William Brown** said the community members can perhaps alert other community members. **Paul Young** added that part of his role is to support the environmental liaison committee. John Minor suggested an annual walkabout for inspections of the soil vegetation cover.

Action item 4: John Minor to confirm a communications process to report findings of sampling reports.

Action item 5: To add an agenda item to next meeting to discuss lessons learned, and the value of this committee.

John Minor commented that Waterfront Toronto is learning that environmental issues are a large issue which they have to deal with. Waterfront TO should meet with the environmental liaison and PLAC, they should engage the community where the community is already getting together. **Paul Young** said that these groups don't get a very large turn out, and they are no substitute for a public meeting. **Paula Fletcher** said there will be public meetings as well.

Paul Young remarked that there wouldn't have been any remediation of this site if the public hadn't said the soil should be tested. There needs to be meetings in the local community, since people are not always willing to travel across the city. People are likely concerned about water quality and other issues on the waterfront. **John Minor** commented that the turnout for the Toronto Waterfront meeting was about 20 members of the public, but it was the 1st of many meetings to come. Toronto Waterfront has learned a lot, and they will continue to learn. There will be room for public consultation and engagement and meetings must be held in the communities as opposed to downtown.

7. Confirm Next Steps

David Nagler confirmed the next steps. The groundwater samples should be back by March, the City's Clerk will look into the terms of reference vis-à-vis City Council's recommendations, and the signage is now in the hands of Toronto Public Health. The next meeting will be scheduled as soon as testing results are finalized – most likely in early March 2010.

Paul Young thanked everyone for the meeting. **Paula Fletcher** thanked all in attendance for keeping the process moving.

Meeting Adjourned at 8:45