TERRAPEX
Environmental Ltd.

July 11, 2013
CB709.0

City of Burlington
426 Brant Street
Burlington, ON
L7R 2G2

Attention: Mr. Cary Clark, P.Eng.
Manager of Development & Environmental Engineering
Development & Infrastructure Division

Re: Review of Environmental Reports
Imported Fill Quality
Burlington Executive Airpark

Dear Mr. Clark:

Further to your request, Terrapex Environmental Ltd. (Terrapex) is pleased to provide our review of available environmental testing reports of fill materials received at the Burlington Executive Airpark (the Airport) that were provided by the City of Burlington (the City), and provide our opinion of fill quality within the framework applicable federal and provincial regulations.

Jurisdiction and Regulatory Context

It is Terrapex's understanding, based on discussions with the City, that approximately 500,000 cubic meters of fill material has been received at the Airport site between 2008 and present, and that the Airport property is privately owned. We understand that, as air operations at the Airport facility are regulated by the Canadian federal Aeronautics Act (AA), the site stakeholders maintain that other provincial or municipal regulations do not apply, namely provincial regulations governing the importing of fill materials.

It is Terrapex's understanding that the AA, while regulating air operations at airports in Canada, is silent on matters of fill placement at airport sites. Furthermore, it is our experience in working on federal projects for several years, that if a project site is not owned by the federal government, regulatory evaluations automatically default to the applicable provincial regulations, and in some cases, to applicable municipal regulations. In cases where the site is federally owned, yet no federal regulatory framework exists for any applicable aspect of the project, then applicable

920 Brant Street, Suite 16, Burlington, Ontario, L7R 4J1
Ph: (905) 632-5939 Fax: (905) 632-6793

provincial regulations are applied as a default. As the Airport site is privately owned, and no federal regulations applying to the placement of fill material are apparent, it is Terrapex's opinion that provincial regulations definitely apply to fill placement at this site.

In addition, despite the site owners arguments for federal jurisdiction at the receiving site, provincial regulations definitely apply to movement of wastes from the shipping sites, and transportation of waste (contaminated soil is generally considered a solid non-hazardous waste) on Ontario roadways.

Considering these factors, Terrapex suggests that the applicable regulation pertaining to fill placement at this site is Ontario Regulation (O.Reg.) 153/04, made under the Ontario Environmental Protection Act (EPA), as well as specific Section of the EPA itself, and O.Reg 347 governing waste management.

Ontario Regulation 153/04 Requirements with Respect to Fill Placement

Generally speaking, O.Reg. 153/04 outlines three main requirements for acceptance of fill material at sites in Ontario. These include:

1. chemical analysis of soils to be received at a frequency of one sample per 160 cubic meters for the first 5,000 cubic meters, and one sample per each 300 cubic meters thereafter;

2. chemical analysis of soils to be received for all parameters reasonably expect to be contaminants of concern at the shipping site; and

3. concentrations of tested parameters must meet the Table 1 Site Condition Standards listed in *Soil, Groundwater and Sediment Standards for Use Under part XV.1 of the Environmental Protection Act*, MOE, April 15, 2011, unless a Record of Site Condition exists at the receiving site in which case imported soils must meet the Site Condition Standards indicated as appropriate for the site in the Record of Site Conditions.

Ontario Environmental Protection Act with Respect to Waste

In addition to the O.Reg.153/04, Terrapex also suggests the following pertinent EPA requirements. The EPA (Part V; Section 25) defines “waste” as “*includes ashes, garbage, domestic waste, industrial waste, or municipal refuse and such other materials as designated in the regulations*”. Ontario Regulation 347 (General – Waste Management) (Section 2) designates several categories and types of waste, including “inert fill” which is defined (Section 1) as *“...earth or rock fill or waste of a similar nature that contains no putrescible material or soluble or decomposable chemical substances*”. O.Reg.347 (Section 3) actually exempts “inert fill” from Part V of the EPA and O.Reg.347, however, the Ontario Ministry of the Environment (MOE) has

further defined “inert fill” as soils with chemical concentrations of contaminants meeting the Table 1 Site Condition Standards, and only in this case is the fill material considered inert and exempt. It therefore follows that fill, the quality of which does not meet these standards, is not considered inert, and is indeed considered a waste which is not exempt from Part V of the EPA or O.Reg.347.

Part V (Section 25) of the EPA defines “waste disposal site” as *“(a) any land upon, into, in or through which, or building or structure in which, waste is deposited, disposed of, handled, stored, transferred, treated or processed, and (b) any operation carried out or machinery or equipment used in connection with the depositing, disposal, handling, storage, transfer, treatment or processing referred to in clause (a*)”. Part V (Section 40 – Prohibition as to deposit of waste) indicates that “*No person shall deposit, or cause, permit or arrange for the deposit of, waste upon, in, into or through any land or land covered by water or in any building that is not a waste disposal site for what an environmental compliance approval or renewable energy approval has been issued or a registration under Part II.2 is in effect and except in accordance with the terms and conditions of the approval or the regulation made for the purposes of Part II.2. 2010, c.16, Sched. 7, s. 2 (30).”*

Review of Environmental Testing Reports

The City provided Terrapex with 56 documents for review. The documents consisted of FAXes, emails, reports, and in some cases loose laboratory certificates of analysis. Of the 56 documents, two of them indicated that the material was rejected, and two other documents were specifically geotechnical in nature and provided no chemical data. The remaining 52 reports were reviewed by Terrapex and summarized in the attached table with specific comment regarding the dates of testing, the source of the fill material, expected contaminants of concern, parameters analyzed, whether the sample data met Table 1 or Table 2 Site Condition Standards, where the material was placed at the Airport, and the quantity of fill material represented by the samples.

As shown in the attached table, the majority of the data was from 2010 and 2011. Considering that the fill operation was ongoing from 2008 to present, Terrapex suggests that either much of the fill was not tested, or all of the data was not available or provided.

Further to requirement #1 above, considering 500,000 cubic meters of material was received at the Airport, at the prescribed rate of testing indicated in O.Reg.153/04 approximately 1700 samples (meeting Table 1 standards) would have been required in order to demonstrate suitability of the fill material for receipt at the Airport site. Considering that the sum of samples collected, represented by the 52 reports reviewed was 323 samples, we conclude that sampling frequency was inadequate.

With respect to item #2 above, only one of the 52 reports reviewed provided any rationale for expected contaminants of concern at the shipping site. Therefore, Terrapex cannot conclude that appropriate analyses were completed at the remaining 51 shipping sites.

Further to requirement #3 above, Terrapex found that of the 323 samples tested (possibly for inadequate contaminants of concern) only 134 samples (41%) actually met the Table 1 Site Condition Standards. These samples were collected from 13 of the 52 sites (25%). It should be noted that while many of the Table 1 exceedences were for electrical conductivity (EC) and/or sodium adsorption ration (SAR) only, 17 of the 39 sites yielding failing samples (or 32% of total sites tested) also indicated exceedences of Table 1 standards for parameters such as petroleum hydrocarbons (PHC), polycyclic aromatic hydrocarbons (PAH), and/or metals such as cadmium (Cd), lead (Pb), antimony (Sb), and zinc (Zn).

Notwithstanding that the Table 2 Site Condition Standards are not applicable to the site, the City indicated to Terrapex that the site owner was screening analytical results to assure that fill received did meet the Table 2 standards. However based on our review, only 244 of the 323 samples actually met the Table 2 standards. While EC and/or SAR exceeded the Table 2 standards at 25 of the sites, sample from 5 of these shipping sites also had concentrations of one or more of PHC, PAH, and metals exceeding the associated standards.

Further to the issue of use of the Table 2 Site Condition Standards, Region of Halton correspondence provided to Terrapex by the City indicates that despite the O.Reg. 153/04 Table 1 requirement for fill material, the Table 2 Site Condition Standards are not appropriate for the site due to the presence of environmentally sensitive sites proximate to the Airport lands.

Conclusions

Based on our understanding of federal and provincial regulations and the documents provided by the City for review, Terrapex concludes the following:

1. The regulation applicable to receipt of fill material at the Airport site is Ontario Regulation 153/04 and based on this regulation only materials meeting the Table 1 Site Condition Standards listed in *Soil, Groundwater and Sediment Standards for Use Under part XV.1 of the Environmental Protection Act*, MOE, April 15, 2011 are appropriate for use as fill at the site.

2. Based on the amount of fill received at the Airport site and the data reviewed, the sampling and analytical frequency is inadequate.

3. As contaminants of concern were not substantiated for the majority (51 of 52) shipping sites the adequacy of the sampling programs cannot be assured.

4. Only 41% of samples represented in the body of data reviewed indicated concentrations of all analyzed parameters meeting the applicable Table 1 Site Condition Standards. Although sampling frequency was inadequate, this data may suggest that only 41% of material received at the Airport site (approximately 200,000 of 500,000 cubic meters) actually meets the applicable standard.

5. The receipt of fill material exceeding the Table 1 standards, which is classified as waste in accordance with the EPA, O.Reg.347, and the MOE, is in contravention of EPA Section 40 prohibiting the deposit of waste on lands which are not an approved disposal site. The deposit of waste at the Airport site has essentially resulted in the establishment of an un-licensed waste disposal site, which may have ramifications for not only the receiver, but the various shippers and haulers of the waste.

I trust this information meets your current requirements. If there are any questions or comments, please do not hesitate to contact me.

Sincerely,

TERRAPEX ENVIRONMENTAL LTD.

Jeff Stevenson, P.Geo.
Senior Project Manager

Burlington Executive Airpark
Imported Fill Material
Summary of Environmental Reports

	Report Name	Report Date (dd/mm/yy)	Source of Material Sampled	Expected Contaminants of Concern	Parameters Analyzed	Concentrations Met Table 1 SCS	Concentrations Met Table 2 SCS	Placement Location at Site	Volume of Soil Represented by the Data
1	Environmental Sampling and Chemical Analysis 4100 Upper Middle Road, Burlington (LVM)	10/19/2010	Construction Site 4100 Upper Middle Road, Burlington	Unknown	BTEX, PHC F1-F4, SAR, EC, pH, Cyanide, PCBs, and metals	6 of 7 samples	7 of 7 samples	Unknown	Unknown
2	Geotechnical Investigation, Proposed Library Addition and Parking Lot, West Side of Woodlands, Secondary School, 3225 Erindale Station Road, Mississauga (Shad and Associates)	1/24/2012	N/A - No chemical analysis completed	N/A	N/A	N/A	N/A	N/A	N/A
3	Laboratory Certificate of Analysis - Testmark Laboratories Ltd. 22/11/2012	11/22/2012	Unknown	Unknown	pH, EC, SAR, VOC, metals	0 of 2 samples (fail for EC only)	1 of 2 samples (fail for EC only)	Unknown	Unknown
4	Results of Environmental Soil Chemical Analyses for Excess Soil Management, Wedgewood Junior Public School, 5 Swan Avenue, Toronto, Ontario (Coffey)	11/28/2012	School Yard 5 Swan Avenue, Toronto	None*	pH, EC, SAR, metals	2 of 2 samples	2 of 2 samples	Unknown	Unknown
5	Email from Eliseo Lancione 01/03/2013 covering: Geotechnical Investigation, watermain Replacement, Plains Road, Burlington, Ontario (SPL)	1/19/2011	N/A - No chemical analysis completed	N/A	N/A	N/A	N/A	N/A	N/A
6	Email from Eliseo Lancione 05/03/2013 covering: Chemical Characterization of Soil, Water Main Replacement Tedlo Street and Area, Mississauga, Ontario (SPL)	9/12/2012	Construction Site Tedlo Street, Mississauga	Unknown	pH, EC, SAR, metals	1 of 2 samples (fail for EC only)	2 of 2 samples	Unknown	Unknown
7	Email from Eliseo Lancione 11/03/2013 covering: excerpt from Watermain & Sanitary Sewer Replacement, Spruce Avenue, Burlington, Ontario (Trow)	Unknown	Construction Site Spruce Avenue, Burlington	Unknown	pH, EC, SAR, metals	0 of 8 samples (all fail for SAR and EC: 2 fail Ba)	1 of 8 samples (6 of 8 fail SAR; 6 of 8 fail EC)	Unknown	Unknown
8	Email from John Hutter 22/03/2013 covering: Analytical Test Results for Soil Disposal, Proposed Excavation for Watermain Trenches, Kenninghall Cr & Creditview Road, Mississauga, Ontario (Soil Probe Ltd.)	3/18/2012	Proposed sewer trench - residential subdivision, Steen Drive and Pine Cliff Drive, Mississauga	Unknown	BTEX, PHC F1-F4, SAR, EC, pH, PCBs, and metals	2 0f 2 samples	2 of 2 samples	Unknown	Unknown
9	Email from Matthew Hutter 04/04/2013 covering: Stockpiled Soil Chemical Analyses Results, Main Street West, Milton Subdivision, Milton, Ontari (AMEC)	6/15/2012	Soil Stockpile - Residential Development, Main Street and Whitmer Street, Milton	None*	pH, EC, SAR, metals	3 of 3 samples	3 of 3 samples	Unknown	Unknown
10	FAX from JCR Contracting Ltd 08/04/2013 covering: excerpt from a report by Coffey Geotechnics	12/6/2010	Unknown	Unknown	pH, EC, SAR, VOC, metals	0 of 5 samples (all fail for SAR; 4 fail for EC; RDL for several parameters exceed Table 1 SCS	4 of 5 samples (1 fail for EC only)	Unknown	Unknown
11	Email from Regina Construction Limited 23/04/2013 covering: Chemical Analysis Results, Garden Avenue Junior Public School Addition, 225 Garden Avenue, Toronto, Ontario (MCR)	4/17/2013	Proposed School Addition 225 Garden Avenue Toronto	None*	pH, EC, SAR, metals	0 of 2 samples (fail for SAR only)	2 of 2 samples	Unknown	Unknown

Burlington Executive Airpark
Imported Fill Material
Summary of Environmental Reports

	Report Name	Report Date (dd/mm/yy)	Source of Material Sampled	Expected Contaminants of Concern	Parameters Analyzed	Concentrations Met Table 1 SCS	Concentrations Met Table 2 SCS	Placement Location at Site	Volume of Soil Represented by the Data
12	Email from Matthew Hutter 07/05/2013 covering: Results of Augsut 30, 2012 Environmental Soil Chemical Analyses, Macklin Public School,, 136 Ingleton Blvd, Toronto, Ontario (Coffey)	9/17/2012	Proposed School Addition 136 Ingleton Blvd, Toronto	None*	pH, EC, SAR, metals	1 of 2 samples (1 fail for EC and cyanide)	1 of 2 samples (1 fail for EC and cyanide)	Unknown	Unknown
13	Email from Victor DePalma 08/05/2013 covering: Laboratory Certificate of Analysis - Maxxam Analytics 10/01/2010	1/10/2010	N/A - TCLP only	N/A	N/A	N/A	N/A	N/A	N/A
14	Email from Eliseo Lancione 14/05/2013 covering: excerpt from a report by Soil-Eng Limited , May 2000	5/3/2000	Unknown	Unknown	pH, EC, SAR, metals	1 of 4 samples (3 fail SAR; 1 fails EC)	2 of 4 samples (2 fails SAR; 1 fails EC)	Unknown	Unknown
15	Email from Mark Hrvatin 15/05/2013 covering: Stockpile Sampling, 338 Dundas Street East, Oakville, Ontario (AMEC)	5/14/2013	Soil Stockpile - 338 Dundas Street East, Oakville	None*	pH, EC, SAR, metals	0 of 2 samples (both samples fail EC and SAR)	0 of 2 samples (both fail EC; 1 fails SAR)	Unknown	50 m3
16	Email from John Barroso 15/01/2013 covering: Chemical Analysis of Materials to be Excavated, 2332 Upper Middle Road West, Oakville, Ontario (Haddad Geotechncial)	11/9/2012	Proposed Residential Development , 2332 Upper Middle Road West, Oakville	None*	pH, EC, SAR, metals, PHC, VOC	1 of 4 samples (2 fail for SAR; 1 fails for Ba)	4 of 4 samples	Unknown	Unknown
17	Email from Eliseo Lancione 11/03/2013 covering: excerpt from Terraprobe Rpeort 24/02/2000 and AGAT Laboratory Certificates of Analysis 05/11/2012	24/02/2000 05/11/2012	Proposed Water Main - Oakville	Unknown	pH, EC, SAR, metals	0 of 8 samples (2 fail for EC; all fail SAR)	5 of 8 samples (2 fail EC; 2 fail SAR)	Unknown	Unknown
18	Email from Matthew Hutter 03/05/2013 covering: Geotechnical Investigation, Proposed Town Hall Renovations, 1255 Trafalgar Road, Oakville, Ontario 23/08/2012 (EXP)	8/23/2012	Proposed Town Hall Renovations - 1255 Traflager Road, Oakville	Unknown	pH, EC, SAR, metals	1 of 3 samples (2 fail for EC and SAR)	1 of 3 samples (2 fail for SAR only)	Unknown	Unknown
19	Laboratory Certificate of Analysis - Maxxam Analytics 22/06/2009	6/22/2009	Unknown	Unknown	pH, EC, SAR, metals, PCBs, PHC, BTEX	1 of 4 samples (1 fails for EC; 2 fail Cu)	2 of 4 samples (1 fails for EC; 1 fail Cu)	Unknown	Unknown
20	FAX from Dynex Construction Ltd. 01/04/2011 Covering: Laboratory Ceritifcate of Analysis - Maxxam Analytics 08/12/2010	12/8/2010	Unknown	Unknown	pH, EC, SAR, metals, PAHs, PHC, VOC, pesticides, dioins and furans	0 of 1 sample (fails for flouranthene and DDE)	1 of 1 sample	Unknown	100 loads (1000 m3 ?)
21	FAX from ECS Engineering & Construction Ltd. 09/08/2011 Covering: excerpt from a report by Coffey on Supplementary Geotechnical Investigation, Etobicoke Creek Trunk Sewer Renewal 01/12/2009, and Laboratory Ceritifcate of Analysis - Maxxam Analytics 11/08/2011 from 1100 Kerr Street, Oakville	01/12/2009 11/08/2011	Unknown & Canadian Tire Store 1100 Kerr Street, Oakville	Unknown & petroleum hydrocarbons	pH, EC, SAR, metals, PHC, VOC	4 0f 9 samples & 0 of 4 samples (all fail SAR; 3 fail Cu; 2 fail Cd)	8 0f 9 samples & 1 of 4 samples (2 fail SAR; 2 fail Cd)	Unknown	Unknown
22	FAX from NEI Construction Corp. 04/05/2011 Covering: Results of Environmental Soil Chemical Analyses, Runway End Safety Areas (RESA) Improvement, Lester B. Perarson International Airport 04/03/2011 (Coffey)	3/4/2011	Toronto Airport	None*	pH, EC, SAR, metals	0 of 4 samples (all fail EC)	3 of 4 samples (1 fails EC)	Unknown	Unknown

Burlington Executive Airpark
Imported Fill Material
Summary of Environmental Reports

	Report Name	Report Date (dd/mm/yy)	Source of Material Sampled	Expected Contaminants of Concern	Parameters Analyzed	Concentrations Met Table 1 SCS	Concentrations Met Table 2 SCS	Placement Location at Site	Volume of Soil Represented by the Data
23	Letter from AME 25/07/2011 covering: Laboratory Certificate of Analysis - AGAT Laboroatories 21/07/2011	7/21/2011	Appleby GO Station, Burlington	Unknown	pH, EC, SAR, metals	1 of 1 sample	1 of 1 sample	Unknown	Unknown
24	FAX from JPW Construction Limited 03/06/2011 Covering: Geotechnical Investigation, Water Main Replacement in Pimlico Sourt and Minstrel Mews, Mississauga, Ontario 23/07/2010 (SPL Consultants Limited & Chemical Characterization of Soil, Water Main Replacement in Pilmico Court and Minstrel Mews, Mississauga, Ontarion 27/07/2010 (SPL Beatty)	23/07/2010 27/07/2010	Water main Replacement, Mississauga	Unknown	pH, EC, SAR, metals	1 of 4 samples (2 fail for EC; 3 fail for SAR)	2 of 4 samples (1 fail for EC; 2 fail SAR)	Unknown	Unknown
25	Geotechnical Investigation, Proposed South Expansion, Yorkdale Shopping Centre, Toront, Ontario 21/10/2010 (Terraprobe)	10/21/2010	Proposed Mall Expansion, Toronto	None*	pH, EC, SAR, metals, PAHs, PHC, VOC, PCBs	0 of 8 samples (all fail EC and SAR)	0 of 8 samples (all fail EC and SAR)	Unknown	Unknown
26	Soil Quality Investigation for the Native, 1085 The Queensway, Toronto, Ontario, March 2011 (MCR)	Mar-11	Unknown	Unknown	pH, EC, SAR, metals, PAHs, PHC, VOC, PCBs, Dioxane	8 of 12 samples (1 fail EC and PHC F4; 1 fail SAR; 2 fail numerous PAH	11 of 12 samples (1 fail PAH)	Unknown	Unknown
27	Laboratory Certificate of Analysis - Maxxam Analytics 24/07/2009	7/24/2009	Unknown	Unknown	pH, EC, SAR, metals, PHC	0 of 4 sampeles (all fail SAR; 1 fail EC)	1 of 4 sampeles (3fail SAR; 1 fail EC)	Unknown	Unknown
28	Laboratory Certificate of Analysis - AGAT laboratories 18/04/2011	4/18/2011	Unknown	Unknown	pH, EC, SAR, metals	0 of 3 samples (all fail for EC and SAR)	0 of 3 samples (all fail for SAR; 2 fail EC)	Unknown	Unknown
29	Excerpt from Geo-Canada report June 2008	Jun-08	Unknown	Unknown	pH, EC, SAR, metals	0 of 4 samples (all fail for SAR; 2 fail EC; 1 fail Cd)	1 of 4 samples (3 fail for SAR; 2 fail EC; 1 fail Cd)	Unknown	Unknown
30	Geotechnical Pavement Investigation, Internal Roads and Driveways, Townhouse Complex, 2736 Folway Drive, Mississauga, Ontario 22/10/2010 (Terraprobe)	22/10/201	Residential Townhouse Complex roadways, Mississauga	Unknown	pH, EC, SAR, metals	0 of 1 sample (fail for EC and SAR)	0 of 1 sample (fail for SAR)	Unknown	Unknown
31	Chemical Analyses for Stockpile Soil at Lakeshore Road & East of Burloak Drive, Oakville, Ontario 22/10/2010 (Chi S. Huang & Associates Inc.) & Soil Chemicl Analysis, David Ramsey Pool, 2470 Thorn Lodge Road, Mississauga, Ontario 21/01/2010 (VA Wood)	22/10/2010 21/01/2010	Soil Stockpile - Lakeshore @ Burloak, Oakville & Pool renovation - Thorn Lodge Road, Mississauga	Unknown	pH, EC, SAR, metals,PHC	1 of 3 samples (2 fail EC; 1 fails SAR and PHC F2)	2 of 3 (1 fails for EC)	Unknown	Unknown

Burlington Executive Airpark
Imported Fill Material
Summary of Environmental Reports

	Report Name	Report Date (dd/mm/yy)	Source of Material Sampled	Expected Contaminants of Concern	Parameters Analyzed	Concentrations Met Table 1 SCS	Concentrations Met Table 2 SCS	Placement Location at Site	Volume of Soil Represented by the Data
32	FAX from Calder Hill Contracting Limited 02/08/2011 Covering: Excerpts of several reports by Terraprobe 2009 and Golder 2009	2009	Unknown	Unknown	pH, EC, SAR, metals	**0 of 3 samples** (2 fail for EC; 1 fail SAR; 1 fail Cu) & **3 of 14 samples** (7 fail EC; 11 fail SAR; 1 fail Pb) & **6 of 16 samples** (10 fail EC - only EC tested) & **1 of 3 samples** (2 fail Cu) & **7 of 13 samples** (5 fail EC; 4 fail SAR; 1 fail Sb)	**0 of 3 samples** (1 fail for EC; 1 fail SAR; 1 fail Cu) & **8 of 14 samples** (6 fail EC; 6 fial SAR; 1 fail Pb) **12 of 16 samples** (4 fail EC - only EC tested) & **3 of 3 samples** & **8 of 13 samples** (5 fail EC)	Unknown	Unknown
33	Email from Rob Iachetta 29/09/2011 covering: Geotechnical Investigation Report for Alton Public School, Burlington, Ontario 17/01/2011 (Coffey)	1/17/2011	Propose School Construction - Alton School Site, Burlington	Unknown	pH, EC, SAR, metals	7 of 9 samples (2 fail EC only)	9 of 9 samples	Unknown	Unknown
34	Laboratory Certificate of Analysis - AGAT laboratories 29/08/2011	8/29/2011	Unknown	Unknown	EC, SAR	0 of 4 samples (all fail for EC; 3 fail for SAR)	4 of 4 samples	Unknown	Unknown
35	Email from Jennifer 25/10/2011 covering: Soil Chemical Testing Report, Woodside Branch Public Library, Oakville, Ontario 03/10/2011 (Forward)	10/3/2011	Library Project - Oakville & Data from an Ajax site	Unknown	pH, EC, SAR, metals	6 of 6 samples	6 of 6 samples	Unknown	Unknown
36	FAX from HR&T 03/11/2011 Covering: Laboratory Certificates of Analysis - AGAT Laboratories 28/10/2011	28/10/1022	97 Commissioners Street, Toronto	Unknown	variable including PHC, metals, EC, SAR	3 of 7 samples (3 fail PHC F2; 1 fails EC)	7 of 7 samples	Unknown	7000 m3
37	Envrionmental Analytical Testing Results, Dundas Street Sanitary Sewer & Forcemain, Oakville, Ontario 12/11/2011 (Thurber)	11/12/2011	Forcemain project - Oakville	Unknown	pH, EC, SAR, metals	3 of 3 samples	3 of 3 samples	Unknown	Unknown
38	Hand Delivery by HR&T 12/12/2011 Covering: Laboratory Certificate of Analysis - AGAT Laboratories 23/11/2011	11/23/2011	97 Commissioners Street, Toronto	Unknown	pH, EC, SAR, metals, PHC	10 of 19 samples (3 fail PHC F1; 3 fail PHC F2; 1 fails xylenes; 4 fail EC; 2 fail SAR)	19 of 19 samples	Unknown	8000 m3
39	Email from Vince Cardinali 16/12/2011 covering: Results of February 7 & 8, 2011 Environmental Soil Chemical Analysis Slppe Evaulaton, Bronte Creek Subdivision, Oakville, Ontarion 29/03/2011 (Coffey)	3/29/2011	Subdivision - Oakville	None*	pH, EC, SAR, metals	1 of 2 samples (1 fail for EC)	2 of 2 samples	Unknown	Unknown
40	Soil Environmental Evaluation Proposed Addition to Clifton Public Schook, 2389 Cliff Road, Mississauga, Ontario 21/12/2011 (JT Donald)	12/21/2011	School Addition - 2389 Cliff Road, Mississauga	Unknown	pH, EC, SAR, metals	3 of 5 samples (2 fail SAR)	5 of 5 samples	Unknown	Unknown
41	Geotechnical Investigation, Washburn Pumping Station, Heathfield Drive Burlington, Ontario January 2008 (PML)	Jan-08	Addition to Pumping station - Burlington	None*	pH, EC, SAR, metals	3 of 3 samples	3 of 3 samples	Unknown	Unknown
42	Laboratory Certificate of Analysis - AGAT Laboratories 02/11/2010	2/11/2010	Unknown	Unknown	pH, EC, SAR, metals, PHC, pesticides	1 of 1 sample	1 of 1 sample	Unknown	Unknown

Burlington Executive Airpark
Imported Fill Material
Summary of Environmental Reports

	Report Name	Report Date (dd/mm/yy)	Source of Material Sampled	Expected Contaminants of Concern	Parameters Analyzed	Concentrations Met Table 1 SCS	Concentrations Met Table 2 SCS	Placement Location at Site	Volume of Soil Represented by the Data
43	FAX from lakeside Contracting 12/11/2010 Covering: Laboratory Certificates of Analysis - AGAT Laboratories 12/07/2010	12/7/2010	Burlington	Unknown	metals, PHC, VOC	2 of 2 samples	2 of 2 samples	Unknown	500 m3
44	Stockpiled Soil sampling and Analysis, proposed Retail Development, Appleby Line and Dundas Street, Burlington, ontarion 20/05/2010 (Trow)	20/05/2010	Soil Stockpile - Proposed development - Burlington	Unknown	PHC	2 of 2 samples	2 of 2 samples	Unknown	Unknown
45	FAX from Roni Excavatin Limited 04/01/2011 Covering: Resulsts of soil chemical Analysis, Dundas & 6th Line Development, Residential Sub-division, Dundas and Sixth Line, oakville, ontario 04/02/2011 (Terraprobe)	4/2/2011	Residential Sub-division Developemnt - Oakville	None*	pH, EC, SAR, metals	5 of 5 samples	5 of 5 samples	Unknown	Unknown
46	FAX from HR&T 21/09/2011 Covering: Laboratory Certificates of Analysis - AGAT Laboratories 12/09/2011	12/9/2011	97 Commissioner Street, Toronto	Unknown	metals, PHC	7 of 9 samples (1 fials PHC F2; 1 fails Sb)	9 of 9 samples	Unknown	8,000 m3
47	FAX from Dekra Transport Inc 13/05/2011 Covering: Environmental Testing Alton North Subdivsiion Project, Burlington, Ontario 28/12/2010 (Soil-mat)	28/12/2010	Sub-division devlopment - Burlington	Unknown	pH, EC, SAR, metals, PHC	3 of 3 samples	3 of 3 samples	Unknown	10,000m3
48	Report, Subsurface investigation, Mayfiedl West Public School, Caledon, Ontario 22/09/2010 (forward Engineering	22/09/2010	Proposed School Development - Caledon	None*	pH, EC, SAR, metals	3 of 3 samples	3 of 3 samples	Unknown	Unknown
49	Emial from Neil MacKenzie 04/10/2011 Covering: Report on GeoEnvironmental Soil sampling and Chemical Analyses, Soil Stockpile, Bronte GO Station, Town of Oakville, Ontario 20/07/2011 (PML)	20/07/2011	Soil Stockpile - Bronte GO Station - Oakville	PHC, VOC, salt, metal, PHs, PCBs	PHC, VOC, salt, metal, PHs, PCBs	14 of 40 samples (14 fail EC/SAR; 12 fail Pb; 1 fail Zn)	31 of 40 samples (9 fail EC/SAR)	Unknown	10,000 - 15,000 m3
50	Letter from Topsite Contracting Limited 04/10/2011 Covering: Results of Test Pit Investigation and Soil Chemical Analysis, Erindale GO Station Parking Structure, mississauga, Ontairo 17/08/2010 (Terraprobe)	17/08/2010	Go Station Parking Structure developemnt - Mississauga	None*	PAH, VOC, PHC	3 of 5 samples (2 fail PAHs)	5 of 5 samples	Unknown	Unknown
51	Grand park Drive and Burnhamthorpe Road West Eaarth Fill Characterization 20/07/2011 (Terraprobe)	20/07/2011	Proposed Development - Mississauga	Unknown	pH, EC, SAR, metals, PHC, PAH, PHC	2 of 6 samples (3 fail EC, 2 fail SAR; 1 fails PAH)	5 of 6 samples (1 fail EC)	Unknown	Unknown
52	FAX from HR&T 16/08/2011 Covering: Laboratory Certificates of Analysis - ALSLaboratories 08/08/2011	8/8/2011	Unknown	Unknown	PHC, metals, SAR, PAH	2 of 13 samples (7 fail PHC F2; 1 fail PAH; fail Pb; 2 fail Sb; 2 fail SAR)	13 of 13 samples	Unknown	Unknown
52	FAX from Rabito Construction Ltd. 20/10/2011 Covering: Chemical Characterization of Soil, Plum Treet Crescent and Vanderilt Road in Mississauga, Ontairo 07/07/2011 (SPL)	7/7/2011	Watermain replacement - Mississauga	Unknown	pH, EC, SAR, metals	2 of 5 samples (3 fail for EC and SAR)	2 of 5 samples (3 fail for EC and SAR)	Unknown	150 m3
53	FAX from Timbel Ltd. 14/10/2011 Covering: Report on Geotechnical Investigation Water Main replacement, Tedwyn Drive, Asta Drive, Abana Road, Felina court, Pashak Crescent, and Selsey Drive, Mississauga, ontario 25/03/2011 (SPL)	25/03/2011	Water main Replacement - Mississauga	Unknown	pH, EC, SAR, metals	0 of 10 samples (all fail SAR; 7 fail EC)	2 of 10 samples (6 fail EC; 8 fail SAR)	Unknown	Unknown

Burlington Executive Airpark
Imported Fill Material
Summary of Environmental Reports

	Report Name	Report Date (dd/mm/yy)	Source of Material Sampled	Expected Contaminants of Concern	Parameters Analyzed	Concentrations Met Table 1 SCS	Concentrations Met Table 2 SCS	Placement Location at Site	Volume of Soil Represented by the Data
54	FAX from Rabito Construction Ltd. 20/05/2011 Covering: Chemical Characterization of Soil, Various Roads in Mississauga, Ontairo 07/01/2011 (SPL)	7/1/2011	Water main Replacement - Mississauga	Unknown	pH, EC, SAR, metals	0 of 8 samples (all fail SAR; 5 fail EC)	3 of 8 samples (4 fail SAR; 4 fail EC)	Unknown	Unknown

None* Report Indicates no field evidence of impact but no other rationale for absence of contaminants is provided

Rejected Material

1 Eliseo Lancione 12/04/1013
2 Belor 25/04/2013