

MEETING MINUTES



MEETING City of Guelph Waste Resource Innovation Centre Public Liaison Committee Meeting #20

DATE Thursday January 14, 2016

LOCATION Administration Boardroom, Waste Resource Innovation Centre 110 Dunlop Drive, Guelph, Ontario

TIME 6:45 p.m. to 8.30 p.m.

PRESENT Committee Members:
Elected Chair Michael Fortin, (City of Guelph resident) Karyn Hogan, (MWA and City of Guelph resident), Donna Sunter, (City of Guelph resident), Ken Spira, (City of Guelph resident)

City of Guelph: Catherine McCausland, David Gordon, Cam Walsh

Mark Jared (Wellington Organix)

Terry La Chapelle (Aecom)

Kevin Noll (MOECC)

REGRETS Larry Conrad, (City of Guelph resident)

ABSENT

DISCUSSION ITEMS

ITEM #	DESCRIPTION
1	Disclosure of Pecuniary Interest: No disclosures of Pecuniary Interest.
2	Approval of Agenda Agenda was approved and accepted by the committee.
3	Approval of September 24th 2015 minutes One wording error in the title. Altered.

	Accepted by the committee.
4	<p>Review of Action Items from Previous Meeting:</p> <p>Action items from the previous meeting reviewed.</p> <p>Ken Spira to contact the City with any further questions on the fugitive emissions plans.</p> <p>Mike Fortin asked if the letter sent to the residents could be shared with the committee. The City agreed.</p>
5	<p>Delegations wishing to be heard regarding matters on the agenda:</p> <p>None</p>
6	<p>Matters arising from the Delegations:</p> <p>None</p>
7	<p>Staff Changes in Solid Waste and introduction</p> <p>Cam Walsh introduced himself as the interim manager of Solid Waste Resources and explained the new reporting structure in the City of Guelph.</p>
8	<p>New Business:</p> <p>a) Organics Facility update on operations.</p> <p>From Monday 21st September 2015 until Friday the 8th January 2016 the plant has processed 6298.92 tonnes of Source Separated organics.</p> <p>The facility has shipped out 1669.61 tonnes of finished compost in this time.</p> <p>The amount of screening waste from the plastics bin leaving the facility in this time frame is as follows:</p> <p>Screening waste- plastics bin- 95.36 tonnes</p> <p>Screening waste plastics bin as a percentage of incoming source separated organics is 1.51%.</p> <p>There have been two rejected loads in this time period. Contaminated with blue box material</p> <p>Facility has been running taking waste from the City of Guelph and the Region of Waterloo in this 3 month timeframe.</p>

	<p>b) Overview of odour complaints since 24th September 2015 meeting</p> <p>There has been 1 odour complaint since the last plc meeting.</p> <p>The City confirmed odours from the Organic Waste processing facility on this complaint. Information was shared with the complainant.</p> <p>Total incoming material to site</p> <p>The total incoming material to the site in the time period 19th September 2015 to the 8th January 2016 was 49051.24 tonnes, the outbound material from the site was 42238.08 tonnes. Taken from Geoware on 14th January 2016.</p> <p>Spills on site</p> <p>No spills on site in the last 3 months</p>
<p>9</p>	<p>2014 Annual report questions:</p> <p>The hydrogeologist from Aecom attended the meeting. The Ministry and the hydrogeologist answered all the questions posed from the 2014 Annual report.</p> <p>It will be reflected in the minutes that there will be some changes to the language in the 2015 annual report.</p> <p>Ken Spira emailed on the 23rd January and asked that all questions and responses be added to these minutes. They are attached at the end of the document.</p>
<p>10</p>	<p>Any other business</p> <p>Items from Ken Spira:</p> <ul style="list-style-type: none"> - Ontario Stewardship Program, used tires, costs-website <p>There was discussion around accepting tires. The City will update the website to reflect the charges for disposing of tires</p> <ul style="list-style-type: none"> - December 11,2015 Fire Department response to facility <p>The City explained it was a fire in a bin at the new PDO. In future for all incidents like this, the City will call it in to the Ministry of Environment.</p> <ul style="list-style-type: none"> - Cambridge Fire <p>There was discussion around how the fire started in Cambridge MRF and how it could be mitigated. The City will take Ken Spira up on his offer to look at some of the sprinkler systems on site.</p> <ul style="list-style-type: none"> - Membership <p>This was discussed earlier in the meeting. The City hopes to have 2 new members</p>

	<p>in position by the next meeting. If there is to be any more advertising for committee members, the plc asked if they could be informed electronically. The City agreed.</p> <ul style="list-style-type: none"> - After Hours Phone Number (website-site) <p>The City will not be posting the on call phone number on the website. Due to the potential for misuse of the number. All local residents have the on call number.</p>
11	<p>Any other business</p> <p>None</p>
12	<p>Next meeting date's</p> <p>Thursday 31st March 2016 at 630pm.</p> <p>Other dates for 2016 are:</p> <p>Thursday 23rd June 2016 Thursday 29th September 2016</p> <p>The City will email plc members to confirm dates for 2016.</p>
13	<p>Adjournment</p> <p>Accepted by the committee.</p> <p>Meeting adjourned at 8.30 p.m.</p>

ACTION ITEMS

ITEM #	ASSIGNED TO	DUE DATE	DESCRIPTION
1	City of Guelph	Next meeting	Share letter to residents
2	City of Guelph	Next meeting	The City will update the website to reflect the charges for disposing of tires
3			
4			

Re: 2014 Annual Report-Solid Waste Transfer Station & Wet-Dry Recycling Centre, C of A (Waste Disposal Site) No. A170128

Questions and Comments by Ken Spira-PLC Member May 6, 2015, **RR: July 8, 2015**

Can you please pass on the following questions and requests to **Aecom and the MOE** as well as add them to the agenda so they can be addressed prior to the **September 2015** PLC Meeting?

Q 1: Under the “Statement of qualifications and limitations”, it is stated that there are constraints and limitations put onto Aecom as a result of these limitations.

Can we get Aecom to elaborate on any specific constraints and limitations that they believe the City of Guelph has put on them as referenced in the Statement of Qualifications and Limitations?

R: *The limitations that the City puts onto Aecom are that they are only to do what the Environmental Compliance Approval requires. This way, taxpayers are not paying for work that is not necessary to complete.*

RR: **The question was to be answered by Aecom.**

Q 2: Executive summary - Page i Item 63(8)(a), A total of 566 tonnes in 2014, 500 tonnes in 2013 and 257 tonnes in 2012 of waste from the composting process were shipped to landfill. The explanation of the increase from 2012 to 2013 was an accumulation of over’s (waste) that was carried into the 2013 year as part normal production process.

Since over’s are a residual waste from the compost process, are we to assume that a 500 – 600 tonnes range should be an average that gets shipped to landfill on an annual basis? Can you provide additional details as to why or what is believed to be the cause for the increase from 2012 compared to 2013 that was 95% higher & 2014 that is 120% higher?

R. *At this point that seems to be the trend but we are only running at 2/3 capacity. This residue may increase as the incoming tonnage does.*

In 2012, the plant ran at reduced capacity due to the restart. This accounts for the smaller amount of residue. 2013 and 2014 were regular operating years which is why they are more consistent.

RR: **Why does page 22 of the annual report state that there is a 100% diversion rate? Does the MOE agree with this statement? I find it hard to believe that 566 tonnes of residual waste from the composting process plus 6.7 tonnes of rejected load would qualify for 100% diversion. Am I missing something? Can the MOE explain how diversion from landfill is calculated and confirm that this is or is not a true statement?**

Q 3: 63(8)(e) Indicates that no loads were rejected in 2012, however there were 25 tonnes of rejected loads in 2013 due to contamination of the loads and 6.7 tonnes in 2014. The answer as to why the increase was “With the cart program introduced to two thirds of the City in 2013, there was an increase in materials that were rejected due to increased contamination”

When was the City finished with distribution of the cart system and if not, what is the expected date?

R. *The final third of the City received their carts in the fall of 2014.*

Q 4: 63(8)(j) indicates that there were two odour incidents received by staff in 2014 and that **after the fact** were unable to confirm the source of the odours.

Can you provide a detail of how long after the fact were the odours investigated and is there a specific time requirement to investigate?

R. *This department has staff on-call 24/7 as required by the E.C.A., for the purpose of responding to complaints in a timely manner. If a complaint is received through either our after-hours number (Extend Communications) or directly to the on-call phone, the expectation is that someone will respond to the complaint within an hour. The investigation continues until such time as the complaint is either verified and the source of the odour is determined or staff is unable to confirm same. This could be a process that takes up to 3 days. Receiving information hours after the odour detection or in some cases the next day, makes it difficult to determine what was happening at the time of the complaint.*

RR: *Can there be more specific details on a complaint by complaint basis, at least in the minutes of the PLC meetings. Information of when calls came in, when they were investigated, a summary of what was found and the remedy if any would be appreciated. A sample would be, June ??th complaint from Airport Road at 4:00pm, investigated at 4:30pm, found that the leaf and yard waste was producing odour's as the trucks did not arrive to remove prior to the weekend. Remedy: trucks were called first thing Monday morning and waste was removed by the end of the day. Memo sent to trucking company.*

Q 5: 52(e) indicates "elevated nitrates are most likely a result of long-term agricultural land use in the area and are not a result of site operations.

Since the nitrate levels are within ODWS in 2014, can this comment not be removed and moving forward, can anything other than being within ODWS be considered an elevation resulting from the operations?

R. *Although nitrate was below the ODWS in 2014 and has been just below ODWS since 2012, nitrate still exists in the groundwater on-site as a result of long term agricultural use in the area. Therefore, this assessment is still valid. It should be noted that operations would not contribute to nitrate at this site.*

RR: *In the February 7, 2011 letter to Bill Shields from Lynnette Latulippe of the MOE regarding the 2009 annual report, she says "This site has been out of agricultural activity for at least 15 years and residual contamination from that activity, particularly in stormwater runoff should be negligible." This statement was made in response to the 2009 annual report and five years later, the same comments are being made about nitrates and long-term agricultural land use. I would have hoped that no more pointing to long-term agricultural land use would be made after 2009, however it is and I would like to see that reference removed in the future if it is not relevant. Please have the MOE comment on this item.*

Q 6: 52(e) refers to exceeding OWDS and also exceeding PWQO.

Are both these standards to be used and referenced? Can we get a brief summary of the difference between the two and how they apply to the site?

R. *ODWS is the Ontario Drinking Water Standards. These standards are applied to groundwater quality for the protection of groundwater use. Although this may be the case, natural groundwater can exceed the ODWS due to other sources and the natural soil and bedrock environment. Therefore, groundwater quality is initially compared to the ODWS as a benchmark which has been completed historically at this site. The WRIC is currently using the ODWS as a guideline to assess the water quality beneath the site.*

PWQO is the Provincial Water Quality Objectives. These objectives are applied to surface water for the protection of aquatic life. As with the ODWS, the PWQO can also be exceeded due to contributions from other sources, such as rural/urban inputs. The WRIC is using the PWQO to determine the suitability of surface water discharge off-site.

Q 7: 52(e) indicates unknown reasons for continued elevations in the Iron levels since 2011 and again in 2014.

What are the details of the future investigations? When, how and by who? Note that the City commissioned a new compost facility design, which was completed by the summer of 2011. Has the storage of earth on the site been investigated as a possible source?

R. *The cause of the iron is not considered related to any activity on site as the anomalous elevated iron was also observed at background locations. At this time, continued monitoring data is required to determine if these concentrations will persist.*

RR: **Was there a response to the Iron Levels by the MOE and if not, could we get a response from their Geologist regarding the Iron levels?**

Q 8: Section 8.5 discusses organic groundwater results. The 2014 organic sampling showed there were detections of DEHP, naphthalene, chloroform, bromodichloromethane, total and m-, p-xylene, phenol and toluene in a few of the monitors.

Can this be compared to background with background being prior to the site being developed? Has the storage of earth on the site been investigated as a possible source?

R. *As discussed in Section 8.5, the organic detections above were not related to site operations as they were either observed at low levels at several locations including background and/or show no observable trends. As well, some of these detections have been periodically observed since organic sampling began in 1997 at the original locations including background. Many of these detections were also observed in the mid 2000's upgradient of the transfer station before the storage of the fill material.*

Increased organic sampling was conducted at the site between 2011 and 2013 as a result of the storage of the fill material. During this period, what was observed was similar to the results and conclusions observed during 2014.

RR: *Are you saying that what is detected is from the soil storage on Site? Keep in mind that the C of A applies to the entire site and if the storage of soil on the site produced these results, then the detections above were related to site operations. Could we have the MOE Geologist comment?*

Q 9: The SW 1 (Stormwater Detention Area 2) was only sampled in January 2014 as the pond was either frozen/snow covered or had water levels below target levels after March. The January sample at the WRIC showed elevated concentrations of some of chloride, sodium and potassium. 2014 SW 1 parameter concentrations are within the range of historic concentrations at this location, though they generally appear to be at the high end of the concentration range. The Provincial Water Quality Objectives (PWQO) was exceeded for zinc, iron and total phosphorus. Total phosphorus, iron and zinc have historically routinely exceeded the PWQO.

Can this be compared to background with background being prior to the site being developed and has the storage of earth on the site been investigated as a possible source?

R. *As stated in the report, there was no background for surface water. However, surface water quality has been sampled, when not dry, since 1997 when the Wet/Dry facility became operational and, as discussed, are within this historical range. Further, Detention Pond 2 would only receive potential surface water run-off from the Wet/Dry area and not from the area where the fill material was placed.*

RR: *If Detention Pond 2 would only receive potential surface water run-off from the Wet/Dry area and not from the area where the fill material was placed, Where does the surface water run-off go from the area where the fill material was placed?*

Q 10: The AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL NUMBER 9496-9NFKJ9 Issue Date: January 7, 2015 says:

6. SPILL CONTINGENCY AND POLLUTION PREVENTION PLAN (1) Upon commencement of operation of the Works, the Owner shall implement a Spill Contingency and Pollution Prevention Plan that outlines procedures as to how to mitigate the impacts of a spill within the area serviced by the Works and/or prevent pollution incidents. The said plan shall include as a minimum, but not limited to:.....

Can you confirm that the plan will define activation of the fire suppression system or leakage from water lines as a spill?

R. *The current site spills procedure relates to any and all spills under this definition, discharge of the fire suppression system that reaches the natural environment could be considered a spill and would be handled according to our procedure.*

RR: *Your answer says "could" be considered a spill. What I am looking for is conformation that the plan does or will be changed to say that discharge of the fire suppression system or water lines that reaches the natural environment SHALL be considered a spill and would be handled according to your procedure.*

Q11: Page 22 says "tonnages of incoming and outgoing materials will not be equal as some mass is lost through evaporation and processing." It should be a simple calculation to determine how much weight is lost due to moisture in the organics facility.

Can this weight be obtained for 2014 and then recorded in future annual reports?

R. *Moisture loss in the composting process is dependent on a number of factors such as feedstock quality, type of and amount of amendment material added, temperature of the tunnels etc. etc. Typically, in the first phase of the process the mass of the organic matter is reduced by up to 45%. During phase 2 composting, the mass of the organic matter is further reduced by 10% - 25%. Once the phase 2 process is complete, the compost is screened where any metal contaminants, broken plastic bags and other contaminating plastics are removed. Also, overs are reused in the process so this can also have an impact on weight of incoming vs. outgoing material. The weights outlined in the annual report are as accurate as they are going to get due to all of the variables in play.*

Q 12: Table one indicates that 19,320.93 tonnes were brought into the Organics Compost Facility, 566.46 was outgoing waste and 4,002.94 was finished compost. This leaves 14,751.53 tonnes that may be water? If this is true then 14,751,530 liters of water is discharging to the wastewater treatment plant on an annual basis.

Can you confirm or clarify this calculation?

R. *All excess water recovered during the composting process is stored in a holding tank where it is reused in the phase 1 composting process.*

RR: **Obviously 14,751,530 liters of water is not recovered and stored in a holding tank? I would assume that some has to go somewhere else? If this is going through the stack and into the air, is it also considered diversion from landfill?**

Q 13: Page 22 The WRIC achieved a 100% diversion rate for organic (yard, leaf and brush) and a 46% rate of diversion for the remaining materials accepted at the site in 2014.

Can you explain how 100% diversion rate is achieved with a total of 566 tonnes in 2014, 500 tonnes in 2013 and 257 tonnes in 2012 of waste from the composting process being shipped to landfill and possibly 14,751.53 tonnes of water going into the sanitary?

R. *All leaf and yard waste is composted and all other organic material received at the organics plant is processed with the exception of residue material. All excess water recovered during the composting process is stored in a holding tank where it is reused in the phase 1 composting process.*

RR: **This still does not add up to me. How can shipping 566 tonnes (see question Q2) of waste to landfill still be diversion from landfill?? And how can 14,751.53 tonnes of water going somewhere be the same, please explain.**

Q 14: Has the City or MOE investigated the concentration of liquid waste leaving the organics facility via the sanitary system and can it be confirmed that the liquid waste can be treated at the waste water treatment plant to an acceptable level prior to discharge from the facility?

R. *All excess water recovered during the composting process is stored in a holding tank where it is reused in the phase 1 composting process.*

RR: What about part of the 14,751.53 tonnes of water that is not recovered from the compost operation and what about washing out the facility and bins? What is the capacity of the holding tank?

Q 15: Is the discharge at the waste water treatment plant monitored and is there any indication of residual waste getting through the system that can be attributed to the liquid waste leaving the WRIC site?

R. All excess water recovered during the composting process is stored in a holding tank where it is reused in the phase 1 composting process.

RR: See Q14 RR:

Q 16: Page 24 7. Leachate Quality says: To determine the potential leachate quality that may be generated from the Transfer Station, the leachate quality from the City of Guelph closed Eastview Road Landfill was examined. Prior to closure in 2003, this landfill accepted a similar mix of waste as the Transfer Station. Groundwater monitoring has been routinely conducted on this site since 1991. Leachate quality is measured by a series of groundwater monitors in the waste and in the outwash layer beneath the waste. In general, the leachate quality is characterized by elevated concentrations of chloride, boron, phenols (critical leachate parameters), sodium, potassium, magnesium, iron, manganese, ammonia and alkalinity (leachate indicator parameters). Also, BOD, COD and oil and grease have been found to be elevated.

With regard to the Transfer Station, downgradient water quality is compared to background water quality for the critical leachate indicator parameters, as identified above, to determine potential impacts from site operations.

Is the Historical Range in table 8.3.3.1 results from Eastview?

R. No, these tables show the historical range for the individual locations.

RR: What in the annual report is related to the leachate quality from the closed Eastview Road Landfill if anything?

Q 17: Page 37: it is stated that Bromodichloromethane can be found in chlorinated drinking water.

Could the increased level be a result of the municipal water being added to the compost, water being used for cleaning or the discharge water from testing the on-site fire pump on an annual basis? Note that the fire pump is 1,000 us gpm and must flow 150% on an annual basis= 1,500 us gpm. Is the fire pump discharge water going onto the site or into the sanitary?

R. All excess water collected throughout the processes is collected in the storage tanks and used in the phase 1 composting process. There are no discharges of any liquid from the composting process that is discharged to the site or the sanitary. The clean water used to flush the fire system during annual testing is discharged into a storm drain.

RR: Is this also the case for cleaning operations? Keep in mind that this is for the entire site under one C of A and not just related to the compost facility.

Q 18: Page 40: Can the MOE confirm that the comment on the bottom of the page regarding the B-7 Guideline being in place to assess groundwater leaving the site for protection of downgradient users and does the further comment about there being no downgradient well users as the surrounding area as it is municipally serviced mean that the B-7 Guideline is irrelevant?

Can the City of Guelph confirm that there are no wells or wellhead protection areas located downgradient of the site and that this area is or is not within the wellhead protection area, the Grand River Source Protection area and if it is or is not rated high for vulnerability based on the final groundwater and surface water vulnerability report (Aquaresource, 2010)?

R. *The first questions will have to be sent to the M.O.E.C.C. for a response.*

RR: *Awaiting response.*

This site and most of Guelph is in a wellhead protection area. This particular site scores in the 8-10 vulnerability range. In a recently released M.O.E.C.C. document titled 'Ministry of Environment and Climate Change's Source Protection Standard Operating Policies', the source protection policies were reviewed and it was determined that the Ministry's current regulatory framework for municipal/industrial/commercial landfills meet the policy requirements. Existing program and regulatory requirements for the approval of waste disposal sites are consistent with the significant threat prescribed instrument policies. Therefore, existing program requirements conform to source protection risk management policies. What this means is that the M.O.E.C.C. considers prescribed instruments such as environmental compliance approvals sufficient to cover off the objectives of the source protection plan.

RR: *The comment on page 40 says that there is NO downgradient well users as the surrounding area is Municipally serviced. Is this in fact a true statement?*

Q 19: Page 44: Can we get a copy of the comments by the MOE as stated in the last paragraph on the exceedances of the phenol PWQO, 18. As well as a copy of 19, 20 and 21 listed on the bottom of page 45?

R. *Attached*

RR: *In the April 8, 2014 memorandum from Krista Chomick from the MOE, she states that she disagrees with Aecom's interpretation that says aside from some irregular occurrences of parameters above PWQOs, there does not appear to be a problem with surface water quality resulting from the facility. In the case of Phenol's, the majority of samples in the detention ponds were above the PWQO and the number of exceedances was greater than other years. In her conclusion and recommendations, she requests that since the number of exceedances is increasing, the source of the Phenol's should be evaluated, and if there is a source on site, monitoring and treatment are recommended. Can the PLC be notified of the evaluation for the source of Phenol's, if a source is found and of any monitoring and treatment put in place? Conclusions and recommendations item 6 indicates that the current surface monitoring program and recommended surface water program for the new public drop off facility is currently under review by the MOE. Can the PLC be copied on all correspondence relating to the current and recommended surface water programs?*

Q 20: In the first paragraph on the top of page 46, it is indicated that all contaminated soils along with the majority of the stock pile have been removed from the site. Can the MOE confirm that they are confident that the contaminated soils have been removed as well as compare those found contaminants with the testing results to determine if there was any movement of the contaminants into the surface or ground water? As of May 2015, it looks like the majority of the stock pile is still on site.

Can we get an updated plan and schedule for what the City is planning with the stock pile and is the MOE satisfied that the placement of the soil was in compliance with the C of A and is there any concern that it has affected the site as it relates to the monitoring results in the annual report?

R. *You will have to request that information from the M.O.E.C.C.*

RR: *I have requested that you pass on these questions to the M.O.E.C.C as a response to all questions would be appreciated so that all members of the PLC can be informed.*

Please contact Grant Ferguson for any information related to plans for the stock pile at 519-822-1260 Ext. 2251.

RR: *I would request that you pass on this question to Grant Ferguson as the stockpile area is on the site and the entire site is subject to the same C of A and mandate of the PLC. A response to all questions together would be appreciated so that all members of the PLC can be informed.*

Q 21: Page 49: It should be noted that the PLC has not been provided with correspondence that the City has received from or provided to the MOE related to concerns or changes to the water monitoring.

Can the PLC be copied on any future correspondence that affects changes to the monitoring or sampling on the site?

R. *Yes*

City Responses to Annual report questions from Ken Spira comments dated 8th July 2015

1. Aecom will be present at the meeting in January to answer any Annual report questions and give an overview of their work.
2. The 100% diversion rate is ONLY in relation to leaf, yard and brush material. The residues for the organics plant are subtracted in table 5. The statement is not saying there is 100% diversion for source separated organics. The MOE does not need to comment on this statement.
3. Ok
4. Discussed at the September plc meeting.
5. MOECC- question to them
6. Ok
7. MOECC- question to them
8. MOECC- question to them.
9. The run off from the soil pile goes into the ditch next to the soil pile, the ministry has confirmed there was no contamination leaving from the soil pile. If you require further information on the soil pile, please contact Technical Services Manager, Joe de Koning, 519-822-1260 extension 2251, joe.dekoning@guelph.ca. Grant Ferguson has now retired.
10. We will discuss any spills that take place on site with the plc, as agreed at previous meetings.
11. Ok
12. The water is lost through evaporation within the composting process. Incoming organics is considered diversion from landfill. The process of turning it from organic food waste into finished compost is considered diversion from landfill.
13. Please see answers to Q2 and Q12
14. Please see answers to Q2 and Q12
15. Please see answers to Q2 and Q12
16. Nothing in the report talks about the leachate quality at the closed landfill.
17. Where applicable water from cleaning operations goes into the sanitary system.
18. MOECC to comment.
19. The PLC can be kept informed of the surface water monitoring programs through the annual report. The Plc was able to review the amendment for the new public drop off. The monitoring for this area will be reported in the annual report.

20. Your questions will be directed to the MOECC. As above, Grant Ferguson has retired. Contact Joe de Koning

21. Ok

Minutes from discussions between MOECC, AECOM and the plc for annual report questions- directed to the Ministry of Environment and Climate Change.

Meeting date 14th January 2016

Question 5

Both the Ministry and AECOM commented on the data showing elevated nitrate levels in several locations at the site. The phrase “historical agricultural activity” was a plausible reason for these levels.

It was discussed that the groundwater flows to the North on the site and away from the community on Glenholm.

The City agreed to continue monitoring of nitrates.

The City will remove the comments about agricultural land use from the next report.

Question 7

The Ministry had their geologist look at the comments related to Iron levels and concluded that iron levels may not be related to current and historical waste operations because elevated iron concentrations above the Drinking Water Standards (ODWS) of 0.3 mg/L have been detected across the site in monitoring wells representing background groundwater conditions. Moreover, iron exceedance is not a cause of concern since it is designated as a non-health related parameter in the Ontario Drinking Water Standards (ODWS).

Question 8

There was discussion around the historical organic compounds found on site. Comments from the Ministry were as follows:

The detection of organics in the groundwater at the site does not mean non-compliance with the applicable site standards which is the Guideline B-7. The chloroform was detected at the downgradient overburden monitor 22B-11 in 2014 at concentration of 0.13 parts per billion (ppb). There is no drinking water standard for chloroform and the background groundwater standard in O. Reg. 153/04,

Though intensive site pre-development organic groundwater quality data is not available, the available data suggests the presence of bis(2-ethylhexyl phthalate) in background groundwater quality monitor at 5-96 in 1998. The monitoring for organic compounds will continue to confirm the temporal and spatial trend. Without going into the suggested suspected source of organic compounds in the groundwater, the groundwater quality leaving the site along its northern property boundary is not impacted. The leaching of organic compounds from the stockpiled soils would impact the surface water before they reach to the groundwater.

Question 18

The Guideline B-7 is relevant and the applicable site standards for leachate impact indicator parameters, i.e. reasonable use concentration (RUC), are developed following the requirements of Guideline B-7

Question 20

There was discussion around the soil pile and the City said it would be continued to be used for engineering projects.

The ground water quality could be affected by any possible sources of contamination on site.

Ground water does flow to the north of the site.