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Phase I - Environmental Site Assessment

Part of 4 Booth Street, Chaudière Island
Ottawa, Ontario

Prepared For

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EXECUTIVE SUMMARY

Assessment

Paterson Group was retained by Windmill Dream Unlimited to conduct a Phase I Environmental Site Assessment (ESA) of the property addressed 4 Booth Street. The purpose of this Phase I ESA was to research the past and current use of the Phase I Property and Phase I ESA Study Area and to identify any environmental concerns with the potential to have impacted the subject land.

Based on the findings of the historical research conducted as part of the Phase I ESA, the Phase I Property was first developed in the early 1800s as a lumber storage yard for a lumber mill located on the adjacent land to the north. The entire Chaudière Island upon which the Phase I Property is located was used for lumber processing. The property was later developed as a pulp and paper mill. The historical use of the adjacent and neighbouring lands was also lumber and pulp and paper processing, with some commercial businesses to the south, on Albert Island. Several tramways traversed the property (and all of Chaudière Island) from the 1900s to at least 1950s.

The Phase I Property is no longer operated as an industrial mill. Operations at the property ceased in 2006, and it was left vacant until 2018, when the majority of the buildings were demolished, and all fill material was removed from the site.

At the time of the site visit, the current uses of the adjacent and neighbouring properties within the Phase I ESA Study Area were observed from publicly accessible areas. The adjacent property to the north is occupied by Hydro Ottawa. The lands to the west are vacant, and the lands to the east, across Booth Street, are occupied by abandoned pulp mill buildings. Albert Island, to the south of the Phase I Property, is occupied by offices located in former industrial/commercial buildings.

Based on the historical research in combination with observations made at the time of the site visit, potentially contaminating activities have been identified which have resulted in APECs on the Phase I Property.

Recommendations

Based on the results of the Phase I ESA, it is our opinion that a Phase II Environmental Site Assessment is required for the property.

1.0 INTRODUCTION

At the request of Windmill Dream Unlimited, Paterson Group (Paterson) conducted a Phase I-Environmental Site Assessment (Phase I-ESA) of part of the property addressed 4 Booth Street, in the City of Ottawa, Ontario. The purpose of this Phase I-ESA was to research the past and current use of the site and study area and to identify any environmental concerns with the potential to have impacted the subject property.

Paterson was engaged to conduct this Phase I-ESA by Ms. Taryn Glancy of Windmill Dream Unlimited. The offices of Windmill Dream are located at 6 Booth Street, Ottawa, Ontario. Ms. Glancy can be reached by telephone at (613) 219-2722.

This report has been prepared specifically and solely for the above noted project which is described herein. It contains all of our findings and results of the environmental conditions at this site.

This Phase I-ESA report has been prepared in general accordance with Ontario Regulation 153/04 as amended (Environmental Protection Act), and also complies with the requirements of CSA Z768-01. The conclusions presented herein are based on information gathered from a limited historical review and field inspection program. The findings of the Phase I-ESA are based on a review of readily available geological, historical and regulatory information and a cursory review made at the time of the field assessment. The historical research relies on information supplied by others, such as, local, provincial and federal agencies and was limited within the scope-of-work, time and budget of the project herein.

2.0 PHASE I PROPERTY INFORMATION

Address:	4 Booth Street, Ottawa, Ontario
Legal Description:	Parts 2 through 17, and part of Part 1 and Part of Part 24 (of multiple Lots), Plan 10 and Concession A (Ottawa Front), City of Ottawa. Refer to Survey Plan for complete Legal Description.
Property Identification Numbers:	04097-0089, 04097-0094, 04097-0211, 04097-0213, 04097-0214, 04097-0215, 04097-0216
Location:	The subject site is located on the west side of Booth Street, approximately 415 m north of Wellington Street, in the City of Ottawa, Ontario. The subject site is shown on Figure 1 - Key Plan following the body of this report.
Latitude and Longitude:	45° 25 11.6" N, 75° 43' 4.6" W
Site Description:	
Configuration:	Irregular
Site Area:	1.5 hectares (approximate)
Zoning:	MD5 – Mixed Use Downtown
Current Use:	The property is currently vacant and undergoing development for mixed residential and commercial purposes.
Services:	The Phase I Property is not currently serviced but is located in a municipally serviced area.

3.0 SCOPE OF INVESTIGATION

The scope of work for this Phase I-Environmental Site Assessment was as follows:

- ☐ Determine the historical activities on the subject site and study area by conducting a review of readily available records, reports, photographs, plans, mapping, databases and regulatory agencies;
- ☐ Investigate the existing conditions present at the subject site and study area by conducting site reconnaissance;
- ☐ Conduct interviews with persons knowledgeable of current and historic operations on the subject property, and if warranted, neighbouring properties;
- ☐ Present the results of our findings in a comprehensive report in general accordance with the requirements of Ontario Regulation 269/11 amending O.Reg. 153/04 made under the Environmental Protection Act and in compliance with the requirements of CSA Z768-01;
- ☐ Provide a preliminary environmental site evaluation based on our findings;
- ☐ Provide preliminary remediation recommendations and further investigative work if contamination is suspected or encountered.

4.0 RECORDS REVIEW

4.1 General

Phase I-ESA Study Area Determination

A radius of approximately 250 m was determined to be appropriate as a Phase I ESA study area for this assignment. Properties outside the 250 m radius are not considered to have impacted the subject land, based on their significant distance from the site.

First Developed Use Determination

According to the current property owner, the Phase I Property was first developed as a timber processing facility in the 1800s and developed into a pulp and paper mill in the early 1900s. Domtar acquired the property in 1998 and ceased operations in 2006.

Fire Insurance Plans

Fire insurance plans dated 1878, 1901, 1912 and 1956 were reviewed for the area of the Phase I Property.

1878 FIP

Multiple small buildings occupy the southern portion of the Phase I Property, while the majority of the site is used for lumber storage. Tramway tracks are indicated crossing the site, which were used to transport materials across the island. The tramway tracks are considered to be a PCA.

Additional lumber storage is present to the west of the Phase I Property and to the northeast (on Chaudière East), and saw mills are present to the north.

1901 FIP

The Phase I Property is a lumber mill yard, primarily used for storing piled lumber. The buildings present in the previous FIP at the south end of the site are no longer present (burned down in the fire of 1900). Two (2) small outbuildings (an office and hose house) appear to be located on the subject property.

The surrounding lands include the main mill buildings (saw, timber, pulp, etc.) to the north, and additional lumber yard space to the west. The southeast corner of the Phase I Property is labeled “old stone foundations”. The Buchanan Channel is indicated to have been under construction at this time, while Albert Island to the

south has been developed with the existing buildings, labeled “storage” and “smithy and machine shop”. The east side of Chaudière Island (Chaudière East), across Booth Street (then Bridge Street), is occupied by additional lumber yard space. Victoria Island, to the south of Chaudière East, is occupied by an electric power generating station, offices, and saw shop.

The machine shop on Albert Island and the mills on the adjacent lands to the north of the Phase I Property are considered to be Potentially Contaminating Activities.

1912 FIP

The 1912 FIP shows that buildings have been constructed on the Phase I Property. A paper mill (PCA) is present on the south end of the property and a saw mill is present near the centre of the property. The latter building (buildings 507 and 508) contains ten (10) boilers and a boiler stack. An underground tunnel connects the two buildings, and a second tunnel extends from the saw mill to the north end of the Phase I Property. A tunnel also connects the paper mill building to Chaudière East (under Bridge Street / Booth Street).

A waste carrier and waste burner (PCAs) are indicated to the northeast of the Phase I Property.

Mill buildings have been constructed on Chaudière East, and include a sulphite pulp mill, an acid storage room, a cardboard mill, beater mill, a second pulp mill, workshop, and lime and sulphite storage (PCAs). Victoria Island includes a storage battery plant (PCA), and a power house at the end of the Buchanan Channel at the south end of the island. Buildings on Albert Island include a paint shop and machine shop (PCAs). Approximately 180 m to the southeast of the Phase I Property, on the south bank of the Ottawa River, there are railway tracks (PCA).

1922 FIP

The majority of the Phase I Property appears to be in the same configuration as in 1912, with the exception of a new building (506) between the paper mill (buildings 501, 502, 503) and saw mill buildings (507 and 508).

1956 FIP

The Phase I Property is occupied by the same paper mill on the south end of the site, tramways, a coal storage area with seven (7) boilers and two (2) boiler stacks (PCA) at buildings 506 and 507, and a train shed (PCA) has been added to the west end of building 503. Buildings 508a and 509 (labeled a turbine house) have also been constructed.

The saw mill and splitter mill previously located to the north of the Phase I Property have been demolished. The buildings on Albert Island are occupied by stores, including a harness shop, and offices. No significant changes are apparent on Chaudière East. A steam power plant has been constructed on the west side of Victoria Island, and has six (6) boilers (PCA). Multiple commercial buildings have been constructed along the south side of Victoria Island, and are occupied by the Ottawa Transportation Commission, the National Film Board, The People's Gas Supply Co. (PCA), and furniture storage.

City of Ottawa Street Directories

City Directories for the Phase I Property were reviewed at approximate ten-year intervals from 1891 to 2011. The property was listed as James Parr Planing Mill, Ottawa Flour and Oatmeal Mill, lumber yards, CAR grounds, CAR freight office, and Armstrong J&P Carriage Makers in 1891. The property continued to be listed as a lumber yard until 1934, when it was listed as J.R. Ltd. pulp mill and CNR lumber tracks. The property was listed as E.B. Eddy Co. from 1949 to 1992, as Comstock Canada in 2000, and as Domtar Inc. in 2011.

The former uses of the Phase I Property as a flour mill, carriage maker, pulp mill, and Canada Atlantic Railway (CAR) grounds, are considered to be PCAs representing APECs on the Phase I Property.

Previous Engineering Reports

The following engineering reports were reviewed as part of the current Phase I Environmental Site Assessment:

- ☐ "Phase I Environmental Site Assessment – Domtar Lands Redevelopment, Chaudière and Albert Islands, 3, 4 and 6 Booth Street, Ottawa, Ontario", prepared by DST Consulting Engineers, dated August 2014.

A Phase I Environmental Site Assessment was carried out for the Phase I Property by DST in 2014. At the time this assessment was carried out, the pulp and paper mill buildings had not been demolished, although the buildings were not operational. Multiple Potentially Contaminating Activities were identified on the Phase I Property and surrounding lands, some of which were still present at the time of the 2014 site visit. These PCAs included acid and sulphite storage on Chaudière East, coal-powered electricity generation on the Phase I Property, multiple former and current fuel storage tanks, fill of unknown quality throughout the property, a paint shop on Albert Island, the pulp and paper mill buildings on the Phase I Property and adjacent lands, transformers on Chaudière East and the

lands to the north of the Phase I Property, and a waste burner on the land to the north of the Phase I Property.

The former layout of the pulp and paper mill building and the results of an ERIS search (including chain of title) were included in the DST Phase I ESA and are referenced in this report. The former building outline and building numbers are indicated on Drawing PE3584-3 Site Plan attached to this report.

- ❑ “Phase Two Environmental Site Assessment Update, Domtar Lands Redevelopment, Chaudière and Albert Islands, 3,4 and 6 Booth Street, Ottawa Ontario”, prepared by DST Consulting Engineers, dated June 2016.

This Phase II ESA Update was completed to update the previous Phase II ESAs that were completed in 2008 and 2015. The update added some parcels of land and compared analytical testing results to the updated O. Reg. 153/04 Site Condition Standards. The updated report identified soil and groundwater exceedances on the Phase I Property.

The original Phase II ESA field programs included the advancement of thirty-two (32) boreholes, of which twenty-six (26) were instrumented with groundwater monitoring wells. Two (2) monitoring wells and three (3) boreholes were placed in the current Phase I Property.

The field program determined that soil on the Phase I Property consists of fill material overlying bedrock, and varies in depth from 0 to 7 m. The bedrock consisted of grey limestone with fossiliferous sections and narrow black shale horizons, with weathering in the top 1.5 m.

Soil samples were submitted for laboratory analysis from BHWM14 and BHMW29. Sodium, PAH parameters, two metals parameters, and PHCs were identified in excess of the Table 7 and Table 9 standards in BHMW14. PAHs, metals, PHCs and VOCs were identified in excess of the standards in BHMW29. Groundwater samples submitted for analysis were in compliance with the applicable standards.

Based on the presence of contaminated soil at the Phase I Property, the completion of a soil remediation or risk assessment were recommended for the property.

4.2 Environmental Source Information

Environment Canada

A search of the National Pollutant Release Inventory (NPRI) was conducted electronically on November 1, 2018. The subject site and adjacent properties were not listed in the NPRI database. No records of pollutant release were listed in the database for properties located within the Phase I Study Area.

PCB Inventory

A search of national PCB waste storage sites was conducted. Eddy Forest Products Ltd., at 6 Booth Street, was listed as a PCB waste storage site. According to the City of Ottawa HLUI report, the source of these PCBs were transformers containing high levels (>1000ppm) and other materials containing low levels of PCBs. The historic presence of these PCBs is considered to be a PCA.

The previous Phase I ESA completed by DST included an ERIS search, which returned additional, more recent (up to 2008) results for PCB storage sites in the Phase I area. Seven (7) records were listed from the National PCB database, five (5) of which were for E.B. Eddy Forest Products Ltd., at 6 Booth Street. One (1) was for Domtar Inc. (also at 6 Booth Street), and one (1) was for Domtar Inc. at 3 rue Eddy. Six (6) records were identified in the Ontario PCB database (1987-2004), all for sites located at 6 Booth Street, and owned by E.B. Eddy Forest Products. The Ontario database also notes that the sites consisted of transformers, bulk liquid high concentration PCBs, and drums and other materials containing low concentration PCBs.

The precise locations of the PCB storage sites are not known; however, the former presence of PCBs on or in the vicinity of the Phase I Property is considered to be a PCA.

Ontario Ministry of Environment, Conservation and Parks (MECP) Instruments

A request was submitted to the MECP Freedom of Information office for information with respect to certificates of approval, permits to take water, certificates of property use or any other similar MECP issued instruments for the site.

Based on the MECP response dated November 16, 2018, multiple records were identified for the Phase I Property. An Environmental Compliance Approval was issued for a sewage works, treatment of cooling water, and containment of transformer oil on the hydro property to the north of the Phase I Property. The

ongoing waste generation and PCB storage on the hydro property is considered to be a PCA and APEC on the Phase I Property.

A copy of the MECP response is provided in Appendix 2.

MECP Coal Gasification Plant Inventory

The Ontario Ministry of Environment and Climate Change document entitled "Municipal Coal Gasification Plant Site Inventory, 1991" was reviewed to reference the locations of former plants with respect to the site. No coal gasification plants were identified within 1 km of the subject site.

MECP Incident Reports

A request was submitted to the MECP Freedom of Information office for information with respect to records concerning environmental incidents, orders, offences, spills, discharges of contaminants or inspections maintained by the MECP for the site or adjacent properties. Based on the MECP response dated November 16, 2018, several incidents have been reported at or in the vicinity of the subject site; however, they are not considered to pose a concern to the Phase I Property.

An incident report was filed for a diesel fuel spill that occurred on the Phase I Property on September 22, 2018. As a result of a power failure, dewatering pumps failed, and an excavation pit containing a fuel tank flooded with river and rain water. Based on the known volume of the fuel tank prior to the flood, an estimated 50 L of fuel was released into the flooded pit. Diesel was removed from the surface of the water via absorption sheets and a vac truck was used to remove the contaminated water from the spill area. Contaminated water was also pumped to the clarifier tanks located in a building across Booth Street, and subsequently removed from the property. The area of the diesel spill is considered to be a PCA and APEC on the Phase I Property.

A copy of the MECP response is provided in Appendix 2.

MECP Waste Management Records

A request was submitted to the MECP Freedom of Information office for information with respect to waste management records. Based on the MECP response dated November 16, 2018, adjacent properties, also addressed 4 Booth Street, are operated by Chaudière Water Power Inc. (hydro) and Northec Construction and are registered hazardous waste generators. Solid, liquid and gas waste is reportedly disposed of off-site and is not considered to pose a concern to the Phase I Property. A copy of the MECP response is provided in Appendix 2.

MECP Submissions

A request was submitted to the MECP Freedom of Information office for information with respect to reports related to environmental conditions that have been submitted to the MECP. Based on the MECP response dated November 16, 2018, no records with respect to environmental conditions were identified for the Phase I Property. A copy of the MECP response is provided in Appendix 2.

MECP Brownfields Environmental Site Registry

A search of the MECP Brownfields ESR was conducted for properties within the Phase I Study Area. According to the ESR, no Records of Site Condition (RSCs) have been filed for the Phase I Property. No RSCs were identified for properties within the Phase I Study Area.

MECP Waste Disposal Site Inventory

The Ontario Ministry of Environment document titled "Waste Disposal Site Inventory in Ontario, 1991" was reviewed as part of the historical research. This document includes all recorded active and closed waste disposal sites, industrial manufactured gas plants and coal tar distillation plants in the Province of Ontario. No waste disposal sites were identified in the Phase I study area.

Areas of Natural Significance

A search for areas of natural significance and features within the Phase I Study Area was conducted on the web site of the Ontario Ministry of Natural Resources and Forestry (MNRF) on November 1, 2018. According to the MNRF site, no areas of natural significance are present on the Phase I Property or within the Phase I Study Area.

Technical Standards and Safety Authority (TSSA)

The TSSA, Fuels Safety Branch in Toronto was contacted electronically on November 1, 2018 to inquire about current and former underground storage tanks, spills and incidents for the site and neighbouring properties. A response from the TSSA, dated November 1, 2018, indicated that there are records for an expired private fuel outlet, a propane refill centre, and an expired liquid fuel tank on the property addressed 6 Booth Street. The former presence of a fuel outlet at 6 Booth Street is a PCA; however, based on presence of the intervening Buchanan Channel, the former outlet is not considered to represent an APEC on the Phase I Property. A copy of the TSSA correspondence is included in Appendix 2.

City of Ottawa Landfill Document

The document entitled “Old Landfill Management Strategy, Phase I-Identification of Sites, City of Ottawa”, was reviewed. According to the document, no former landfill sites are located on the subject property or in the Phase I study area.

City of Ottawa Historical Land Use Inventory (HLUI)

A request was submitted to the City of Ottawa for a search of the Historical Land Use Inventory (HLUI) database. The response from the City of Ottawa identified multiple potential land use concerns on the Phase I Property and in the Phase I study area. The PCAs listed are the former use of the property as a pulp and paper mill (and associated storage tanks, listed as owned by E.B. Eddy, J.R. Booth, and Domtar), the former presence of PCB-containing transformers at 6 Booth Street, electricity generating stations, and a CPR roundhouse repair shop on Bayview Road. Based on the distance from the subject property (more than 1 km), the former CPR roundhouse is not considered to be a PCA with respect to the Phase I Property; however, the associated railway tracks to the northeast of the roundhouse are considered to be a PCA. A copy of the HLUI is provided in Appendix 2.

4.3 Physical Setting Sources

Aerial Photographs

Historical air photos from the National Air Photo Library were reviewed in approximate ten (10) year intervals. The review period dates back to the first available air photos for the site. Based on the review, the following observations have been made:

- | | |
|------|--|
| 1928 | The Phase I Property is occupied by buildings 501, 502, 503, 506, 508, and 509. Three (3) smaller buildings appear to be present where buildings 507 and 508 will later be constructed. At least two (2) boiler stacks are present on the Phase I Property, and an overhead conveyor runs across the site and all of Chaudière Island in an east-west direction. The central and western portion of the property appears to be used for lumber storage. Adjacent properties are occupied by mill buildings. The lands on the south shore of the Ottawa River, approximately 140 m to the south of the subject property, are occupied by railway tracks and rail storage space. |
|------|--|

- | | |
|------|--|
| 1938 | No significant changes appear to have been made to the Phase I Property, with the exception of the train shed (building 504) which has been constructed at the west end of building 503. |
| 1950 | Buildings 507 and 508 have been constructed near the centre of the property. No other significant changes appear to have been made to the Phase I Property or properties in the Phase I study area. |
| 1967 | The overhead conveyor is no longer present on Chaudière Island, including on the Phase I Property. Some of the buildings to the west, on the west side of Chaudière Island, and at least one building on Chaudière East, appear to have been demolished. The railways and rail yards to the south, on the south shore of the Ottawa River, have been removed and a roadway is under construction in their place. |
| 1979 | No significant changes appear to have been made to the Phase I Property. Several buildings to the northwest have been demolished, and the roadway on the south side of the Ottawa River has been completed. No railways are present in the Phase I study area. |
| 1989 | (Poor scale) No significant changes appear to have been made to the Phase I Property or properties in the Phase I study area. |
| 1992 | The boiler stack on the east side of the Phase I Property is no longer present. No other significant changes appear to have been made to the Phase I Property. A building on the southeast side of Chaudière East has been demolished. |
| 2002 | (City of Ottawa, geoOttawa) The Phase I Property remains unchanged from the previous photograph. A round structure on the west side of the mill building, to the north of the Phase I Property has been removed. |
| 2017 | (City of Ottawa, geoOttawa) The remaining boiler stack near the centre of the mill building complex has been removed. No other significant changes are apparent on the Phase I Property. Part of the land to the northwest has been excavated and/or restructured as part of a hydro power project, and a hydro power generating station has been constructed on the north side of Chaudière Island. |

Laser copies of selected aerial photographs reviewed are included in Appendix 1.

Topographic Maps

Topographic maps were obtained from Natural Resources Canada – The Atlas of Canada website and from the City of Ottawa website. The topographic maps indicate that the site is approximately 45 m above sea level and relatively flat. The regional topography in the general area of the site, beyond the Ottawa River, is relatively flat and slopes gently upwards on either side of the river to the north and south. An illustration of the referenced topographic map is presented on Figure 2 – Topographic Map, appended to this report.

Physiographic Maps

The Ontario Geological Survey publication ‘The Physiography of Southern Ontario, Third Edition’ was reviewed as a part of this assessment. According to the publication and attached mapping, the site is situated within the Ottawa Valley Clay Plains physiographic region, described as “clay plains interrupted by ridges of rock or sand”.

Geological Maps

The Geological Survey of Canada website on the Urban Geology of the National Capital Area was consulted as part of this assessment. Based on this information, bedrock in the area of the site consists of interbedded limestone and shale of the Verulam Formation. Overburden is absent or negligible.

Water Well Records

The MECP well mapping website was accessed to obtain well records for all drilled wells within 250 m of the Phase I Property. According to the MECP website, there are no wells on the Phase I Property. Three (3) records for industrial wells were identified for properties within the Phase I Study Area as well as one well abandonment record. The wells were installed between 1953 and 2014, within limestone bedrock. Copies of the MECP well records are provided in Appendix 2.

Water Bodies and Areas of Natural Significance

The subject site is located on an island in the Ottawa River. To the south, the property borders a part of the Ottawa River called the Buchanan Channel. Other than the Ottawa River, no bodies of water are present within the Phase I Study Area. No areas of natural significance are known to exist within the Phase I Study Area.

5.0 INTERVIEWS

Property Owner Representative

Information has been provided on an on-going basis by the current property owner representative, Ms. Taryn Glancy, and has included previous reports completed for the subject property, historical documents relating to previous site plans (such as locations of previous buildings, fuel storage tanks, and other structures), and information about the current and previous excavations carried out on the subject property.

The information obtained in interviews is consistent with site information obtained from other sources and is considered to be valid.

6.0 SITE RECONNAISSANCE

6.1 General Requirements

The site visit was conducted on November 8, 2018. Weather conditions were overcast, with a temperature of approximately 6° C. Personnel from the Environmental Department of Paterson Group conducted the site visit. The uses of neighbouring properties within the Phase I Study Area were also assessed at the time of the site visit, from publicly accessible areas. Photographs of the Phase I Property and adjacent lands are provided in the Figures Section of this report.

6.2 Specific Observations at Phase I Property

Buildings and Structures

No buildings or structures are located on the Phase I Property, with the exception of several walls from mostly demolished buildings along the eastern edge of the Phase I Property. A parking garage is currently under construction and construction site trailers and equipment are located in the northern portion of the property.

Underground Utilities and Below Grade Structures

Underground service locates were not obtained as part of the Phase I ESA. Telephone and hydro services are provided via overhead wires.

Site Features

The Phase I Property is currently unoccupied, with the exception of an underground parking garage that is currently under construction on the southern half of the site. Any fill previously present on the property has been removed, and bedrock in the southern portion has been blasted to create the subsurface levels required for the parking structure. Clean granular fill has been placed throughout the site as part of the ongoing redevelopment and to facilitate vehicle access. A paved roadway traverses the northern edge of the site and is used for construction vehicle access.

Site topography is relatively flat. Site drainage consists of surficial infiltration and sheet flow to Booth Street, the Ottawa River (Buchanan Channel) and the low-lying areas on the adjacent lands.

With the exception of several portable generators, no ASTs or evidence of USTs, fuels or chemicals, was observed on the Phase I Property at the time of the site visit.

No underground structures were noted on the exterior of the Phase I Property at the time of the site visit.

Waste generated on site includes construction waste which is collected and removed on an as-needed basis by on-site contractors. Domestic waste water generated on site is discharged to on-site holdings tanks, which are also emptied on an as-needed basis by contractors. No other waste is currently generated on site.

No evidence of rail lines was noted on the Phase I Property at the time of the site visit. Recent excavation of fill material was noted throughout the Phase I Property at the time of the site visit, as well as extensive areas of bedrock blasting. There were no unidentified substances on the exterior of the Phase I Property at the time of the site visit.

Hazardous Materials

Ozone-depleting substances (ODSs) noted at the time of the site visit include fire extinguishers. No potential sources of polychlorinated biphenyls (PCBs) were noted at the time of the site assessment. No other potentially hazardous materials were noted on the Phase I Property at the time of the site visit.

Neighbouring Properties

An inspection of the neighbouring properties was conducted from publicly accessible roadways at the time of the site inspection. Land use adjacent to the subject site was as follows:

- ☐ North – Hydro property, followed by the Ottawa River.
- ☐ South – Buchanan Channel (Ottawa River) followed by office buildings on Albert Island.
- ☐ East – Booth Street, followed by non-operational pulp and paper mill buildings;
- ☐ West – Vacant land undergoing development in conjunction with the Phase I Property, and a former paper mill building (part of Building.

The hydro property to the north of the Phase I Property is a potentially contaminating activity (PCA) considered to represent an APEC on the subject land. The former pulp and paper mill buildings to the east and west of the Phase I Property are considered to be PCAs; however, they are not considered to result in APECs on the Phase I Property. No other PCAs were identified within the Phase I Study Area. Current land use within the Phase I Study Area is illustrated on Drawing: PE3584-4 – Surrounding Land Use Plan in the Figures section of this report, following the text.

7.0 REVIEW AND EVALUATION OF INFORMATION

7.1 Land Use History

The following tables indicate the current and past uses of the site as well as associated potentially contaminating activities dating back to the first developed use of the site.

Table 1 Land Use History – 4 Booth Street				
Time Period	Name of Owner	Property Use	Description of Property Use	Other Observations from Aerial Photos, FIPs, etc.
1853-1890s	Perley and Pattee	Lumber mill	Lumber, saw mill	1878 FIP indicates lumber piles on Phase I Property, some buildings on the south end, saw mills to the north, owned by Perley and Pattee
1890s-1920s	J.R. Booth Ltd.	Lumber mill	Lumber, saw mill	1922 FIP indicates site was owned by J.R. Booth, occupied by paper mill buildings
1920s-1998	E.B. Eddy Company	Pulp and paper mill	Pulp and paper mill	Various buildings including paper mill on aerial photos, 1956 FIP Various buildings including paper mill on aerial photos, 1956 FIP
1998-2006	Domtar Inc.	Pulp and paper mill	Pulp and paper mill	
2006-2017	Domtar Inc.	Vacant	Vacant	
2017-present	Windmill Dream	Vacant	Unoccupied, construction site	Buildings have been demolished, site undergoing redevelopment at time of site visit

Potentially Contaminating Activities

The following historical and/or existing PCAs were identified on the Phase I Property:

- ☐ Item 18, Table 2, O.Reg. 153/04 as amended: “Electricity Generation, Transformation and Power Stations” - this PCA was identified based on the former presence of coal-powered generators on the Phase I Property.
- ☐ Item 28, Table 2, O.Reg. 153/04 as amended: “Gasoline and Associated Products Storage in Fixed Tanks” – this PCA was identified based on the

former presence of fuel storage tanks on-site, and a diesel spill in September 2018.

- ☐ Item 30, Table 2, O.Reg. 153/04 as amended: “Importation of Fill Material of Unknown Quality” – this PCA was identified based on the former presence of fill on the Phase I Property.
- ☐ Item 45, Table 2, O.Reg. 153/04 as amended: “Pulp, Paper and Paperboard Manufacturing and Processing” – this PCA was identified based on the historic presence of a pulp and paper mill on-site.
- ☐ Item 46, Table 2, O.Reg. 153/04 as amended: “Rail Yards, Tracks and Spurs” – this PCA was identified based on the historic presence of tramways on-site.

The aforementioned on-site PCAs are considered to result in APECs on the Phase I Property as further discussed in the following section.

Existing or historical off-site PCAs considered to result in APECs on the Phase I Property include the following:

- ☐ Item 28, Table 2, O.Reg. 153/04 as amended: “Gasoline and Associated Products Storage in Fixed Tanks” – this PCA was identified based on the former presence of fuel storage tanks on adjacent lands.
- ☐ Item 45, Table 2, O.Reg. 153/04 as amended: “Pulp, Paper and Paperboard Manufacturing and Processing” – this PCA was identified based on the historic presence of a pulp and paper mill on the adjacent lands to the north.
- ☐ Item 52, Table 2, O.Reg. 153/04 as amended: “Storage, maintenance, fuelling and repair of equipment, vehicles, and material used to maintain transportation systems” - this PCA was identified based on the former train shed on the adjacent lands to the west.
- ☐ Item 58, Table 2, O.Reg. 153/04 as amended: “Item 45, Table 2, O.Reg. 153/04 as amended: “Waste Disposal and Waste Management, including thermal treatment, landfilling and transfer of waste, other than use of biosoils as soil conditioners” – this PCA was identified based on the historic presence of a waste burner to the north of the Phase I Property.

On-site and off-site PCAs considered to represent APECs on the Phase I Property are shown in red on Drawing PE3584-3 - Site Plan.

Additional PCAs identified in the Phase I study area include the following:

- ☐ Item 1, Table 2, O.Reg. 153/04 as amended: “Acid and Alkali Manufacturing, Processing and Bulk Storage” - this PCA was identified based on the former acid storage tanks located on Chaudière East.
- ☐ Item 6, Table 2, O.Reg. 153/04 as amended: “Battery Manufacturing, Recycling and Bulk Storage” - this PCA was identified based on the former battery plant on Albert Island, to the south, and Victoria Island, to the southeast.
- ☐ Item 18, Table 2, O.Reg. 153/04 as amended: “Electricity Generation, Transformation and Power Stations” - this PCA was identified based on the former presence of coal-powered generators on Victoria Island.
- ☐ Item 28, Table 2, O.Reg. 153/04 as amended: “Gasoline and Associated Products Storage in Fixed Tanks” – this PCA was identified based on the former presence of fuel storage tanks on Albert Island and Chaudière East.
- ☐ Item 39, Table 2, O.Reg. 153/04 as amended: “Paints Manufacturing, Processing and Bulk Storage” - this PCA was identified based on the former paint shop located on Albert Island.
- ☐ Item 45, Table 2, O.Reg. 153/04 as amended: “Pulp, Paper and Paperboard Manufacturing and Processing” – this PCA was identified based on the historic presence of a pulp and paper mill on Chaudière East.
- ☐ Item 55, Table 2, O.Reg. 153/04 as amended: “Item 45, Table 2, O.Reg. 153/04 as amended: “Transformer Manufacturing, Processing and Use” – this PCA was identified based on the historic presence of transformers on Chaudière East and Albert Island.
- ☐ Item 58, Table 2, O.Reg. 153/04 as amended: “Item 45, Table 2, O.Reg. 153/04 as amended: “Waste Disposal and Waste Management, including thermal treatment, landfilling and transfer of waste, other than use of biosoils as soil conditioners” – this PCA was identified based on the historic presence of PCB waste at 6 Booth Street.

Areas of Potential Environmental Concern

Table 2 Areas of Potential Environmental Concern					
Area of Potential Environmental Concern	Location of Area of Potential Environmental Concern with respect to Phase I Property	Potentially Contaminating Activity	Location of PCA (on-site or off-site)	Contaminants of Potential Concern	Media Potentially Impacted (Groundwater, Soil, and/or Sediment)
APEC 1	Fill of unknown quality throughout the Phase I Property	PCA 30 – Importation of Fill Material of Unknown Quality	On-site	PAHs, BTEX, VOCs, PHCs (F1-F4), metals, PCBs	Soil and Groundwater
APEC 2	Central area extending southward to the edge of the Phase I Property – resulting from fuel spill	PCA 28 – Gasoline and Associated Products Storage in Fixed Tanks	On-site	PHCs (F1-F4), BTEX	Soil and Groundwater
APEC 3	Northwest corner of the Phase I Property – resulting from diesel UST, pump, and bunker C AST	PCA 28 – Gasoline and Associated Products Storage in Fixed Tanks	Off-site	PHCs (F1-F4), BTEX, PAHs	Soil and Groundwater
APEC 4	North-central area – resulting from former fuel truck unloading area	PCA 28 – Gasoline and Associated Products Storage in Fixed Tanks	Off-site	PHCs (F1-F4), BTEX, PAHs	Soil and Groundwater

Table 2 Areas of Potential Environmental Concern					
Area of Potential Environmental Concern	Location of Area of Potential Environmental Concern with respect to Phase I Property	Potentially Contaminating Activity	Location of PCA (on-site or off-site)	Contaminants of Potential Concern	Media Potentially Impacted (Groundwater, Soil, and/or Sediment)
APEC 5	Northeast corner – resulting from former pulp mill, waste burner	PCA 45 - Pulp, Paper and Paperboard Manufacturing and Processing PCA 58 - Waste Disposal and Waste Management, including thermal treatment, landfilling and transfer of waste, other than use of biosoils as soil conditioners	Off-site	PAHs, metals, PCBs	Soil and Groundwater
APEC 6	Along west side of the Phase I Property – resulting from coal storage and transportation	PCA 18 – Electricity Generation, Transformation and Power Stations	Off-site	PHCs (F1-F4), PAHs	Soil and Groundwater
APEC 7	East side of Phase I Property – resulting from former ASTs	PCA 28 – Gasoline and Associated Products Storage in Fixed Tanks	Off-site	PHCs (F1-F4), BTEX	Soil and Groundwater
APEC 8	West side of the Phase I Property – resulting from former on-site tramway tracks	PCA 46 - Rail Yards, Tracks and Spurs	On-site	PAHs, PHCs (F1-F4), metals	Soil and Groundwater
APEC 9	Southwest portion of the Phase I Property – resulting from former ASTs	PCA 28 – Gasoline and Associated Products Storage in Fixed Tanks	Off-site	PHCs (F1-F4), BTEX	Soil and Groundwater

Table 2 Areas of Potential Environmental Concern					
Area of Potential Environmental Concern	Location of Area of Potential Environmental Concern with respect to Phase I Property	Potentially Contaminating Activity	Location of PCA (on-site or off-site)	Contaminants of Potential Concern	Media Potentially Impacted (Groundwater, Soil, and/or Sediment)
APEC 10	Southwest portion of the Phase I Property – resulting from former on-site oiler shack	PCA 28 – Gasoline and Associated Products Storage in Fixed Tanks	Off-site	PHCs (F ₁ -F ₄), BTEX	Soil and Groundwater
APEC 11	South side of the Phase I Property – resulting from former diesel AST	PCA 28 – Gasoline and Associated Products Storage in Fixed Tanks	Off-site	PHCs (F ₁ -F ₄), BTEX	Soil and Groundwater
APEC 12	South-central portion of the Phase I Property – resulting from former paper mill	PCA 45 - Pulp, Paper and Paperboard Manufacturing and Processing	On-site	PAHs, BTEX, PHCs (F ₁ -F ₄), metals, PCBs	Soil and Groundwater

Contaminants of Potential Concern (CPCs)

Based on the APECs identified above, CPCs in the soil and/or groundwater include the following:

- ☐ Polycyclic aromatic compounds (PAHs);
- ☐ Polychlorinated biphenyls (PCBs);
- ☐ Benzene, ethylbenzene, toluene and xylenes (BTEX);
- ☐ Volatile organic compounds (VOCs);
- ☐ Petroleum hydrocarbons (PHCs, Fractions F₁-F₄); and
- ☐ Metals.

7.2 Conceptual Site Model

Geological and Hydrogeological Setting

The Geological Survey of Canada website on the Urban Geology of the National Capital Area was consulted as part of this assessment. Based on this information, bedrock in the area of the site consists of interbedded limestone and shale of the

Verulam Formation and limestone of the Bobcaygeon Formation. Overburden soils are non-existent.

Contaminants of Potential Concern

The CPCs identified in this Phase I ESA are listed in Section 7.1 of this report.

The mechanisms of contaminant transport within the site soils include physical transportation and leaching. Physical transportation includes any intentional or unintentional movement or distribution of soil by physical means. Contamination at ground surface may be physically transported by vehicle movement or site grading. Leaching may occur in areas where the ground surface consists of gravel, where asphalt quality is poor, or where the bedrock is cracked/weathered; precipitation infiltrating in these areas may transport surficial contaminants into lower strata. As such, this mechanism represents a potential pathway for soil contaminants to migrate into site groundwater.

The mechanisms of contaminant transport within the groundwater system include advection, dispersion, and diffusion. Advection and dispersion will be the dominant mechanisms of contaminant transport in soils with higher hydraulic conductivities, such as sands, gravels, silts, and some glacial till soils, whereas diffusion will dominate in soils with lower hydraulic conductivity, such as clays.

Buildings and Structures

The Phase I Property is currently vacant and has been extensively excavated and blasted. No buildings are present on the property. Construction site trailers on the north end of the site and the exterior walls of former buildings on the south end of the site were present at the time of the site visit. An underground parking garage structure was under construction on the southern half of the Phase I Property.

Water Bodies

As noted previously, the Phase I Property is located on the south side of Chaudière Island in the Ottawa River. The river runs in an approximate southwest to northeast direction. No other water bodies are present on the Phase I Property or within the Phase I Study Area.

Areas of Natural Significance

No areas of natural significance are known to exist within the Phase I Study Area, although one earth science Area of Natural Scientific Interest (ANSI) is located on Victoria Island, approximately 300 m to the east of the Phase I Property.

Potable Water Wells

The MECP well mapping website was accessed to obtain well records for all drilled wells within 250 m of the Phase I Property. There are no records for potable wells on the Phase I Property or in the Phase I study area. Two industrial water supply wells were installed on Victoria Island in 1953 and 1954.

Monitoring Wells

The MECP well mapping did not identify any monitoring well records for the Phase I Property. One (1) record for a monitoring well was identified on Albert Island (dated 2006), and one well abandonment record (2014) was identified on Victoria Island.

Neighbouring Land Use

Neighbouring land use in the Phase I Study Area is light industrial (hydro property to the north) and former industrial (unoccupied buildings). Land use is shown on Drawing PE3584-4 - Surrounding Land Use Plan.

Potentially Contaminating Activities and Areas of Potential Environmental Concern

As per Section 7.1 of this report, historical and existing PCAs resulting in APECs on the Phase I Property include the following: fuel storage on and adjacent to the Phase I Property, a former pulp and paper mill on and adjacent to the Phase I Property, former tramway tracks on and adjacent to the Phase I Property.

The former pulp and paper mill PCAs located to the east and southeast of the Phase I Property (on Chaudière East and Victoria Island) are not considered to result in APECs on the Phase I Property based on their separation distance (at least 40 m) and down-gradient location. The PCAs located to the south of the Phase I Property (on Albert Island) are not considered to result in APECs on the Phase I Property based on their separation distance and cross-gradient location.

Assessment of Uncertainty and/or Absence of Information

The information available for review as part of the preparation of this Phase I ESA is considered to be sufficient to conclude that there are potentially contaminating activities on the subject site and neighbouring properties which have resulted in areas of potential environmental concern on the Phase I Property. The presence of potentially contaminating activities was confirmed by a variety of independent sources. As such, the conclusions of this report are not affected by uncertainty which may be present with respect to the individual sources.

8.0 CONCLUSIONS

Assessment

Paterson Group was retained by Windmill Dream Unlimited to conduct a Phase I Environmental Site Assessment (ESA) of part of the property addressed 4 Booth Street. The purpose of this Phase I ESA was to research the past and current use of the Phase I Property and Phase I ESA Study Area and to identify any environmental concerns with the potential to have impacted the subject land.

Based on the findings of the historical research conducted as part of the Phase I ESA, the Phase I Property was first developed in the early 1800s as a lumber storage yard for a lumber mill located on the adjacent land to the north. The entire Chaudière Island upon which the Phase I Property is located was used for lumber processing. The property was later developed as a pulp and paper mill. The historical use of the adjacent and neighbouring lands was also lumber and pulp and paper processing, with some commercial businesses to the south, on Albert Island. Several tramways traversed the property (and all of Chaudière Island) from the 1900s to at least 1950s.

The Phase I Property is no longer operated as an industrial mill. Operations at the property ceased in 2006, and it was left vacant until 2018, when the majority of the buildings were demolished, and all fill material was removed from the site.

At the time of the site visit, the current uses of the adjacent and neighbouring properties within the Phase I ESA Study Area were observed from publicly accessible areas. The adjacent property to the north is occupied by Hydro Ottawa. The lands to the west are vacant, and the lands to the east, across Booth Street, are occupied by abandoned pulp mill buildings. Albert Island, to the south of the Phase I Property, is occupied by offices located in former industrial/commercial buildings.

Based on the historical research in combination with observations made at the time of the site visit, potentially contaminating activities have been identified which have resulted in APECs on the Phase I Property.

Recommendations

Based on the results of the Phase I ESA, it is our opinion that a Phase II Environmental Site Assessment is required for the property.

9.0 STATEMENT OF LIMITATIONS

This Phase I - Environmental Site Assessment report has been prepared in general accordance with O.Reg. 153/04 as amended and meets the requirements of CSA Z768-01. The conclusions presented herein are based on information gathered from a limited historical review and field inspection program. The findings of the Phase I - ESA are based on a review of readily available geological, historical and regulatory information and a cursory review made at the time of the field assessment. The historical research relies on information supplied by others, such as, local, provincial and federal agencies and was limited within the scope-of-work, time and budget of the project herein.

Should any conditions be encountered at the subject site and/or historical information that differ from our findings, we request that we be notified immediately in order to allow for a reassessment.

This report was prepared for the sole use of Windmill Dream Unlimited. Permission and notification from Windmill Dream and Paterson Group will be required to release this report to any other party.

Paterson Group Inc.



Anna Graham, B.Sc., M.E.S.



Mark S. D'Arcy, P.Eng., QP_{ESA}



Report Distribution:

- Windmill Dream Unlimited
- Paterson Group

10.0 REFERENCES

Federal Records

Air photos at the Energy Mines and Resources Air Photo Library.
National Archives.
Maps and photographs (Geological Survey of Canada surficial and subsurface mapping).
Natural Resources Canada – The Atlas of Canada.
Environment Canada, National Pollutant Release Inventory.
PCB Waste Storage Site Inventory.

Provincial Records

MECP Freedom of Information and Privacy Office.
MECP Municipal Coal Gasification Plant Site Inventory, 1991.
MECP document titled “Waste Disposal Site Inventory in Ontario”.
MECP Brownfields Environmental Site Registry.
Office of Technical Standards and Safety Authority, Fuels Safety Branch.
MNRF Areas of Natural Significance.
MECP Water Well Inventory.

Municipal Records

City of Ottawa Document “Old Landfill Management Strategy, Phase I - Identification of Sites.”, prepared by Golder Associates, 2004.
The City of Ottawa eMap website.

Local Information Sources

Phase I Environmental Site Assessment – Domtar Lands Redevelopment, Chaudière and Albert Islands, 3, 4 and 6 Booth Street, Ottawa Ontario, prepared by DST Consulting Engineers, August 2014.
Phase II Environmental Site Assessment Update – Domtar Lands Redevelopment, Chaudière and Albert Islands, 3, 4 and 6 Booth Street, Ottawa Ontario, prepared by DST Consulting Engineers, June 2016.
Draft Remedial Action Plan, prepared by Paterson Group, December 2015.

Public Information Sources

Google Earth.
Google Maps/Street View.

FIGURES

FIGURE 1 – KEY PLAN

FIGURE 2 – TOPOGRAPHIC MAP

DRAWING PE3584-3 – SITE PLAN

DRAWING PE3584-4 – SURROUNDING LAND USE PLAN

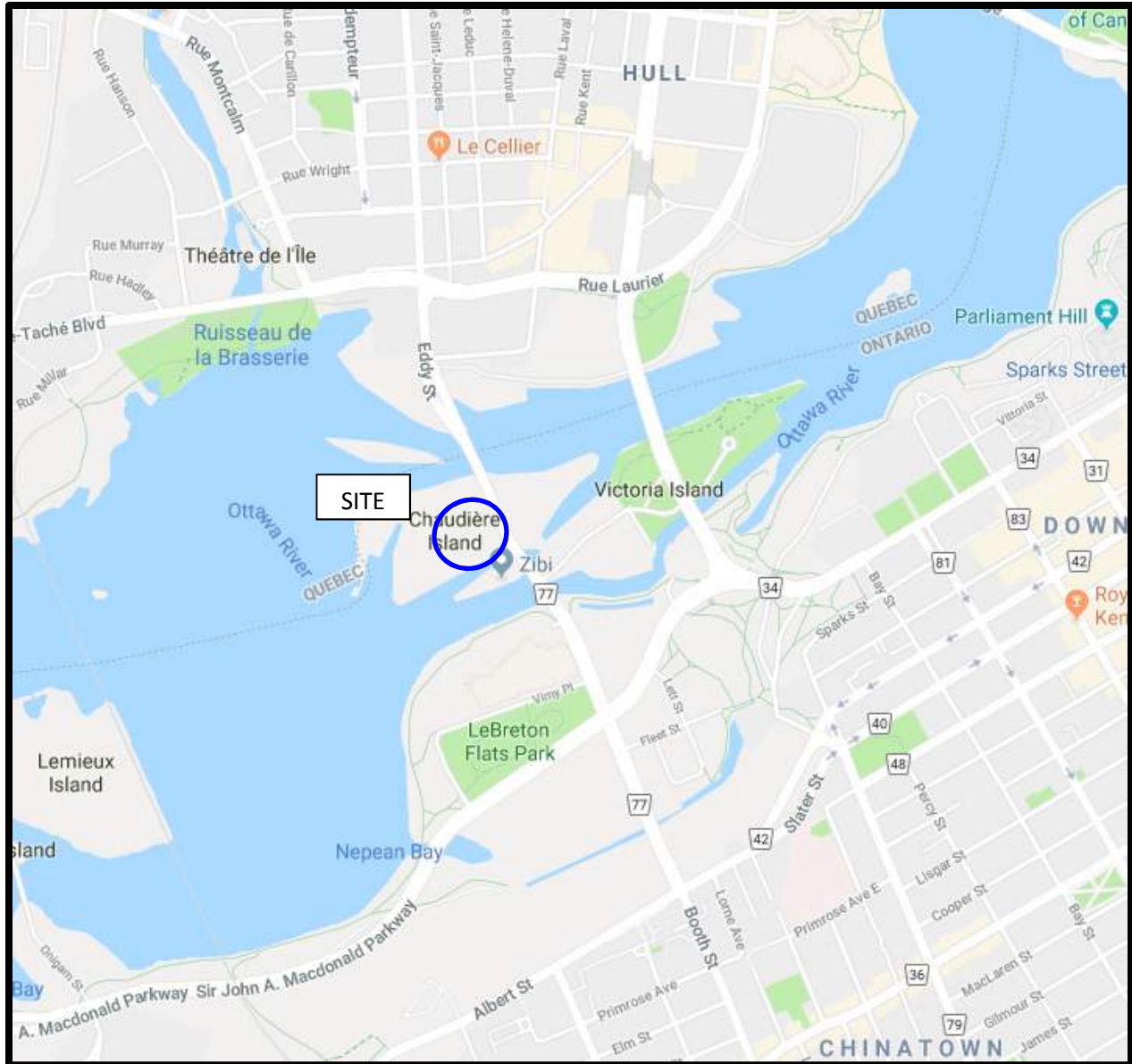


FIGURE 1
KEY PLAN

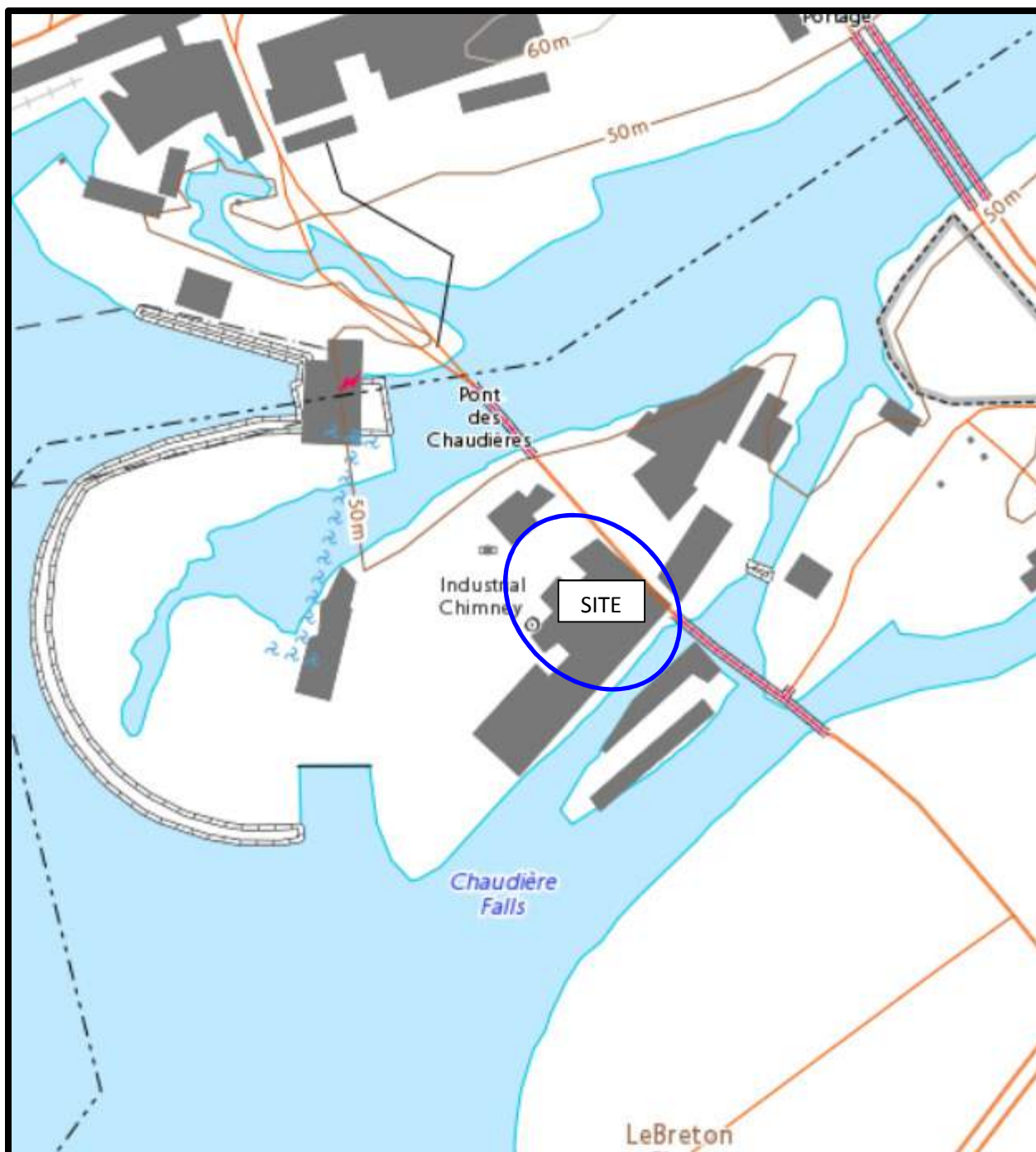
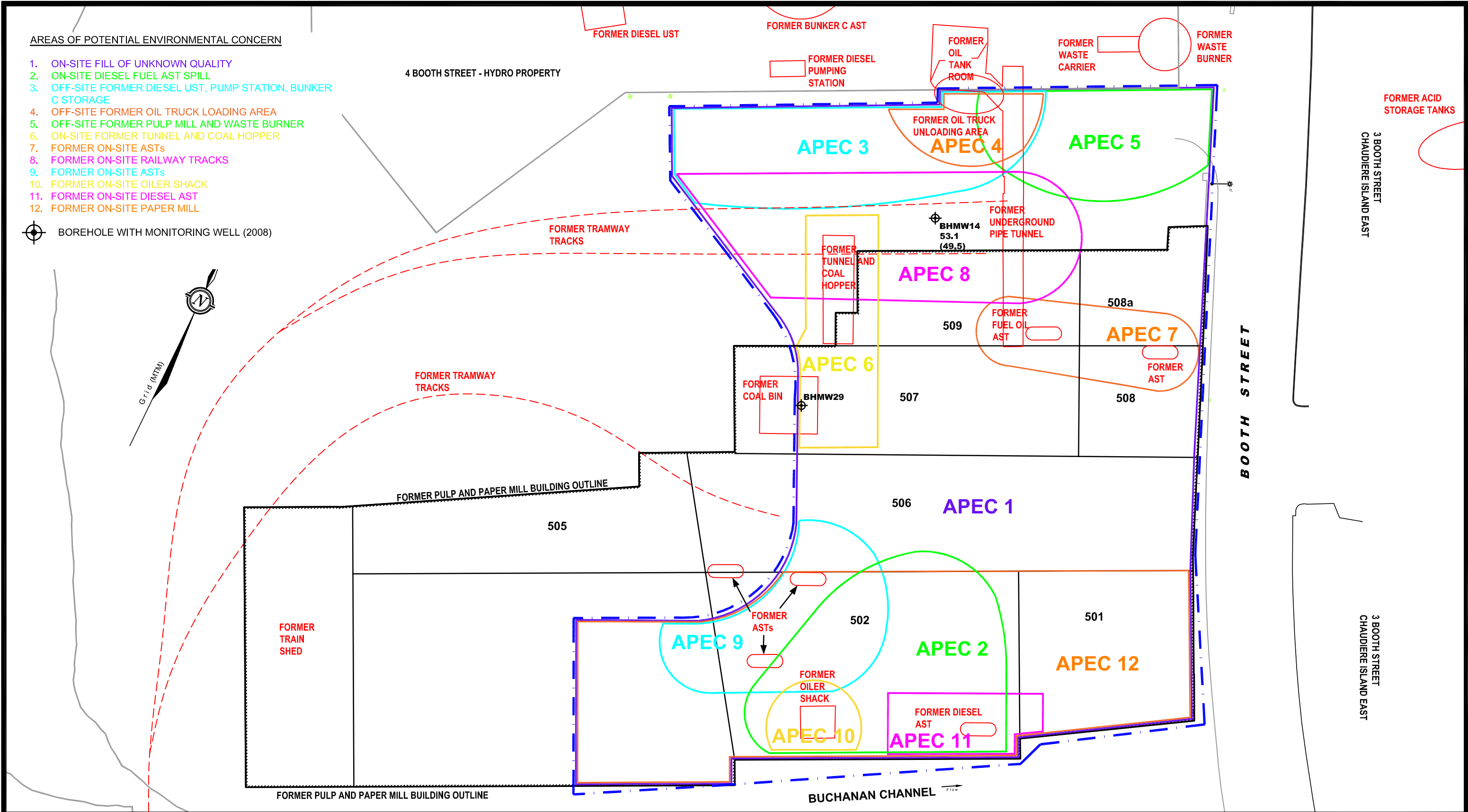


FIGURE 2
TOPOGRAPHIC MAP

AREAS OF POTENTIAL ENVIRONMENTAL CONCERN

1. ON-SITE FILL OF UNKNOWN QUALITY
2. ON-SITE DIESEL FUEL AST SPILL
3. OFF-SITE FORMER DIESEL UST, PUMP STATION, BUNKER C STORAGE
4. OFF-SITE FORMER OIL TRUCK LOADING AREA
5. OFF-SITE FORMER PULP MILL AND WASTE BURNER
6. ON-SITE FORMER TUNNEL AND COAL HOPPER
7. FORMER ON-SITE ASTs
8. FORMER ON-SITE RAILWAY TRACKS
9. FORMER ON-SITE ASTs
10. FORMER ON-SITE OILER SHACK
11. FORMER ON-SITE DIESEL AST
12. FORMER ON-SITE PAPER MILL

BOREHOLE WITH MONITORING WELL (2008)



patersongroup
consulting engineers

154 Colonnade Road South
Ottawa, Ontario K2E 7J5
Tel: (613) 226-7381 Fax: (613) 226-6344

0			
NO.	REVISIONS	DATE	INITIAL

WINDMILL DREAM UNLIMITED
PHASE I ENVIRONMENTAL SITE ASSESSMENT
DOMTAR LANDS REDEVELOPMENT - CHAUDIERE ISLAND

OTTAWA, ONTARIO
Title:
SITE PLAN

Scale:	1:600	Date:	12/2018
Drawn by:	AG	Report No.:	PE3584-1
Checked by:	LK	Dwg. No.:	PE3584-3
Approved by:	CDS	Revision No.:	0

POTENTIALLY CONTAMINATING ACTIVITIES:

1. FORMER FUEL USTs, FORMER DIESEL PUMPING STATION (ITEM 28)
2. FORMER PULP MILL BUILDING (ITEM 45)
3. FORMER FUEL TRUCK UNLOADING AREA (ITEM 28)
4. FORMER WASTE CARRIER AND BURNER (ITEM58)
5. FORMER TRAMWAY TRACKS (ITEM 46)
6. FORMER COAL HOPPER (ITEM 18)
7. FORMER COAL STORAGE BIN (ITEM 18)
8. FORMER COAL BOILERS (ITEM 18)
9. FORMER FUEL ASTs (ITEM 28)
10. FORMER TRAIN SHED (ITEM 52)
11. FORMER FUEL TANKS (ITEM 28)
12. FORMER OILER SHACK (ITEM 28)
13. FORMER FUEL AST (ITEM 28)
14. FORMER FILL OF UNKNOWN QUALITY (ITEM 30)
15. FORMER TRANSFORMERS (ITEM 55)
16. FORMER OIL ASTs (ITEM 28)
17. FORMER SULPHITE PULP MILL AND BOARD MILL (ITEM 45)
18. FORMER ACID STORAGE TANKS (ITEM 1)
19. FORMER TRANSFORMERS (ITEM 55)
20. FORMER ASTs (ITEM 28)
21. FORMER PULP MILL (ITEM 45)
22. FORMER BATTERY PLANT (ITEM 6)
23. FORMER GASOLINE UST (ITEM 28)
24. FORMER MACHINE SHOP (ITEM
25. FORMER PAINT SHOP (ITEM 39)
26. FORMER RAILWAY TRACKS (ITEM 46)
27. FORMER ASTs (ITEM 28)
28. FORMER OIL ASTs (ITEM 28)
29. FORMER PULP MILL AND POWER HOUSE (ITEM 45)
30. FORMER PCB STORAGE SITE



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0			
NO.	REVISIONS	DATE	INITIAL

WINDMILL DREAM UNLIMITED
PHASE I ENVIRONMENTAL SITE ASSESSMENT
DOMTAR LANDS REDEVELOPMENT - CHAUDIERE ISLAND

OTTAWA, ONTARIO
Title:

SURROUNDING LAND USE PLAN

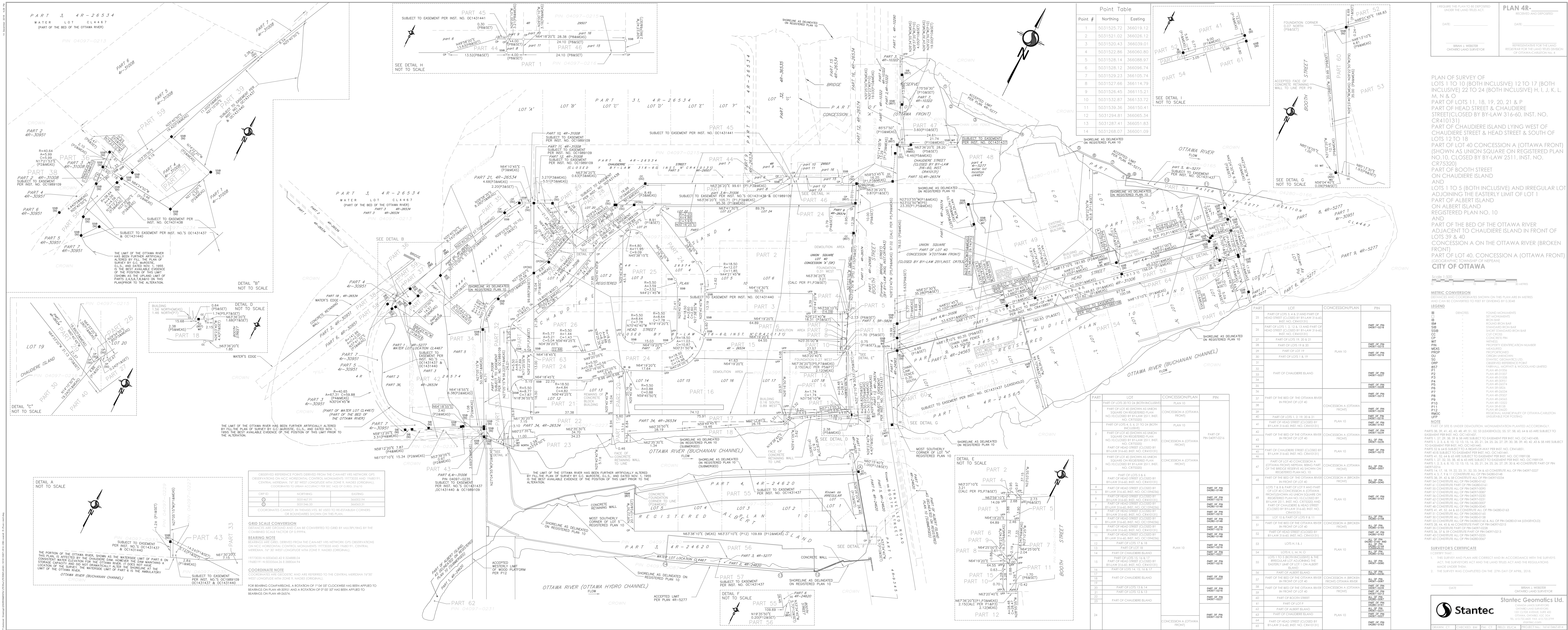
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Drawn by:	AG	Report No.:	PE3584-1
Checked by:	LK	Dwg. No.:	PE3584-4
Approved by:	CDS	Revision No.:	0

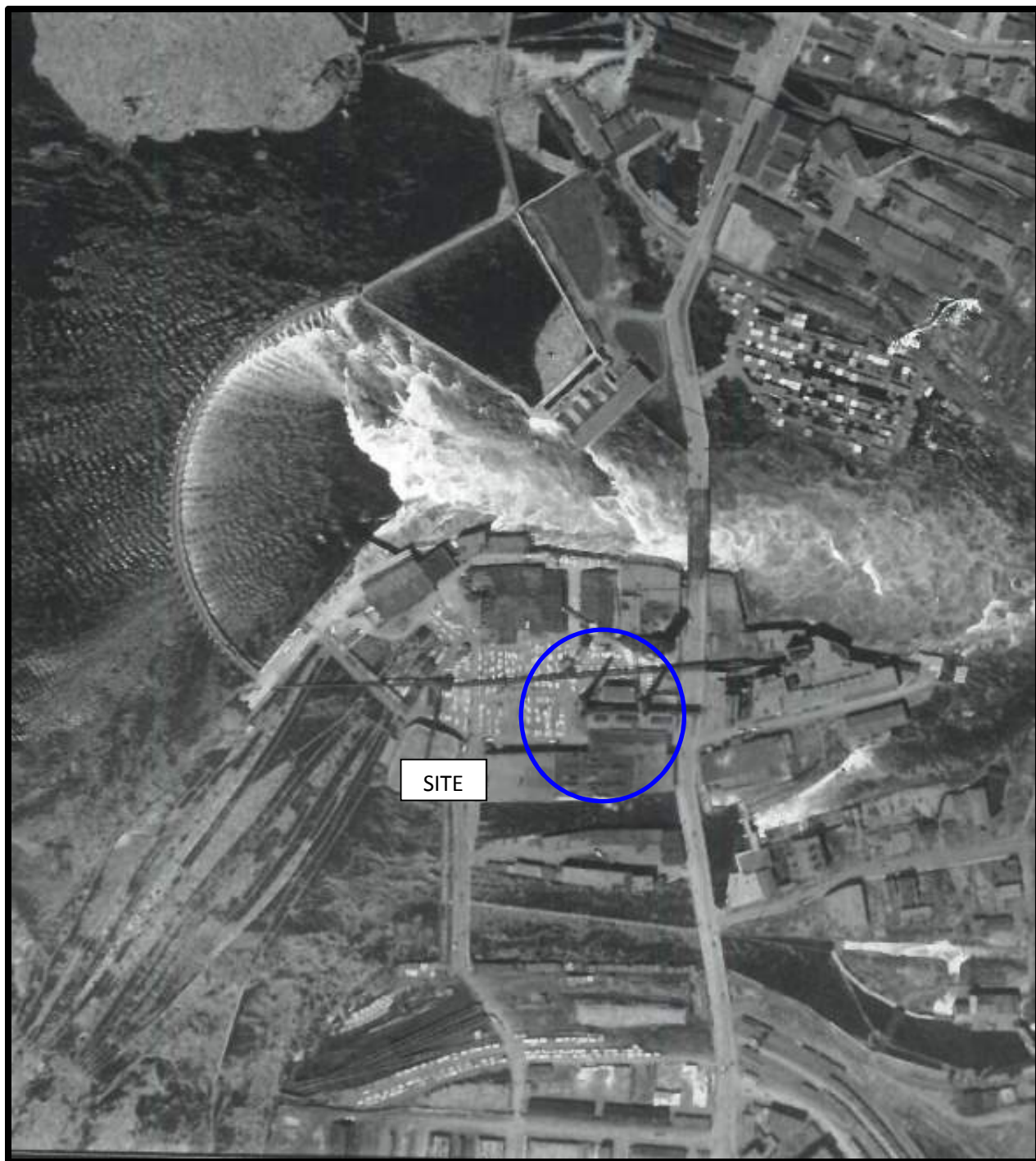
APPENDIX 1

PLAN OF SURVEY

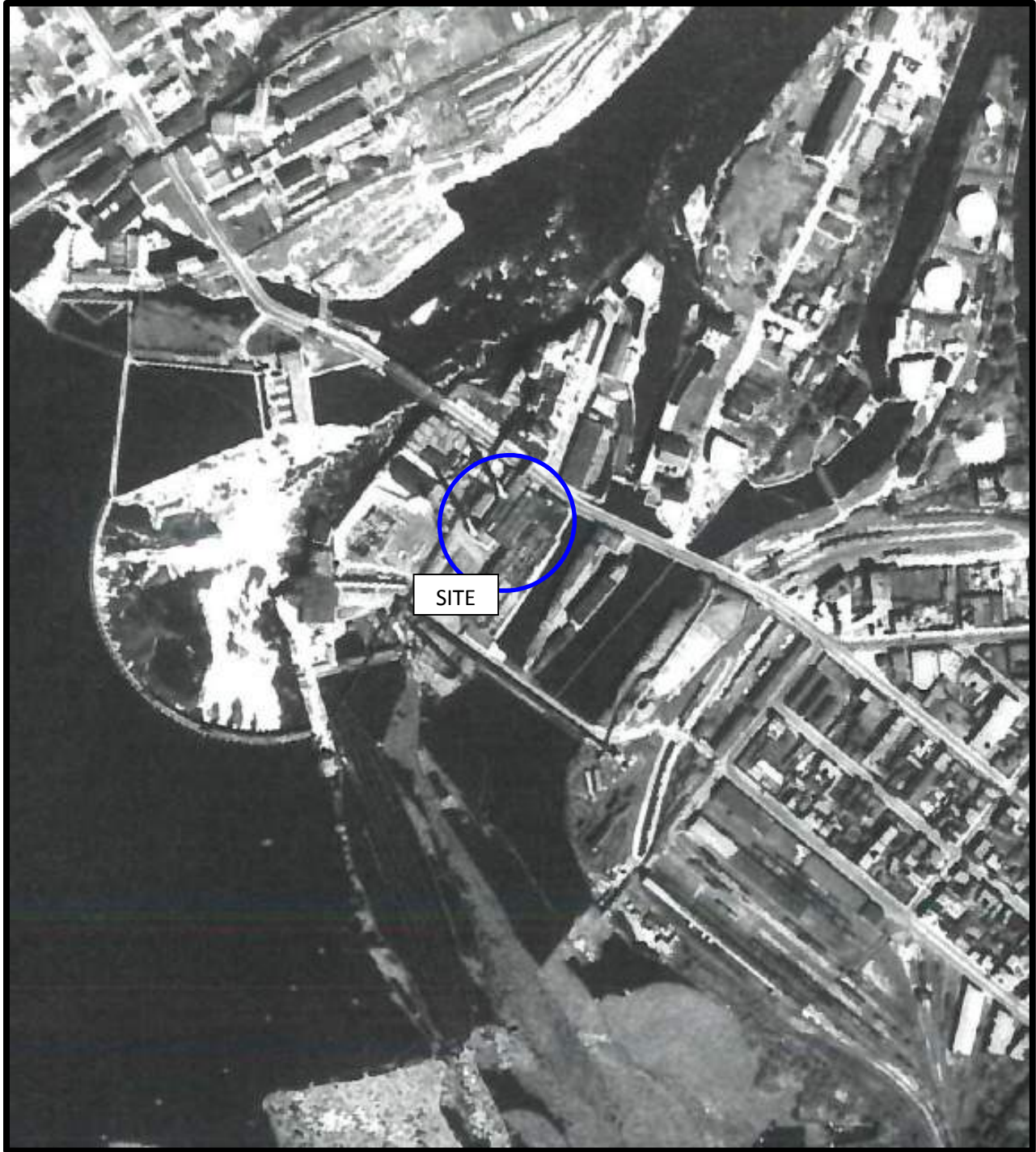
AERIAL PHOTOGRAPHS

SITE PHOTOGRAPHS





AERIAL PHOTOGRAPH
1928



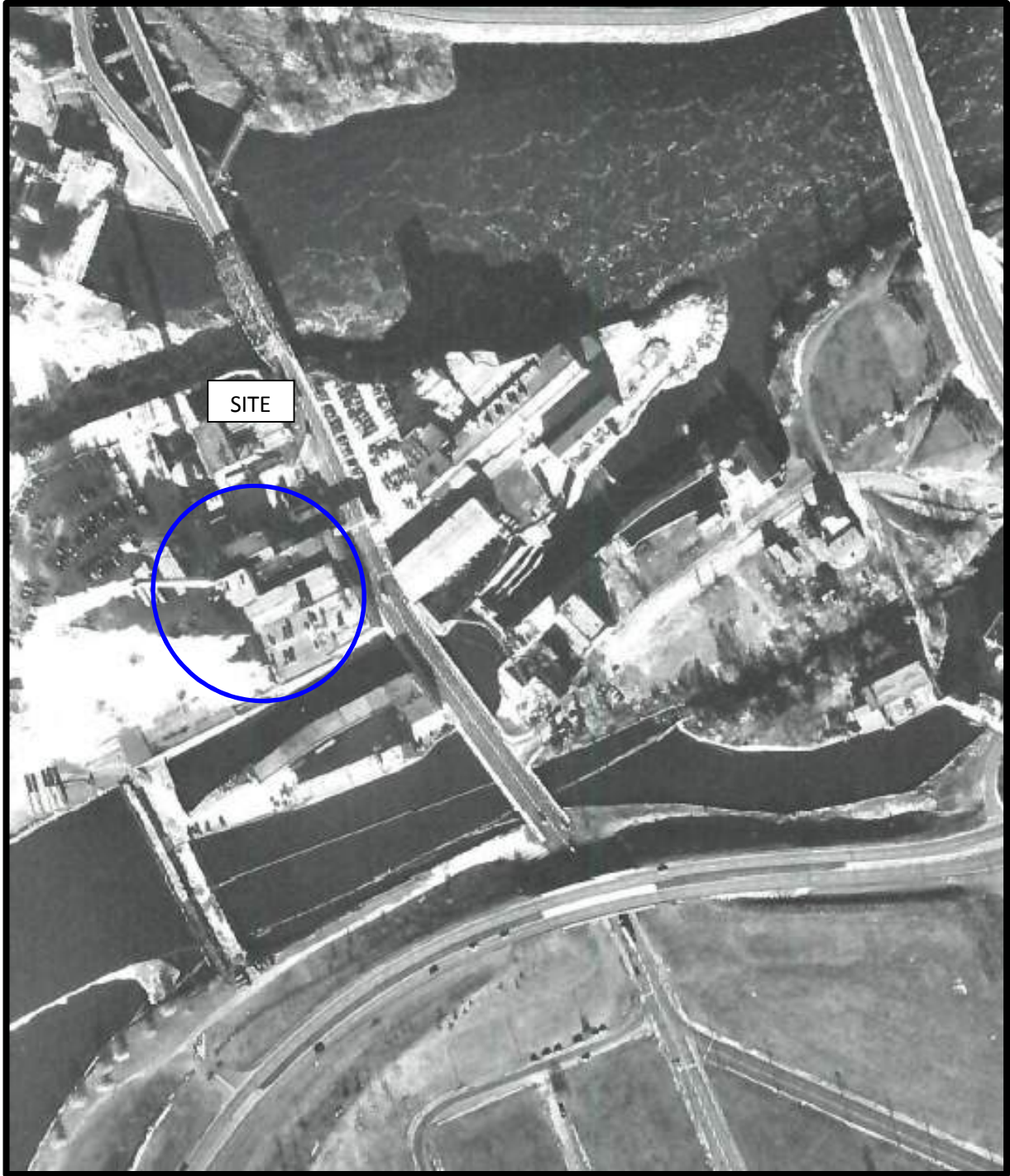
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1938



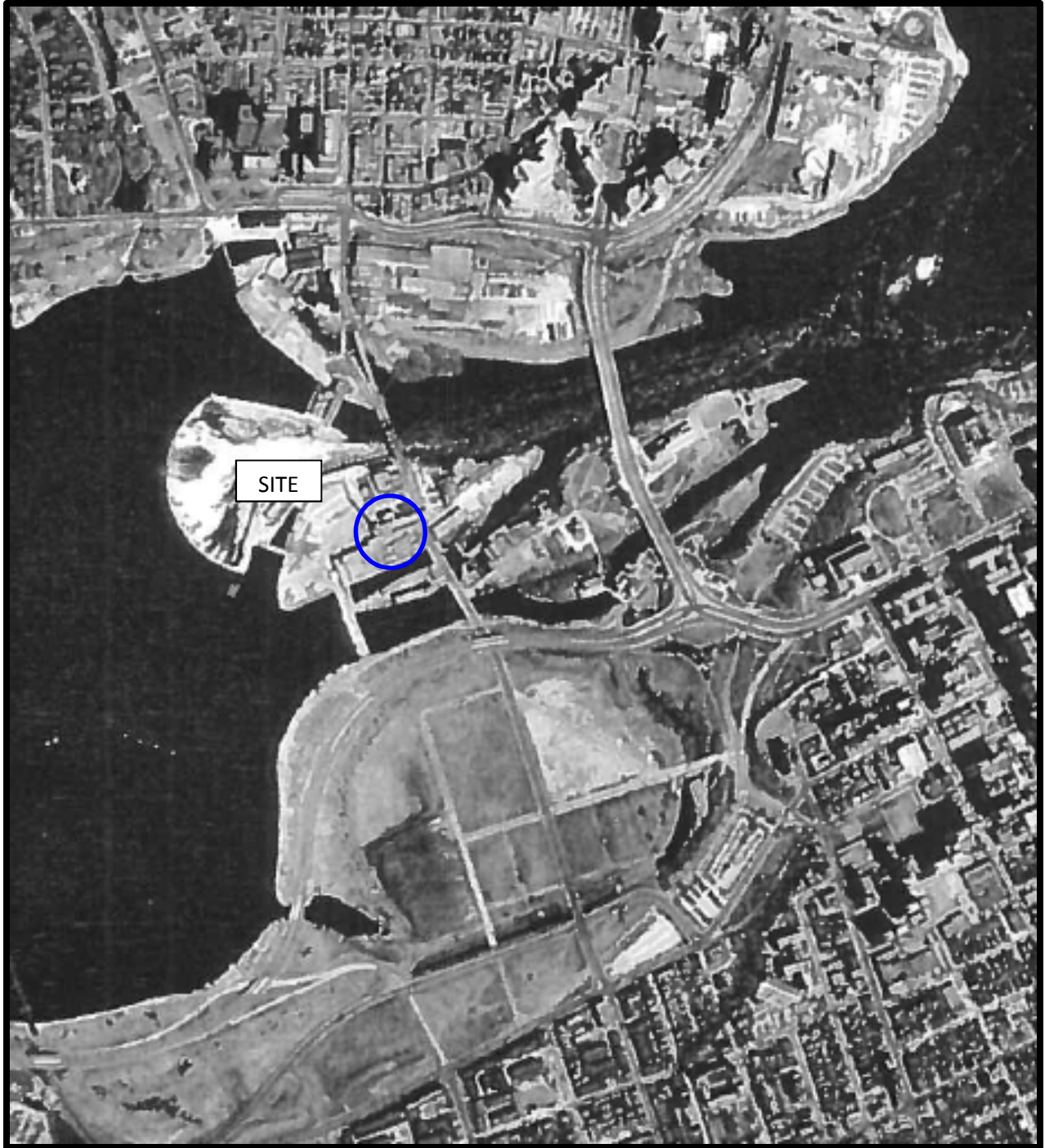
AERIAL PHOTOGRAPH
1950



AERIAL PHOTOGRAPH
1967



AERIAL PHOTOGRAPH
1979



AERIAL PHOTOGRAPH

1989



SITE

AERIAL PHOTOGRAPH
1992



AERIAL PHOTOGRAPH
2017

Site Photographs

PE3584

4 Booth Street, Chaudière Island, Ottawa, Ontario

November 8, 2018



Photograph 1: View of the entrance onto the Phase I Property from Booth Street, looking west.



Photograph 2: View of the southeast corner of the Phase I Property, looking west from the eastern wall.

Site Photographs

PE3584

4 Booth Street, Chaudière Island, Ottawa, Ontario

November 8, 2018



Photograph 3: View of the central part of the Phase I Property, looking north.



Photograph 4: View of the central part of the Phase I Property looking south from the north driveway.

Site Photographs

PE3584

4 Booth Street, Chaudière Island, Ottawa, Ontario

November 8, 2018



Photograph 5: View of the western side of the Phase I Property looking southwest from the north edge of the Property.



Photograph 6: View of the Phase I Property looking southeast from the northwest corner.

APPENDIX 2

MECP FREEDOM OF INFORMATION SEARCH

TSSA CORRESPONDENCE

CITY OF OTTAWA HISTORICAL LAND USE INVENTORY SEARCH

MECP WELL RECORDS

Ministry of the Environment,
Conservation and Parks

Freedom of Information and
Protection of Privacy Office

12th Floor
40 St. Clair Avenue West
Toronto ON M4V 1M2
Tel: (416) 314-4075

Ministère de l'Environnement, de
la Protection de la nature et des
Parcs

Bureau de l'accès à l'information et
de la protection de la vie privée

12^e étage
40, avenue St. Clair ouest
Toronto ON M4V 1M2
Tél.: (416) 314-4075



November 16, 2018

Anna Graham
Paterson Group Inc.
154 Colonnade Rd
Ottawa, ON K2E 7J5

Dear Anna Graham:

RE: Freedom of Information and Protection of Privacy Act Request
Our File #: A-2018-07330, Your Reference #: PE3584

This letter is in response to your request made pursuant to the *Freedom of Information and Protection of Privacy Act* relating to 4 Booth Street, Ottawa.

After a thorough search of the Ministry's Ottawa District Office, Investigations and Enforcement Branch, Environmental Assessment and Permissions Branch, Environmental Monitoring and Reporting Branch, Sector Compliance Branch and Safe Drinking Water Branch, records were located in response to your request. It is my decision to provide full access to the attached information. Pages not responsive to the request criteria has been marked N/R (Not Responsive).

In accordance with Section 57 of the *Freedom of Information and Protection of Privacy Act*, detailed below are our charges:

• Search Time 1 hour @ \$30/hour	\$30.00
• Copying 103 pages @ \$0.20/page	\$20.60
• Delivery	3.00
• Total	\$ 53.60
• Deposit Received	- 30.00
• BALANCE WAIVED (NOT REQUIRED)	\$23.60

You may request a review of my decision by contacting the Information and Privacy Commissioner/Ontario, 2 Bloor Street East, Suite 1400, Toronto, ON M4W 1A8 (800-387-0073 or 416-326-3333). Please note that there is a \$25.00 fee and you only have 30 days from receipt of this letter to request a review.

If you have any questions regarding this matter, please contact Aaron Foster at aaron.foster@ontario.ca.

Yours truly,


Janet Dadufalza
FOI Manager

Attachments

[HOME](#)
[AIR](#)
[WATER](#)
[LAND](#)

[User Management](#)
[Company Mgmt](#)
[Manifests](#)
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Ministry of the
Environment

[central site](#)
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[site map](#)
[français](#)

Administration

Generator Details

Registration/Notification Number

ON7275937

Legal Company Name

Primary Name: Chaudiere Hydro Limited Partnership Division Name: NA

Company Operating Name

Primary Name: Chaudiere Hydro Limited Partnership Division Name: NA

Mailing Address

Division Building: NA Post Box Number: NA
 Address Line 1: 4 Booth St. Address Line 2: NA
 Town/City: Ottawa Postal Code / Zip Code: K1R 6K8
 County: (if inside Ontario) OTTAWA CARLTON (RM) Province/State (if inside Canada/US) ONTARIO
 County: (if outside Ontario) NA Province / State (if outside Canada / US) NA
 Country: Canada

Site Location

This should be the street address of the site that is being registered. You are required to register each site that generates hazardous waste separately.

Division Building: NA Post Box Number: NA
 Address Line 1: 4 Booth St. Address Line 2: NA
 Town/City: Ottawa Postal Code / Zip Code: K1R 6K8
 County: (if inside Ontario) OTTAWA CARLTON (RM) Province / State (if inside Canada / US) ONTARIO
 County: (if outside Ontario) NA Province / State (if outside Canada / US) NA
 Country: Canada

Active Waste Classes

Active Waste Class Listing

Add New Waste Class Inactive waste classes

Active Off-site Waste Classes

Waste Class	View Details	Hazardous Waste Number (per waste stream)	Reg. 347 Schedules	Disposal Method	Part 2B required	Part 2B complete	Physical State	Site	Off-Status	Unregistered
123 - C	View Details	D002	5, 13	Land Disposal	Y	Y	Liquid	Off-Site	Active	<input type="checkbox"/>
145 - I	View Details	D001	5, 13	Land Disposal	Y	Y	Solid	Off-Site	Active	<input type="checkbox"/>
212 - L	View Details	N/A					Liquid	Off-Site	Active	<input type="checkbox"/>
213 - I	View Details	D001	5, 13	Land Disposal	Y	Y	Liquid	Off-Site	Active	<input type="checkbox"/>
221 - I	View Details	D001	5, 13	Out of Ontario - Potential Land Disposal	Y	Y	Liquid	Off-Site	Active	<input type="checkbox"/>
251 - L	View Details	N/A					Liquid	Off-Site	Active	<input type="checkbox"/>
252 - I	View Details	N/A					Liquid	Off-Site	Active	<input type="checkbox"/>

331 - I [View Details](#) D001

5, 13

Land Disposal

Y

Y

Gas

Off- Active
Site

☐

[Back](#)



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Technical Inquires to Webmaster,
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HOME

AIR

WATER

LAND

ABOUT US

NEWS & PUBLICATIONS

User Management

Company Mgmt

Manifests

Site Data

HELP

Logout

central site

feedback

search

site map

français

Ministry of the Environment

Search

Go

hwin

Administration

Generator Details

Registration/Notification Number

ON2617699

Legal Company Name

Primary Name:

Chaudiere Water Power Inc.

NA

Company Operating Name

Primary Name:

Chaudiere Water Power Inc.

NA

Mailing Address

Division Building:

NA

Address Line 1:

4 Booth St.

Town/City:

Ottawa

Country: (if inside Ontario)

OTTAWA CARLTON (RM)

Postal Code / Zip Code: K1R 6K9

Country: (if outside Ontario)

Province / State (if outside Canada / US): ONTARIO

Province / State (if outside Canada / US): NA

Country:

Canada

Site Location

This should be the street address of the site that is being registered. You are required to register each site that generates hazardous waste separately.

Division Building:

NA

Address Line 1:

4 Booth St.

Address Line 2:

NA

Town/City:

Ottawa

Country: (if inside Ontario)

OTTAWA CARLTON (RM)

Postal Code / Zip Code: K1R 6K9

Country: (if outside Ontario)

Province / State (if outside Canada / US): ONTARIO

Province / State (if outside Canada / US): NA

Country:

Canada

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Company Mgmt

Manifests

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Ministry of the Environment

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Administration

Company Name: Chaudiere Water Power Inc.
Company Number: ON2617699 (Generator)

Active Waste Classes

Active Waste Class Listing

[Add New Waste Class](#) [Inactive waste classes](#)

Active Off-site Waste Classes

Waste Class	View Details	Hazardous	Reg. 347 Schedules	Disposal Method	Part 28 required complete	Physical State	Off-Site	Status	UnRegister
Class	Details	Waste Number	(per waste stream)				Site		Waste Class
123 - C	View Details	D002	5, 13	Land Disposal	Y	Liquid	Off-Site	Active	<input type="checkbox"/>
145 - I	View Details	D001	5, 13	Land Disposal	Y	Solid	Off-Site	Active	<input type="checkbox"/>
146 - L	View Details	N/A				Liquid	Off-Site	Active	<input type="checkbox"/>
212 - L	View Details	N/A				Liquid	Off-Site	Active	<input type="checkbox"/>
221 - I	View Details	D001	5, 13	Land Disposal	Y	Liquid	Off-Site	Active	<input type="checkbox"/>
251 - L	View Details	N/A				Liquid	Off-Site	Active	<input type="checkbox"/>
252 - L	View Details	N/A				Liquid	Off-Site	Active	<input type="checkbox"/>
331 - I	View Details	D001	5, 13	Land Disposal	Y	Gas	Off-Site	Active	<input type="checkbox"/>

HWIN

Off-
Site

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Generator Details

Registration/Notification Number

ONT7352120

Legal Company Name

Primary Name: Norhect Construction

Division Name: NA

Company Operating Name

Primary Name: Norhect Construction

Division Name: NA

Mailing Address

Division Building: NA

Post Box Number: NA

Address Line 1: 2401, Airport Road

Address Line 2: NA

Town/City: Timmins

Postal Code / Zip Code: P4N7C3

Country: (if inside Ontario)

Province/State (if inside Canada/US): ONTARIO

Country: (if outside Ontario)

Province / State (if outside Canada / US): NA

Country: Canada

Province / State (if outside Canada / US): NA

Site Location

This should be the street address of the site that is being registered. You are required to register each site that generates hazardous waste separately.

Division Building: NA

Post Box Number: NA

Address Line 1: 4 Booth Street

Post Box Number: NA

Address Line 2: NA

Post Box Number: NA

Town/City: Ottawa

Postal Code / Zip Code: K1R 6K8

Country: (if inside Ontario)

Province / State (if inside Canada / US): ONTARIO

Country: (if outside Ontario)

Province / State (if outside Canada / US): NA

Country: Canada

Province / State (if outside Canada / US): NA




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Ministry of the
Environment

Company Name: Norther Construction
 Company Number: ON7352120 (Generator)

Active Waste Classes

Active Waste Class Listing

[Add New Waste Class](#) [Inactive waste classes](#)

Active On-site Waste Classes

Waste Class	View Details	Hazardous Class	Waste Number (per waste stream)	Reg. 347 Schedules	Disposal Method	Part 2B required	Part 2B complete	Physical State	Off-Site	Status
212 - L	View Details	N/A						Liquid	Off-Site	Active
251 - L	View Details	N/A						Liquid	Off-Site	Active
252 - L	View Details	N/A						Liquid	Off-Site	Active
331 - I	View Details	D001		5, 13		Y	Y	Gas	Off-Site	Active

[Back](#)

Technical Inquires to Webmaster:
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**Pages 10 to / à 19
are not relevant
sont non pertinentes**

Rustad, Tor (MOECC)

From: Arghittu, Brendan <BArghittu@hatch.ca>
Sent: August-14-15 7:45 AM
To: Rustad, Tor (MOECC)
Cc: 346544_PSG; Arghittu, Brendan
Subject: Chaudière Hydro Redevelopment Project - MOE Visit 13_Aug_15

Mr. Rustad,

As requested please see below a chain of events occurring prior to your visit yesterday and an outline of action taken by EBC in response to unintentional turbid water discharge into the Ottawa River:

Summary of events:

- At 12:45 pm I was notified by a Domtar employee that he had seen turbid water being discharged into the river downstream of the old carpenter shop building.
- I went out to investigate and found that the discharge was coming from Drainage Pipe #1 on the North side of Flume #2 between the carpenter shop and Generating Station #2.
 - 4 drainage pipes run below the existing flumes in bedrock and have an unknown termination points.
 - The outlet pipe discharge points sit at approximately EL. 41m
 - The current excavation depth at the deepest point is at approximate EL. 45m which is the native bedrock surface.
 - Currently the collection points for these drain pipes has not been uncovered - excavating to investigate is not an option due to the operating flume #2 directly adjacent to the area.
- EBC's Environmental Manager (Jérémie Tremblay) was notified of the issue and called out onto site to formulate an action plan.
 - Excavation work was stopped in this area of the excavation to let the turbidity levels settle.
 - Water samples were taken inside the excavation to determine TSS levels and confirm the chemical properties of the water.
 - The Spills Action Center was called and notified of the issue.
 - The contractor started making arrangements to have a silt curtain installed around the drainage pipe discharge points in the Ottawa River (this is to occur on Aug.14th).
 - Construction of a check dam commenced inside the excavation to help settle out turbidity.
 - The contractor started exploring options to control and direct the water within the excavation.
 - It is believed that the majority (if not all) of the water flowing into the excavation is coming from under the flume walls.
 - It is hoped that there will be a large reduction of water ingress upon Shutdown of the two generating stations (GS2 & GS3) and dewatering of the flumes.
 - Shutdown of GS2 & GS3 is tentatively planned for 10 days from now.
- MOE received an anonymous phone call mid-afternoon reporting the discharge into the river
 - I was called at 3:05pm by an Energy Ottawa employee (Sasha McCulloch) to let me know that an MOE inspector had received a call and was onsite to investigate.
 - Myself, Jérémie Tremblay (EBC Env. Mgr), & Yannick Lussier (EBC PM) escorted you onto the construction site and reviewed the chain of events above, subsequent action already taken, and we viewed the areas in question.
 - MOE was offsite at approximately 3:30pm and advised that suitable action was taken onsite in response to the problem.
 - This summary email was requested.

Moving forward EBC will be installing the silt curtain today into the river and will continue working towards controlling and directing water within the excavation to limit turbidity. Water ingress will be isolated and dealt with where it is currently visible, accessible, and possible.

As mentioned yesterday excavation adjacent to the Flume walls to locate additional areas of water ingress cannot occur at this point due to stability concerns with the flume walls and related safety issues. This is the same reason why the intake location of the discharge pipes cannot be investigated.

A water sampling program will be discussed internally today in addition to the planned shutdown and dewatering date for the Flumes.

Please let me know if you require any additional information or clarification.

Regards,

Brendan Arghittu, C.E.T.
Sr. Civil Engineering Technologist
Mobile: +1 905 864 4375
 **HATCH**
www.hatch.ca

From: Arghittu, Brendan
Sent: Thursday, August 13, 2015 5:34 PM
To: 'tor.rustad@ontario.ca'
Cc: 346544_PSG
Subject: Chaudière Hydro Redevelopment Project - MOE Visit

Mr. Rustad,

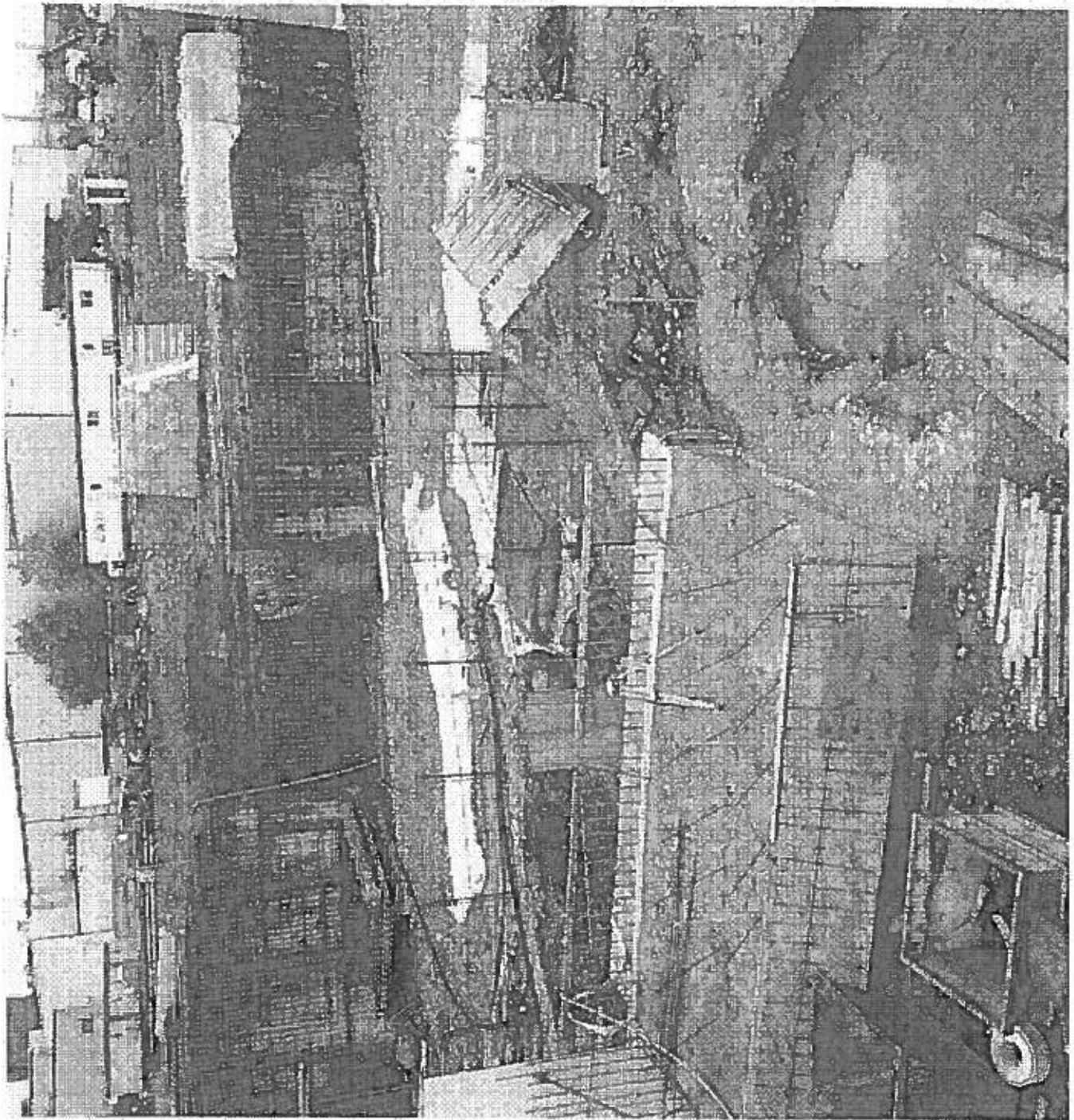
I'm working on putting together the summary email regarding our discussions during your visit to the CHRP project earlier this afternoon - I will have it to you by 8:30 a.m. August 14th.

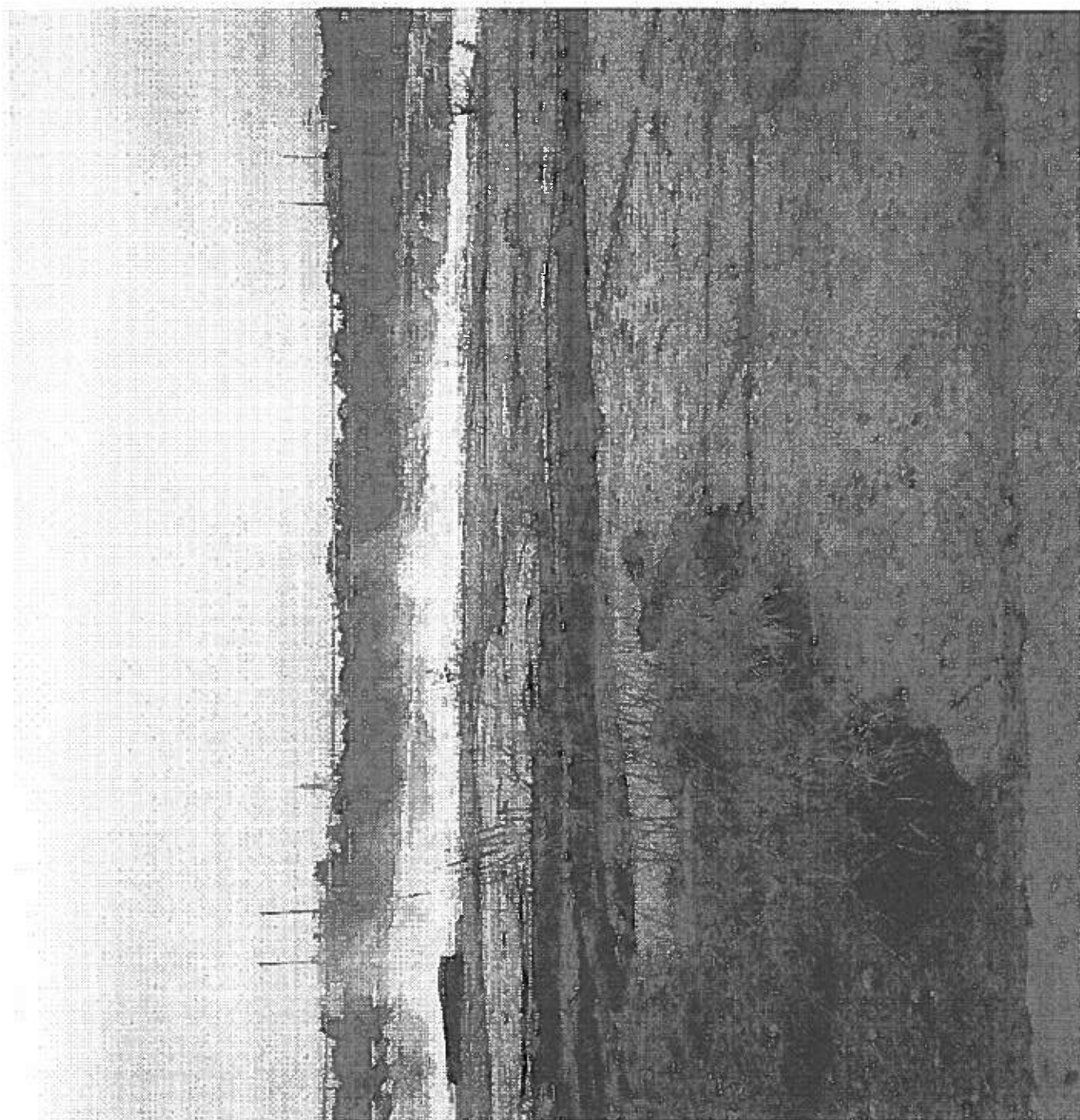
I hope this is ok.

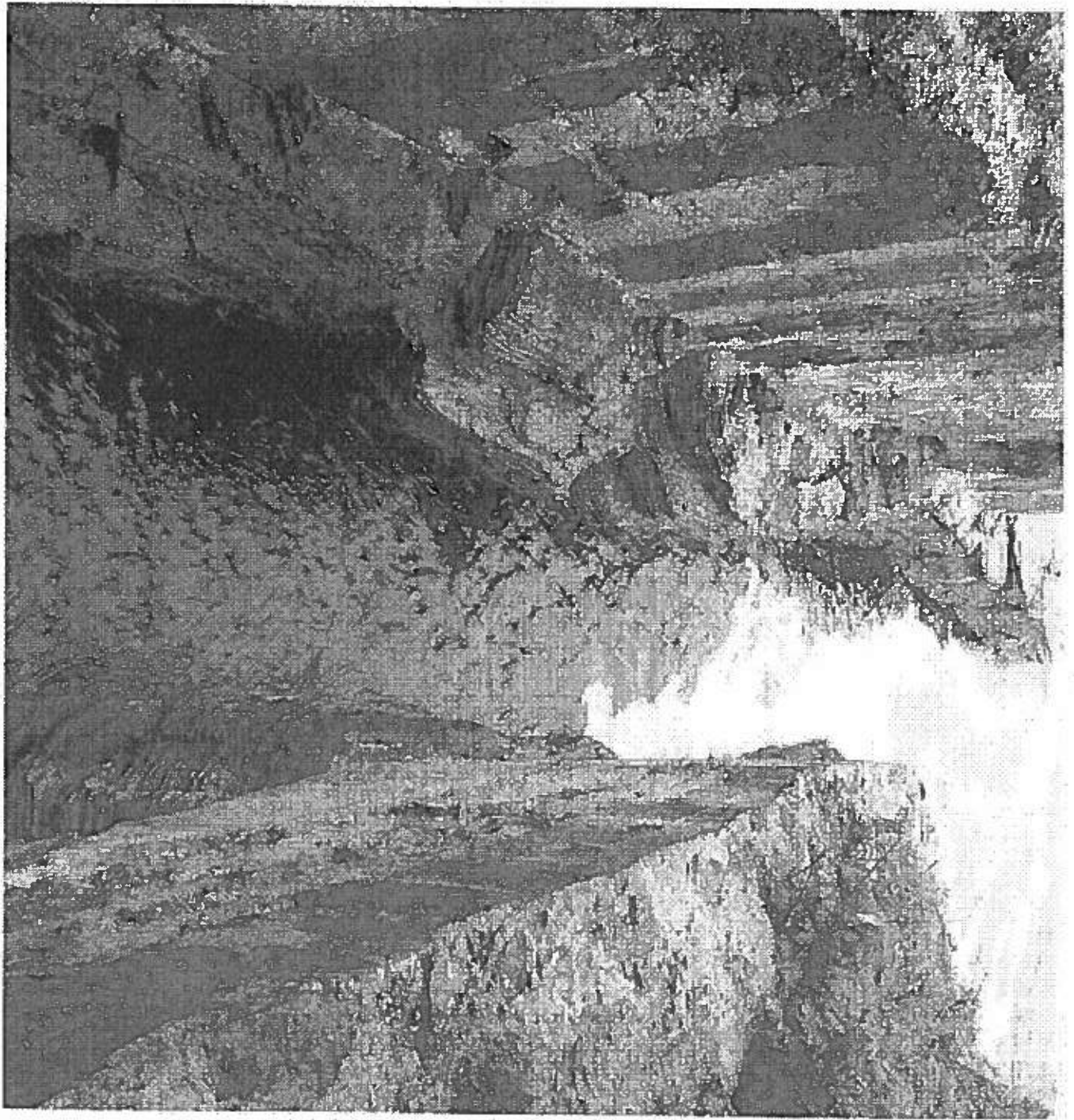
Regards,

Brendan Arghittu, C.E.T.
Sr. Civil Engineering Technologist
 **HATCH**
Mobile: +1 905 864 4375
www.hatch.ca

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INCIDENT REPORT

Reference Number:	0300-A4YMHS	Module Type:	Spill
Status:	In progress	File Storage Number:	
Program:	Water - Ground & Surface	Activity:	Spills

Caller or PO Reporting/Receiving Information

First Name:	Last Name:
Jeremie	Premblay
Name of Company:	
EBC and Corporation	

MAILING ADDRESS

Civic Address:		Unit Identifier:	
Delivery Designator:		Delivery Identifier:	
Municipality/ Unorganized Twp:	County/District:	Province/State:	Postal Code:
(1)		Ontario	
Postal Station:		Country:	Canada
Telephone Number:	Extension:	Other Number:	Email Address:
514-801-5369		Fax	

Date Reported to MOE:	2015/12/07	Time Reported to MOE:	11:38
Date of Incident:	2015/12/07	Time of Incident:	11:30
Incident Date Confirmation:	Actual		

Client(s)

Client Details

Site(s)

Site Details

Construction Site<UNOFFICIAL>

Address: Lot , Part , 4 Booth Street, Ottawa, City,

District Office: Ottawa

GeoReference: Map Datum: , Zone: 18, Method: GPS, UTM Easting: 443817, UTM Northing: 5029961, UTM

Location Description: ,

Incident Summary:

High turbidity water from construction site to Ottawa River

Initial Incident Description (as reported):

Created: Ali Kuba (Spills Action Centre) - 2015/12/07 11:38:01 AM

Caller reports EBC and Corporation have a construction site with a coffer dam. Due to construction the water has high turbidity. They have installed a silt curtain around the coffer dam to avoid any contamination to the Ottawa River. This water is going through the stop log and into the Ottawa River. Quantity is 1L per second and he is estimating that this began this morning 10:00. Construction in that area has not stopped and they are going to continue construction until the coffer dam is complete since this will ensure an end to the contamination into the Ottawa River.

Caller will update SAC when the turbidity in the water has gone down, around 17:00. Turbidity is being monitored and measured. Turbidity will end with construction

11:59 SAC(AK2) to MOE DO Ottawa(Emily Tieu): Left msg for call back

13:08 SAC(AK2) to MOE DO Ottawa(Emily Tieu): Briefed Emily who said SAC will be called back

17:48 Jeremie Tremblay to SAC(bw) Jeremie advising SAC the work is finished for the day. Jeremie stated there is one sheet piling that needs to be put in place and will be installed tomorrow morning at 10:00 am at the coffer dam. Jeremie stated the installation of the last sheet pile disturb some more sediment within the river. Jeremie will call SAC tomorrow once the sheet piling has been installed and will advise if there has been additional sediment released

Not in SWP Zone

SAC Action Class:

Watercourse Spills

Non-Standard Procedure:

No

Incident Description:

Last update: Kyle Straberger (Ottawa District Office) - 2015/12/10 05:06:38 PM

December 8, 2015 - Site visit to Chaudiere Hydro Redevelopment Project (4 Booth Street).

- Met with Jeremie Tremblay (JT - EBC) who is overseeing the installation of the coffer dam for the excavation to build and install the new power generating station. The project incorporates an expansion of the existing Dornier property and hydroelectric generating station to service the new power station (increase from 7kwh to 22kwh).

- EO discussed the report of high turbidity and TSS into the Ottawa River

- EO observed sediment laden water discharging from the stop logs captured by the installed coffer dam

- JT outlined that membranes have been installed at the 2 log stops of the ring dam that are being brought offline by the installation of the coffer dam however the membrane appears to not be controlling the release of sediment

- turbidity measurements are being conducted to determine water quality (EO was shown stick notes of readings that indicate a decreasing trend of turbidity)

- pictures were taken of the sediment laden water coming from the stop logs and entering into the Ottawa River

- the cause of the sediment laden water was reported to be from the installation of the sheet piling. Vibration from the sheet pile installation travelled through the approx. 10' gravel road within the coffer dam resulted in sediment becoming suspended. No sediment was generated throughout the coffer dam installation until the location closest to the 2 stop log locations

- it was noted that on section of the coffer dam sheet pile was not installed due to shifting of the coffer dam soils (welding occurring to add an extension to the sheet pile to allow for a proper fit into the existing coffer dam formation)
- at the time of the site visit no sediment was observed within the standing water inside the coffer dam (only sediment from the stop logs referenced above)
- EBC has constructed a series of settling ponds (3 shipping containers connected with spill overs that will be used when dewatering operations occur to remove TSS prior to being pumped into the sanitary sewer)
- Completed H&S orientation for the CHRP construction site
- Completion of the final sheet pile is expected to be completed tomorrow.
- Left site

December 9, 2015 - EO sent email to JT requesting answers to a series of questions regarding the discharge event and a copy of the erosion and sediment control plan (see below questions):

1. Have samples been collected to determine the concentrations of total suspended solids discharging into the Ottawa River?
2. When did EBC notice the discharge of the sediment laden water?
3. What was completed to address the discharge?
4. What measures are going to be implemented to prevent this discharge from occurring again when the final sheet pile is installed?
5. Does EBC have an erosion and sediment control plan for the construction site and/or an engineering report outlining the control measures to prevent sediment discharge?
6. What other agencies have been notified regarding the discharge of sediment laden water? (Department of Fisheries and Oceans, Ministry of Natural Resources and Forestry)

December 9, 2015 - (15:35) Phone call from JT requesting clarification to question 4 of the above referenced email for additional information. EO outlined that the sediment laden water can not be discharged into the Ottawa River. The OWRA outlines that no person shall discharge a contaminant that may impair water quality therefore measures need to be implemented in the event sediment is discharged during the installation of the last sheet pile. JT stated that sand bags can be deployed to contain the impacted water and a pump can be installed to pump the impacted water back into the coffer dam. JT will outline this procedure in his response email.

December 9, 2015 - (16:05) Phone call from JT outlining that the water discharging from the stoplogs is very clean and not impacted with sediment. Sheet pile installation is approximately 60 to 70 feet from the stop logs therefore he does not anticipate there be an issue with sediment water discharging through the stoplogs into the Ottawa River. JT stated that during the installation of the stoplogs he will monitoring water quality and stop work if sediment becomes an issue. JT stated that the deployment of sand bags could cause an issue for H&S given they will need to be behind the dam. EO stated that the procedure discussed before did not outline H&S issues and will need to determine a procedure that addresses both the sediment issue and the H&S concerns. JT mentioned that ropes may be used to install sand bags and pumps if needed. EO requested that the procedure be included in the response email. JT will also take pictures throughout the installation of the final sheet to document water quality.

December 9, 2015 - EO received email from JT providing 5 pictures which include of the Ottawa River upstream, water within the coffer dam and water discharging from stop logs. The pictures provided appear to be free from sediment at both upstream and downstream locations. JT, as requested by the previous email, provided a copy of the erosion and sediment control plan for the Chaudiere Hydro Redevelopment Project (CHRP).

December 10, 2015 - EO phoned Tanya McLaurin, Sr. Lands Technician & Project Lead, for MNRF for the CHRP. Left message requesting call back to discuss MNRF approvals/involvement and to advise of the December 7, 2015 sediment laden water discharge / MOECC involvement.

December 10, 2015 - EO phoned Joff Cote, Biologist, for MNRF for the CHRP. Left message requesting call back to discuss MNRF approvals/involvement and to advise of the December 7, 2015 sediment laden water discharge / MOECC involvement.

December 10, 2015 - EO reviewed the above email and attachments provided. The erosion and sediment control plan addresses control measures that are to be implemented to prevent impacts from the CHRP specific to the installation of coffer dams. EO provided a response email requesting the following information and confirming the procedure that was created in the event sediment laden water is discharged to the Ottawa River as a result of finalizing the coffer dam. See below information request.

1. Turbidity measurements outlined in your response to question 1
2. A copy of the Spills Prevention and Response Plan (CHRP-EPP-PLAN-3) to confirm the actions completed with respects to Section 5.1(iv) of the REV B Erosion and Sediment Control Plan and associated documentation to confirm the action

taken with respects to the December 7, 2015 sediment discharge

3. Notification (email or phone call) prior to the installation of the final sheet pile

4. Turbidity measurements collected for the installation of the last sheet pile as outlined in your response to question 4

5. Pictures indicating water quality at the stop logs as outlined in your response to question 4

December 10, 2015 - Phone call from JT. Installation of the final sheet pile was completed this morning prior to receiving EO's email. Pictures and turbidity monitoring was collected which confirmed the installation of the sheet pile did not have an impact to the Ottawa River. Time stamp on the pictures that will be sent to the MOECC have an hour elay (time change) therefore the time stamp on the picture has an hour difference (completed at 10:30am, timestamp will state 11:30am - example). JT will provide spills prevention and response plan and the spill report for the December 7, 2015 sediment discharge. The report needs to be reviewed by engineer (Hatch) first but once the review is completed they will send it to the MOECC.

Incident Description Continuation:

Not Available

Incident Update:

Not Available

Was there an MOE field response?	No
Were there samples collected / analyzed at any time?	No
Health / Environmental Consequences at the Time of Incident	
Health / Environmental Consequences:	2 - Minor Environment

Has a Water Body been Impacted?	Yes
Water Body / Bodies Impacted:	Ottawa River
Receiving Environment:	Surface Water
Incident Event:	Other
Specify Other:	Construction
Incident Reason:	Unknown / N/A
Source Type:	Unknown / N/A
Sector Type:	Unknown / N/A
MOE/Other Agencies Involved:	Province - MOE Regional Response - Air and Water Modeling/Monitoring
Was there a discharge / emission / spill of a contaminant to the environment?	
Yes	

Contaminants Table

Contaminant Name	Description	Code	UN#	Limit	Quantity	[units]	[freq]
TURBIDITY 1.0		51	n/a		0	other - see incident description	none

Environmental Compliance Reporting (ECR)

<p>Is this an air emission (measured or modelled) or wastewater (sewage) discharge exceedance that will become part of the Environmental Compliance Report?</p> <p>(legislation, certificate of approval, order, or guideline)</p> <p>No</p>
--


Voluntary / Mandatory Abatement

Was there Non-Compliance/Non-Conformance Identified?	<input type="radio"/> Yes <input type="radio"/> No
Voluntary / Mandatory Abatement Items Not Available	

Waste / EGR Information

Waste / EGR Information entries: Not Available
--

Document Related Information

Cross Reference:	(doc link)	Task Link:	1080-A4YMZS 
Originating Document:		Created by:	Ali Kuba
Date Created:	2015/12/07	Date Completed:	
Office Receiving Incident Report:	Spills Action Centre	Incident Info Received By:	Ali Kuba
Bring Forward Date:		Bring Forward Reason:	

Signatures

Provincial Officer:

--

Name:	
Badge No:	
Work Unit:	
District/Area Office:	
Date:	
Signature:	

District/Area Supervisor:

Name:	
Work Unit:	
District/Area Office:	
Date:	
Signature:	



INCIDENT REPORT

Reference Number:	1438-AB6LX5	Module Type:	Spill
Status:	To be assigned	File Storage Number:	
Program:	Water - Ground & Surface	Activity:	Spills

Caller or PO Reporting/Receiving Information

First Name:	Last Name:
Jeremie	Tremblay
Name of Company:	
Northec Construction - EBC	

MAILING ADDRESS

CMIC Address:		Unit Identifier:	
1095 Rue Valet			
Delivery Designator:		Delivery Identifier:	
Municipality/ Unorganized Twp:	County/District:	Province/State:	Postal Code:
(1)		Ontario	
Postal Station:		Country:	Canada
Telephone Number:	Extension:	Other Number:	Email Address:
514-601-5369		Fax	Jeremie.tremblay@ebcinc.com

Date Reported to MOE:	2016/06/22	Time Reported to MOE:	12:08
Date of Incident:	2016/06/22	Time of Incident:	10:00
Incident Date Confirmation:	Actual		

Client(s)

Client Details
Northec Construction Inc. Mailing Address: 2401 Airport Rd, Timmins, Ontario, Canada, P4N 7C3 Physical Address: 2401 Airport Rd, Timmins, Unorganized Township, District of Cochrane, Ontario, Canada, P4N 7C3

Telephone: (705)531-3370, FAX: (705)531-3373, email: jf.theriault@northecc.ca
Client #: 9056-92KRQ3, Client Type: Corporation

Site(s)

Site Details
Construction site<UNOFFICIAL> Address: Lot , Part , 4 Booth Street, Ottawa, City District Office: Ottawa + + + + Booth Street Address: Lot: 39, Concession: 1 ON OTTAWA RIVER, Booth (from Somerset Street to Primrose), Geographic Township: NEPEAN, Ottawa, City District Office: Ottawa GeoReference: Map Datum: NAD83, Accuracy Estimate: 1-10 metres eg. Good Quality GPS, Method: Survey, , LIO GeoReference: Zone: , UTM Easting: , UTM Northing: , Latitude: 45.405, Longitude: -75.7108 Site #: 6657-6EQK3L

Incident Summary:
Northecc: discharge water to Ottawa River

Initial Incident Description (as reported):
Created: Fatima Jabeen (Spills Action Centre) - 2016/06/22 12:08:08 PM
Caller (Jeremy Tremblay, Northecc) reporting - On a regular basis the site would discharge water from the excavation after secondary treatment Today, the two discharge pumps at site broke, so the discharge water was let to flow into the Ottawa River. The discharge water is sent through a sediment bag before it is sent to River. The discharge lasted for about 2 hours but has stopped now. The discharge pumps are being fixed and are expected to be on-line later today. SAC to be updated if a new discharge is planned. No further updates expected on clean-up. Jeremy states Brad Eckert, Area EO was advised about the incident. 12:36 SAC (jf) to MOECC - Ottawa: Left a vm for Jena Leavoy, DO with incident details, and for call back IDS IR # provided. **SPIMT: site not in SWP zone**

SAC Action Class:	Watercourse Spills
Non-Standard Procedure:	No

Incident Description:
Last update: Fatima Jabeen (Spills Action Centre) - 2016/06/22 12:32:46 PM

Incident Description Continuation:
Not Available

--

Incident Update:
Not Available

Was there an MOE field response?	No
Were there samples collected / analyzed at any time?	No
Health / Environmental Consequences at the Time of Incident	
Health / Environmental Consequences:	2 - Minor Environment

Has a Water Body been impacted?	Yes
Water Body / Bodies Impacted:	Ottawa River
Receiving Environment	Surface Water
Incident Event:	Other
Specify Other:	Discharge
Incident Reason:	Other
Specify Other:	pump failure
Source Type:	Other
Specify Other:	construction site
Sector Type:	Miscellaneous Industrial
MOE/Other Agencies Involved:	Province - MOE-District Office
Was there a discharge / emission / spill of a contaminant to the environment?	
Yes	

Contaminants Table

Contaminant Name	Description	Code	UN#	Limit	Quantity	[units]	[freq]
WATER/SEDIMENT		41	n/a		0	other - see incident description	

Environmental Compliance Reporting (ECR)

Is this an air emission (measured or modelled) or wastewater (sewage) discharge exceedance that will become part of the Environmental Compliance Report?

(legislation, certificate of approval, order, or guideline)
No


Voluntary / Mandatory Abatement

Was there Non-Compliance/Non-Conformance Identified?	<input type="radio"/> Yes <input type="radio"/> No
Voluntary / Mandatory Abatement Items	
Not Available	

Waste / EGR Information

Waste / EGR Information entries:
Not Available

Document Related Information

Cross Reference:	(doc link)	Task Link:	6704-AB6MT2 
Originating Document:		Created by:	Fatima Jabeen
Date Created:	2016/06/22	Date Completed:	
Office Receiving Incident Report:	Spills Action Centre	Incident Info Received By:	Fatima Jabeen
Bring Forward Date:		Bring Forward Reason:	

Signatures

Provincial Officer:

Name: Badge No: Work Unit: District/Area Office: Date: Signature:	
--	--

District/Area Supervisor:

Name: Work Unit: District/Area Office:	
--	--

Date: _____
Signature: _____

Signature:



INCIDENT REPORT

Reference Number:	2018-AFRGCZ	Module Type:	Spill
Status:	To be assigned	File Storage Number:	
Program:	Water - Ground & Surface	Activity:	Spills

Caller or PO Reporting/Receiving Information

First Name:	Last Name:
Jeremie	Tremblay
Name of Company:	
Northtec Construction - EBC	

MAILING ADDRESS

Civic Address:		Unit Identifier:	
1095 Rue Valet			
Delivery Designator:		Delivery Identifier:	
Municipality/ Unorganized Twp:	County/District:	Province/State:	Postal Code:
Ottawa(1)		Ontario	
Postal Station:		Country:	Canada
Telephone Number:	Extension:	Other Number:	Email Address:
514-601-5369		Fax	Jeremie.tremblay@ebcinc.com

Date Reported to MOE:	2016/11/16	Time Reported to MOE:	07:14
Date of Incident:	2016/11/16	Time of Incident:	05:30
Incident Date Confirmation:	Estimated		

Client(s)

Client Details

Site(s)

Site Details
4 Booth St <UNOFFICIAL> Address: Lot , Part , Ottawa, City, District Office: Ottawa GeoReference: Map Datum , Zone: 18, Accuracy Estimate: 10 -100 metres eg. Topographic Map, Method: Map, UTM Easting: 443817, UTM Northing: 5029961, UTM Location Description :

Incident Summary:
Northtec Construction: construction dewatering to River, pump failure

Initial Incident Description (as reported):
Created: Julian Aristizabal (Spills Action Centre) - 2016/11/16 07:14:21 AM
Caller reports that at about 00:30 one of the pumps they normally use to dewater the powerhouse stopped because of a faulty breaker, which caused the water to rise. They could not restart the pump so they used other pumps to start pumping the water into the river. Samples have been collected. A crew is working hard to fix the electrical problem with the broken pumps. Flow rate of pumping onto a grassy area which then has overland flow of about 15 ft to the Ottawa River, is about 5L/second of non-turbid water from the construction site. SAC to be notified when the stop pumping to the River.
Not in source water protection

SAC Action Class:	Watercourse Spills
Non-Standard Procedure:	No

Incident Description:

Incident Description Continuation:
Not Available

Incident Update:
Heather Croft - 2016/11/16 created; 2016/11/16 last update - Spills Action Centre 15:10SAC(HC) Jeremie updates that they have stopped pumping directly into the river, however they are pumping into a pond and then to the river. He states that they are using this as a form of sediment control. Caller adds that they have taken samples. The City has attended site and stated that they were ok with these actions. Caller states that they are hoping to be back to normal operations by 18:00 this evening. SAC directed them to provide an update at that time.
Neil Hamilton - 2016/11/16 created; 2016/11/16 last update - Spills Action Centre 1806h Jeremy Tremblay to SACnh reports: -They will have to continue to pump over night as the level of the blast pit needs more time to come down. -Caller reports that right now they are pumping into a settling pond to allow sediments to settle out -After they are pumping clear water directly to the Ottawa River.

-Caller will update SAC in the morning after another sample is taken and to update on the status of the blast pit water level

Jeremy Weiss - 2016/11/17 created; 2016/11/17 last update - Spills Action Centre

Northtec Construction - EBC (J. Tremblay)

-Updating that their site is still pumping water that is impacting the Ottawa River as they were unable to have repairs completed on the pump overnight

-Caller states that the pumping first goes to a rock pond to allow sediment to settle before discharging to the Ottawa River. Caller also states there are sediment bags at each discharge point, advising that there is a sediment bag between the outlet of the rock pond and the Ottawa River.

-City of Ottawa attended site and confirmed no fuel impacts to Ottawa River.

-Electricians are still working on getting the pump operational with anticipation of repairs completed for this afternoon (17 November 2016).

-Northtec Construction - EBC will be conducting additional samples of the discharge again today.

-SAC will be updated when the pump is repaired and impacts to the Ottawa River have ceased.

Brenda Capicciotti - 2016/11/17 created; 2016/11/17 last update - Spills Action Centre

Northtec Construction, Jeremy to SAC(bc) updates they have stopped pumping into the Ottawa River at 13:30. The pump has been repaired. They have ordered 2 back up pumps and power supply from a generator to help in case of future issues

Was there an MOE field response?	No
Were there samples collected / analyzed at any time?	No
Health / Environmental Consequences at the Time of Incident	
Health / Environmental Consequences:	2 - Minor Environment

Has a Water Body been impacted?	Yes
Water Body / Bodies Impacted:	Ottawa River
Receiving Environment:	Surface Water
Incident Event:	Overflow/Surcharge
Incident Reason:	Equipment Failure
Source Type:	Unknown / N/A
Sector Type:	Unknown / N/A
MOE/Other Agencies Involved:	Unknown / N/A
Was there a discharge / emission / spill of a contaminant to the environment?	
Yes	

Contaminants Table

Contaminant Name	Description	Code	UN#	Limit	Quantity	[units]	[freq]
WATER		99	n/a		0	other - see incident description	

Environmental Compliance Reporting (ECR)

Is this an air emission (measured or modelled) or wastewater (sewage) discharge exceedance that will become part of the Environmental Compliance Report?

(legislation, certificate of approval, order, or guideline)

No

Voluntary / Mandatory Abatement

Was there Non-Compliance/Non-Conformance Identified?

☐ Yes ☐ No

Voluntary / Mandatory Abatement Items


Not Available

Waste / EGR Information

Waste / EGR Information entries:

Not Available

Document Related Information

Cross Reference:	(doc link)	Task Link:	8170-AFRGNE 
Originating Document:		Created by:	Julian Aristizabal
Date Created:	2016/11/16	Date Completed:	
Office Receiving Incident Report:	Spills Action Centre	Incident Info Received By:	Julian Aristizabal
Bring Forward Date:		Bring Forward Reason:	

Signatures

Provincial Officer:

Name: Badge No: Work Unit: District/Area Office: Date: Signature:	
--	--

District/Area Supervisor:

Name:	
--------------	--

Work Unit:

District/Area Office:

Date:

Signature:



INCIDENT REPORT

Reference Number:	2820-AFRKX9	Module Type:	Pollution Incident Report (PIR)
Status:	Recommended	File Storage Number:	NOT FILED
Program:	Water - Ground & Surface	Activity:	Pollution Incident Reports

Caller or PO Reporting/Receiving Information

Name of Company:

MAILING ADDRESS			
Civic Address:		Unit Identifier:	
Delivery Designator:		Delivery Identifier:	
Municipality/ Unorganized Twp:	County/District:	Province/State:	Postal Code:
(1)		Ontario	
Postal Station:		Country:	Canada
Telephone Number:	Extension:	Other Number:	Email Address:
Date Reported to MOE:	2016/11/16	Time Reported to MOE:	10:17
Date of Incident:	2016/11/16	Time of Incident:	06:30
Incident Date Confirmation:	Actual		

Client(s)

Client Details

Site(s)

Site Details

hydrodam construction site<UNOFFICIAL>
Address: Lot , Part , 4 Booth St. at Ottawa River, Ottawa, City,
District Office: Ottawa

Incident Summary:

ABC Construction - dewatering directly to River after flooding event

Initial Incident Description (as reported):

Created: Neil St-Denis (Spills Action Centre) - 2016/11/16 10:17:05 AM

An anonymous caller reports that ABC Construction (building a hydrodam) had a failure of their water pumps last night resulting in 4' of water in a >100' hole. They are now using a pump, after bypassing the filtration system, to dewater the hole so there is human waste & chemicals from the portable toilets, fuel, oil etc. being pumped directly into the Ottawa River. This is currently ongoing.

10:23 SAC(ns) - Called the district office and left a message for Thandeka requesting a call back.

10:47 SAC(ns) - Called the works dept, spoke to Maxine, informed her of the incident and provided her the IR# for the incident. She reports that she needs to find out if the site is on their project list in addition to calling multiple people and creating a report. She will call SAC back with all of the info.

10:55 SAC(ns) - Called the district office, spoke to Thandeka and informed her of the incident. She reports that there was a report (IR# 2018-AFRGCZ) created earlier this morning but that it has not resolved itself yet.

11:13 SAC(ns) - Received a call from Maxine, of 311 Ottawa, in regards to an update. She reports that she has made her calls out and it is the sewer branch that will be attending. They are heading there right away (ETA unknown). She will receive any updates and then relay back to SAC. The report number is 201601028322.

14:50 SAC(ns) - Called Ottawa 311, spoke to Catherine and requested an update. She informs us that she will have someone from the sewer dept. call us back shortly with an update.

14:58 Ian Murdie of C of Ottawa to SAC(JL): no impacts to City sewers or infrastructure. It appears that the pit at construction site filled up overnight due to a pump failure. Site is presently de-watering pit by pumping through the sediment bags.

Site Supervisor for construction company is Jeremy Tremblay at 514 601 5389.

SAC Action Class:	Pollution Incident Reports (PIRs) and "Other" calls
Non-Standard Procedure:	No

Incident Description:

Last update: Greg Davis (Ottawa District Office) - 2016/11/17 08:38:49 AM

Nov 17/16 MOECC ODO duty officer. City of Ottawa sewer department responded yesterday. Pit filled with water due to pump failure. No indication of sewage/fuel in pit. No ERP call out initiated by SAC. No MOECC action necessary. Recommend closing IR.

Incident Description Continuation:

Not Available

Incident Update:
Not Available

Was there an MOE field response?	No
Were there samples collected / analyzed at any time?	No
Health / Environmental Consequences at the Time of Incident	
Health / Environmental Consequences:	2 - Minor Environment

Has a Water Body been impacted?	Yes
Water Body / Bodies Impacted:	Ottawa River
Receiving Environment	Surface Water
Incident Event:	Other
Specify Other:	dewatering
Incident Reason:	Equipment Failure
MOE/Other Agencies Involved:	Province - MOE-District Office
Was there a discharge / emission / spill of a contaminant to the environment?	
No	

Environmental Compliance Reporting (ECR)

Is this an air emission (measured or modelled) or wastewater (sewage) discharge exceedance that will become part of the Environmental Compliance Report?
(legislation, certificate of approval, order, or guideline)
No

Voluntary / Mandatory Abatement


Was there Non-Compliance/Non-Conformance Identified?	<input type="radio"/> Yes <input checked="" type="radio"/> No
Voluntary / Mandatory Abatement Items	
Not Available	

Waste / EGR Information

Waste / EGR Information entries:

Not Available

Document Related Information

Cross Reference:	(doc link)	Task Link:	7227-AFRLD3 
Originating Document:		Created by:	Neil St-Denis
Date Created:	2016/11/16	Date Completed:	
Office Receiving Incident Report:	Spills Action Centre	Incident Info Received By:	Neil St-Denis
Bring Forward Date:		Bring Forward Reason:	

Signatures

Provincial Officer:

Name:	Greg Davis
Badge No:	725
Work Unit:	
District/Area Office:	Ottawa District Office
Date:	2017/01/11
Signature:	

District/Area Supervisor:

Name:	
Work Unit:	
District/Area Office:	
Date:	
Signature:	



INCIDENT REPORT

Reference Number:	3061-AAT2UE	Module Type:	Spill
Status:	Recommended	File Storage Number:	SI OT OT BO 100
Program:	Water - Ground & Surface	Activity:	Notifications

Caller or PO Reporting/Receiving Information

First Name:	Last Name:
Jeremy	Trembay
Name of Company:	
Northec Construction	

MAILING ADDRESS

Civic Address:		Unit Identifier:	
Delivery Designator:		Delivery Identifier:	
Municipality/ Unorganized Twp:	County/District:	Province/State:	Postal Code:
(1)		Ontario	
Postal Station:		Country:	Canada
Telephone Number:	Extension:	Other Number:	Email Address:
(450)558-3681		Fax	
Date Reported to MOE:	2016/06/10	Time Reported to MOE:	20:42
Date of Incident:	2016/06/10	Time of Incident:	
Incident Date Confirmation:	Actual		

Client(s)

Client Details

Chaudiere Hydro Inc., Business/Facility Name: Chaudiere Hydro L.P.
Mailing Address: 3025 Albion Rd N, Ottawa, Ontario, Canada, K1G 3S4
Physical Address: 3025 Albion Rd N, Ottawa, City, Ontario, Canada, K1G 3S4
Telephone: (613)225-0418, FAX: (613)738-6406, email: franzkropp@energyottawa.com
Client #: 5378-9L9LCN, Client Type: Corporation, NAICS: 221111

Site(s)

Site Details

4 Booth Street
Address: 4 Booth St, Ottawa, City
District Office: Ottawa
Site #: 1375-9SYP8V

Incident Summary:

Ongoing discharge of excavation water to Ottawa R.

Initial Incident Description (as reported):

Created: Mark C Harris (Spills Action Centre) - 2016/06/10 08:42:13 PM

2023h

I received a call from Northec Construction [Jeremy Tremblay: 450-558-3681 cell] reporting they have a worksite in Ottawa at 4 Booth Street (new powerhouse for hydro project) and they are currently pumping water from their excavation through sediment bags and a membrane filter into the Ottawa River.

Caller states they typically use settling tanks for sediment separation and then send the water to the sanitary system (permit with the city for this activity has been suspended due to the presence of hydrocarbons in the water). Caller advises the City of Ottawa will re-instate the permit only after a secondary treatment system is in place. A contractor [Baker Corp] will be installing the secondary treatment system on Monday.

Caller further states they have been sampling and their samples now show they have no hits for hydrocarbons

As a temporary fix, Northec Construction has placed sediment bags with membrane filtration at their discharge point to a basin which leads directly to the river.

Caller states they cannot stop pumping out the excavation - there is a great deal of equipment in the excavation, which, if impacted, has the potential to release further contaminants into the natural environment.

Caller reports they have been discharging to the Ottawa River for 4-5 hours already and they have a foreman on-site monitoring and they will be sampling over the weekend, but no work will take place over the weekend.

I advised Mr. Tremblay to call MOE SAC with contact information for foreperson on-site over the weekend and provided the IR # for the report.

2057h

SAC[mch to MOE Ottawa Mgr [Steve Burns], left voice message requesting call-back.

2100h

MOE Ottawa Mgr [Steve Burns] to SAC[mch], briefed. MOE SAC to call out the ERP first thing in the morning to assess the situation directly during daylight hours and work with the City to re-instate the permit.

2124h

Northec [Jeremy Tremblay] to SAC[mch], requesting MOE response this evening as the General Supervisor. Jean Desgarniers. 514-592-2557 cell is on-site this evening. Caller reporting General Supervisor has more in-depth knowledge of the site than the foreman for Saturday - Yves. Caller further notes that General Supervisor will be unavailable after tonight - leaving the province.

2139h

SAC (fb) to Jeremy Tremblay (JT). SAC wants to know until what time is going to be the Site Manager available tonight should an inspector will be heading to the Site to assess the situation. Jeremy is not aware of this information. He will contact the on call manager and contact SAC back.

21.58h

SAC (fb) to JT. The Manager is going to be at the Site until 2300. The manager will be at the Site on Sunday during daytime (No specific timeframe provided). JT was informed that an Officer will be called out in the morning to conduct an assessment of the incident.

22.08h

SAC (fb) to Steve Burns (Ottawa Mgr). VM briefing the situation.

June 11, 2016

7:44 - SACkm - ERP initiated - Brad Eckert will be arriving at the office between 09:00 and 09:30. Will contact SAC. IR# provided.

08:52 ERP to SAC (jc2). ERP is at the office and pulling up the report. ERP will likely be on-site at 09:30. SAC to be updated.

12:10 - SACkm to ERP Brad Eckert - Caller stated that there is no sign of hydrocarbon contamination of the water being discharged into the Ottawa River. Caller stated they are filtering the water via filter bags to remove the sediment, which then goes to a natural sump system (rocks), which then flows through a natural channel to the Ottawa River. Caller stated that they have sampled, and resampled, yielding zero detection of hydrocarbons. Caller stated he has no concerns of the quality of the water being discharged into the river.

Brad is heading back to the office, will call SAC once he is back in the office. ETA ~ 20 minutes.

13:04 -- ERP to SAC (ad): Brad E. updates that he is back at the office, will make some notes and head home.

Saturday contact: Foreman "Yves" [1-780-747-4774] will be on-site tomorrow.

Sunday contact: Project Manager Yannick Lussier: 514-710-0912

SAC Action Class:	Primary Assessment of Incident
Non-Standard Procedure:	No

Incident Description:

Last update: Brad Eckert (Ottawa District Office) - 2016/06/15 01:49:19 PM

The situation at the power house is under control and no concerns identified. The discharge is being treated more than adequately. The most recent result from May 30 was 0 hydrocarbons and they just received June 9th result which was 170 ug/l for F3 which is well below our typical effluent criteria of 1000 ug/l. The 2ndary carbon treatment required by the City will be in place by Tues. The emergency discharge is to an excavation pit which created a hydraulic connection to a natural channel running under the island which flows out to the main channel below the dam. There are no signs or any identifiable sources of contamination in the power plant construction area where the additional effluent is coming from. The effluent looks pristine with no signs of any contamination.

With the volume involved and the latest results and controls in place, there would not appear to be any impacts.

June 15, 2016 - Jeremie provided the latest monitoring results which identified 0 hydrocarbons for June 10, 11 and 12.

Incident Description Continuation:

Not Available

Incident Update:

Neil St-Denis - 2016/06/14 created; 2016/06/14 last update - Spills Action Centre

18 01 SAC(ns) - Received a call from Jeremy Tremblay (514 601-5369), with Norheac Construction ABC, in regards to an update. He reports that an inspector has been on site and found what they're doing to be fine. A secondary treatment unit has arrived as of 16:30 and they will fill it with water tomorrow. It takes 24 hours for the treatment process to begin, though.

Was there an MOE field response?	Yes		
Site Visit (other than inspection or ERP Response):	No		
Inspection:	No		
ERP Response:	Yes		
ERP Name:	Brad Eckert		
ERP Call-Out Date:	2016/06/11	ERP Call-Out Time:	07:44
Date of Arrival at Site:	2016/06/11	Time of Arrival at Site:	09:15
Were there samples collected / analyzed at any time?	No		
Health / Environmental Consequences at the Time of Incident			
Health / Environmental Consequences:	2 - Minor Environment		

Has a Water Body been Impacted?	Yes
Water Body / Bodies Impacted:	Ottawa River
Receiving Environment:	Surface Water
Incident Event:	Overflow/Surcharge
Incident Reason:	Other
Specify Other:	Possibly from on-site materials
Source Type:	Other
Specify Other:	construction materials
Sector Type:	Electric Power Generation
MOE/Other Agencies Involved:	Province - MOE-District Office
Was there a discharge / emission / spill of a contaminant to the environment?	
Yes	

Attachments:	
Attachments Names:	Chaudiere Hydro Inc. 1 June 11-16.jpg; Chaudiere Hydro Inc. 2 June 11-16.jpg; Chaudiere Hydro Inc. 3 June 11-16.jpg; Chaudiere Hydro Inc. 4 June 11-16.jpg; Chaudiere Hydro Inc. 5 June 11-16.jpg
Links & Comments:	

Contaminants Table

Contaminant Name	Description	Code	UN#	Limit	Quantity	[units]	[freq]
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OIL/GREASE	Hydrocarbon - F3	15	n/a	170	µg/L	none
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Environmental Compliance Reporting (ECR)

Is this an air emission (measured or modelled) or wastewater (sewage) discharge exceedance that will become part of the Environmental Compliance Report?

(legislation, certificate of approval, order, or guideline)

No

Voluntary / Mandatory Abatement

Was there Non-Compliance/Non-Conformance identified?

☐ Yes ☒ No

Voluntary / Mandatory Abatement Items


Not Available

Waste / EGR Information

Waste / EGR Information entries:

Not Available

Document Related Information

Cross Reference:	(doc link)	Task Link:	5860-AAT3UM 
Originating Document:		Created by:	Mark C Harris
Date Created:	2016/06/10	Date Completed:	
Office Receiving Incident Report:	Spills Action Centre	Incident Info Received By:	Mark C Harris
Bring Forward Date:		Bring Forward Reason:	

Signatures

Provincial Officer:

Name:	Brad Eckert
Badge No:	78
Work Unit:	
District/Area Office:	Ottawa District Office
Date:	2016/07/25

Signature:

District/Area Supervisor:

Name:

Work Unit:

District/Area Office:

Date:

Signature:



INCIDENT REPORT

Reference Number:	3812-9YVQFN	Module Type:	Spill
Status:	Closed	File Storage Number:	NOT FILED
Program:	Water - Ground & Surface	Activity:	Spills

Caller or PO Reporting/Receiving Information

First Name:	Last Name:
Jeremie	Tremblay
Name of Company:	
EBC	

MAILING ADDRESS

Civic Address:		Unit Identifier:	
1095 Rue Valet, Anciennelorette, Quebec			
Delivery Designator:		Delivery Identifier:	
Municipality/ Unorganized Twp:	County/District:	Province/State:	Postal Code:
(1)		Ontario	
Postal Station:		Country:	Canada
Telephone Number:	Extension:	Other Number:	Email Address:
514-601-5369		Fax	Jeremie.tremblay@ebcinc.com

Date Reported to MOE:	2015/07/29	Time Reported to MOE:	15:08
Date of Incident:	2015/07/29	Time of Incident:	14:20
Incident Date Confirmation:	Actual		

Client(s)

Client Details

Site(s)

Site Details	
4 Booth Street Address: 4 Booth St, Ottawa, City District Office: Ottawa Site #: 1375-9SYP8V	
Incident Summary:	
EBC, Asbestos to ground, cnd	
Initial Incident Description (as reported):	
Created: David Irwin (Spills Action Centre) - 2015/07/29 03:08:13 PM	
Caller is reporting a spill of asbestos material from the demolition material involved in the building of a power house on Chaudiere Island. It was noted they have Asbestos on work site from demolished material and while the material was being moved on site it fell to the ground and a pipe fell as well causing the bag of asbestos to break open. The material was estimated to be half the size of a garbage bag. The workers were on site in appropriate PPE and were able to contain the material with "special liquid" and cleaned up the spilled material at the time of the incident. There were no offsite impacts noted at time of the incident. The cleaned up material has been put in 4 bag and will be transported along with the other asbestos waste. The incident happened at 14:20 2015/07/29. Caller was not certain if the incident was exempt under Part IX of O.Reg 875/98.	
15:36 - SAC(dt) to Ottawa MOECC Brad - updated on incident	
SAC Action Class:	Land Spills
Non-Standard Procedure:	No
Incident Description:	
Last update: Greg Davis (Ottawa District Office) - 2015/07/30 08:01:02 AM	
July 30/15. MOECC ODO duty officer G Davis. Spilled asbestos cleaned up. workers had proper PPE. No further action necessary. I recommend closing IR.	
Incident Description Continuation:	
Not Available	
Incident Update:	
Not Available	
Was there an MOE field response?	No
Were there samples collected / analyzed at any time?	No

Health / Environmental Consequences at the Time of Incident	
Health / Environmental Consequences:	0 - No Impact
Has a Water Body been impacted?	No
Receiving Environment	Land
Incident Event:	Leak/Break
Incident Reason:	Operator/Human Error
Source Type:	Truck - Transport/Hauling
Sector Type:	Miscellaneous Industrial
MOE/Other Agencies Involved:	Province - MOE-District Office
Was there a discharge / emission / spill of a contaminant to the environment?	
Yes	

Contaminants Table

Contaminant Name	Description	Code	UN#	Limit	Quantity	[units]	[freq]
ASBESTOS (BLUE)		28	2212		0	other - see incident description	n/a

Environmental Compliance Reporting (ECR)

<p>Is this an air emission (measured or modelled) or wastewater (sewage) discharge exceedance that will become part of the Environmental Compliance Report?</p> <p>(legislation, certificate of approval, order, or guideline)</p> <p>No</p>
--


Voluntary / Mandatory Abatement

<p>Was there Non-Compliance/Non-Conformance Identified?</p> <p><input type="radio"/> Yes <input checked="" type="radio"/> No</p>
<p>Voluntary / Mandatory Abatement Items</p> <p>Not Available</p>

Waste / EGR Information

<p>Waste / EGR Information entries:</p> <p>Not Available</p>

Document Related Information


Cross Reference:	(doc link)	Task Link:	8174-9YVR7M 
Originating Document:		Created by:	David Irwin
Date Created:	2015/07/29	Date Completed:	2015/09/15
Office Receiving Incident Report:	Spills Action Centre	Incident Info Received By:	David Irwin
Bring Forward Date:		Bring Forward Reason:	

Signatures

Provincial Officer:

Name:	Greg Davis
Badge No:	725
Work Unit:	
District/Area Office:	Ottawa District Office
Date:	2015/07/30
Signature:	

Senior Environmental Officer:

Name:	Jena Leavoy
Work Unit:	
District/Area Office:	Ottawa District Office
Date:	2015/09/15
Signature:	



INCIDENT REPORT

Reference Number:	466D-A4UMVN	Module Type:	Spill
Status:	To be assigned	File Storage Number:	
Program:	Water - Ground & Surface	Activity:	Spills

Caller or PO Reporting/Receiving Information

First Name:	Last Name:
Jeremie	Premblay
Name of Company:	
EBC and Corporation	

MAILING ADDRESS

Civic Address:		Unit Identifier:	
Delivery Designator:		Delivery Identifier:	
Municipality/ Unorganized Twp:	County/District:	Province/State:	Postal Code:
(1)		Ontario	
Postal Station:		Country:	Canada
Telephone Number:	Extension:	Other Number:	Email Address:
514-601-5369		Fax	

Date Reported to MOE:	2015/12/03	Time Reported to MOE:	11:58
Date of Incident:	2015/12/03	Time of Incident:	
Incident Date Confirmation:	Estimated		

Client(s)

Client Details

Site(s)

Site Details

Construction Site <UNOFFICIAL>

Address: Lot , Part , 4 Booth Street, Ottawa, City,

District Office: Ottawa

GeoReference: Map Datum , Zone: 18, Method: GPS, UTM Easting: 443817, UTM Northing: 5029961, UTM

Location Description:

Incident Summary:

High turbidity water from construction site to Ottawa River

Initial Incident Description (as reported):

Created: Carly Drser (Spills Action Centre) - 2015/12/03 11:58:37 AM

Caller reports they have a construction site with a coffer dam. Due to construction the water has high turbidity. This water is going through the stop log and into the Ottawa River - Quantity is 1L per second. This started this morning (time unknown). Construction in that area has stopped and within the next few hours the water will start to run clear again. Caller will update SAC when the the turbidity in the water has gone down- approx. 3pm. Turbidity is being monitored and measured.

12:28h

SAC (co) to Ottawa DO

LM for the Duty Officer

14:19h

Ottawa Duty Officer to SAC (co)

Briefed on the incident

1523h

Caller to SACnh reports:

-The turbidity has dissipated but is still present. Caller reports that within 2h the turbidity should dissipate.

-Caller reports that they have previously placed impermeable tarp across the damn and the first two gates but it is very difficult to make a complete seal.

-The work in the area has ceased and caller will continue to monitor and will update SAC once the turbidity has cleared out

SAC/mch notes: site is NOT in SWPZ.

SAC Action Class:

Watercourse Spills

Non-Standard Procedure:

No

Incident Description:

Last update: Mark C Harris (Spills Action Centre) - 2015/12/03 03:43:37 PM

Latitude: 45.420909 Longitude: -75.718127

UTM Zone: 18 Easting: 443817 Northing: 5029961

Municipal - Upper Tier: N/A

Municipal - Single and Lower Tier: N/A

MPAC Street Address: N/A

Township, Concession and Lot: N/A

Assessment Roll Number: N/A

Property Information Number: 042800001

Source Protection Area Name: Rideau Valley

Wellhead Protection Area (WHPA): No

Groundwater Vulnerability Score: N/A

Intake Protection Zone 1 or 2: No
 Surface Water Vulnerability Score (if ≥ 8): N/A
 WHPA – Groundwater Under Direct Influence (GUDI): No
 GUDI Vulnerability Score: N/A
 Significant Groundwater Recharge Area: No
 Highly Vulnerable Aquifer: N/A
 Issue Contributing areas (ICA): No
 ICA Issues: N/A
 Niagara Escarpment Development Control Area: No
 Oak Ridges Moraine Planning Area: No

Incident Description Continuation:

Jena Leavoy - 2015/12/08 created; 2015/12/08 last update - Ottawa District Office
 JL - Spoke to Jeremie on Dec 4 - regarding turbidity issue. Construction is related to the Chaudiere Falls Redevelopment project.

Jena Leavoy - 2015/12/08 created; 2015/12/08 last update - Ottawa District Office
 JL - Spoke to Jeremie regarding turbidity issue. This IR is related to the construction of the Chaudiere Falls hydroelectric generation station redevelopment project. Currently installing coffer dam in order to build power house and new sanitary sewer. Silt curtain in place on coffer dam however stop logs are not 100% sealed. Divers were retained to place a membrane to control any flow through the stop logs but it's not filtering all water getting between stop logs. Jeremie indicated that there is approximately 1L per second of turbid water passing through stop logs or underneath. turbid water was clearing up since Jeremie first reported incident to SAC. Dewatering is planned once turbidity is low. Water management plan in place for construction project. PTTW and sewage works issued for redevelopment project. Plan to use existing sanitary sewer for any construction dewatering. NFA required at this time.

Incident Update:

Not Available

Was there an MOE field response?	No
Were there samples collected / analyzed at any time?	No
Health / Environmental Consequences at the Time of Incident	
Health / Environmental Consequences:	2 - Minor Environment

Has a Water Body been impacted?	No
Receiving Environment:	Surface Water
Incident Event:	Other
Specify Other:	Construction
Incident Reason:	Unknown / N/A
Source Type:	Unknown / N/A
Sector Type:	Unknown / N/A
MOE/Other Agencies Involved:	Province - MOE-District Office
Was there a discharge / emission / spill of a contaminant to the environment?	

Yes

Contaminants Table

Contaminant Name	Description	Code	UN#	Limit	Quantity	{units}	{freq}
TURBIDITY 1.0		51	n/a		0	other - see incident description	

Environmental Compliance Reporting (ECR)

Is this an air emission (measured or modelled) or wastewater (sewage) discharge exceedance that will become part of the Environmental Compliance Report?

(legislation, certificate of approval, order, or guideline)

No

Voluntary / Mandatory Abatement

Was there Non-Compliance/Non-Conformance Identified?

☐ Yes ☐ No

Voluntary / Mandatory Abatement Items


Not Available

Waste / EGR Information

Waste / EGR Information entries:

Not Available

Document Related Information

Cross Reference:	(doc link)	Task Link:	0546-A4UNGA 
Originating Document:		Created by:	Carly Orser
Date Created:	2015/12/03	Date Completed:	
Office Receiving Incident Report:	Spills Action Centre	Incident Info Received By:	Carly Orser
Bring Forward Date:		Bring Forward Reason:	

Signatures

Provincial Officer:

Name: Badge No: Work Unit: District/Area Office: Date: Signature:	
--	--

District/Area Supervisor:

Name: Work Unit: District/Area Office: Date: Signature:	
--	--



INCIDENT REPORT

Reference Number:	8082-ADJSPS	Module Type:	Spill
Status:	To be assigned	File Storage Number:	
Program:	Water - Ground & Surface	Activity:	Spills

Caller or PO Reporting/Receiving Information

First Name:	Last Name:
Jeremie	Tremblay
Name of Company:	
Northec Construction - EBC	

MAILING ADDRESS

Civic Address:		Unit Identifier:	
1095 Rue Valet			
Delivery Designator:		Delivery Identifier:	
Municipality/ Unorganized Twp:	County/District:	Province/State:	Postal Code:
(1)		Ontario	
Postal Station:		Country:	Canada
Telephone Number:	Extension:	Other Number:	Email Address:
514-601-5369		Fax	Jeremie.tremblay@ebcinc.com

Date Reported to MOE:	2016/09/06	Time Reported to MOE:	17:03
Date of Incident:	2016/09/06	Time of Incident:	
Incident Date Confirmation:	Actual		

Client(s)

Client Details

Site(s)**Site Details**

4 Booth Street
Address: 4 Booth St, Ottawa, City
District Office: Ottawa
Site #: 1375-8SYP8V

Incident Summary:

Northe Construction- Unknown Oily Material While Drilling 25m Depth

Initial Incident Description (as reported):

Created: Ian Oosting (Spills Action Centre) - 2018/09/06 05:03:38 PM

Caller reports they were drilling a hole for a powerhouse to a Hydroelectric dam located at 4 Booth Street, Ottawa. Caller reports at 25m depth, they started to get an oily substance leaking into the hole. Caller reports there are no pipelines in the area, and they are unsure if it is natural or not. They will be updating their project engineer. Material will be contained in the hole, and can be treated on their onsite treatment process.

17:41- SAC(io) to Jug Manocha (Operations Engineer, MNRF Petroleum) Briefed and copied report.

SAC Action Class:	Primary Assessment of Incident
Non-Standard Procedure:	No

Incident Description:**Incident Description Continuation:**

Not Available

Incident Update:

Not Available

Was there an MOE field response?	No
Were there samples collected / analyzed at any time?	No
Health / Environmental Consequences at the Time of Incident	
Health / Environmental Consequences:	2 - Minor Environment

Has a Water Body been impacted?	No
--	----

Receiving Environment:	Land
Incident Event:	Unknown / N/A
Incident Reason:	Unknown / N/A
Source Type:	Unknown / N/A
Sector Type:	Unknown / N/A
MOE/Other Agencies Involved:	Province - MOE-District Office, Province - Natural Resources
Was there a discharge / emission / spill of a contaminant to the environment?	
Yes	

Contaminants Table

Contaminant Name	Description	Code	UN#	Limit	Quantity	[units]	[freq]
UNKNOWN		98	n/a		0	other - see incident description	

Environmental Compliance Reporting (ECR)

<p>Is this an air emission (measured or modelled) or wastewater (sewage) discharge exceedance that will become part of the Environmental Compliance Report?</p> <p>(legislation, certificate of approval, order, or guideline)</p>
--

Voluntary / Mandatory Abatement

Was there Non-Compliance/Non-Conformance Identified?	<input type="radio"/> Yes <input type="radio"/> No
Voluntary / Mandatory Abatement Items Not Available	

Waste / EGR Information

Waste / EGR Information entries: Not Available
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Document Related Information

Cross Reference:	(doc link)	Task Link:	0785-ADJU5V 
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Originating Document:		Created by:	Ian Oosting
Date Created:	2016/09/06	Date Completed:	
Office Receiving Incident Report:	Spills Action Centre	Incident Info Received By:	Ian Oosting
Bring Forward Date:		Bring Forward Reason:	

Signatures

Provincial Officer:

Name: Badge No: Work Unit: District/Area Office: Date: Signature:	
--	--

District/Area Supervisor:

Name: Work Unit: District/Area Office: Date: Signature:	
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INCIDENT REPORT

Reference Number:	7640-B4WG7A	Module Type:	Spill
Status:	In progress	File Storage Number:	
Program:	Water - Ground & Surface	Activity:	Spills

Caller or PO Reporting/Receiving Information

First Name:	Last Name:
Ibrahim	Shideh
Name of Company:	
Eddy Lands Construction	

MAILING ADDRESS

Civic Address:		Unit Identifier:	
Delivery Designator:		Delivery Identifier:	
Municipality/ Unorganized Twp:	County/District:	Province/State:	Postal Code:
(1)		Ontario	
Postal Station:		Country:	Canada
Telephone Number:	Extension:	Other Number:	Email Address:
(613)617-2114		Fax	
Date Reported to MOE:	2018/09/24	Time Reported to MOE:	08:05
Date of Incident:	2018/09/22	Time of Incident:	
Incident Date Confirmation:	Actual		

Client(s)

Client Details

Site(s)

Site Details

4 Booth Street, Ottawa<UNOFFICIAL>

Address: Lot: , Part: , 4 Booth Street, Ottawa, Ottawa, City,

District Office: Ottawa

GeoReference Map Datum: , Zone: 18, Method: , UTM Easting: 443856.21, UTM Northing: 5029856.19,

UTM Location Description: ,

Incident Summary:

Eddy Lands Construction: 20L Diesel to construction pit

Initial Incident Description (as reported):

Created: Halden McDonald (Spills Action Centre) - 2018/09/24 08:05:12 AM

Caller to SAC(hm) reporting that there was a spill at their construction site over the weekend located at 4 Booth Street, Ottawa. Caller says that the spill happened on the September 22nd when the tornado hit. Caller says that their construction site started to flood with the rain. Caller says that their diesel generator became submerged and they are estimating a loss of 20L of diesel. Caller says that when this was discovered they moved the generator to higher ground to avoid any further spill. Caller says that they then excavated a hole on the site where all the water drained to. Caller says that this is how they contained the spill. Caller says that they are constructing a building, so the cement walls would have contained it to the site regardless. They are very close to the Ottawa River, but it would not have been impacted. Caller says that they could not get anybody to site on the day and crews on-site were not aware they had to report it forthwith. Caller says that they are going to educate their team on reporting requirements as they only found out this morning about the spill and wanted to report it. Caller says that they have retained Clean Water Works (CWW) to attend site and should be on-site sometime this morning. Caller says that next update will be around 14:00.

13:37 Paul Nagy (Clean Water Works) to SAC(jt)

Caller reports they have skimmed one load so far and they will have another load later on today. An EGR was requested and issued below.

16:58 Paul Nagy (Clean Water Works) to SAC(jt)

Caller reports they have another load ready to leave the site. The cleanup is on-going and they will be returning to site tomorrow. They have contained the spill for tonight. An EGR was requested and issued below.

Sept 25

0815 Ibrahim Shideh to SAC(ak) updates that vac a vac truck was on site. They are on site today as well doing clean up. Caller will update SAC by 1330 hrs.

15:05

Paul Nagy (Clean Waterworks - 613-299-4978) to SACcm2:

- EGR request for 12500L of 221-L. EGR issued.
- Cleanup is ongoing. They'll have one more load tonight and another one most likely tomorrow

SPIA***Not in SWPA***

SAC Action Class:	Land Spills
Non-Standard Procedure:	No

Incident Description:

Last update: Kyle Straberger (Ottawa District Office) - 2018/09/28 03:50:46 PM

EO Straberger

September 28, 2018 - Phone call to Taryn Glancy, Zibi, (613-219-2722). No answer, left message requesting an update to the status of the site.

(9:50am) Phone call from Taryn Glancy, Zibi. Eddy Lands Construction LP generated a Environmental Incident Report that will be forwarded to the MECF. Taryn stated that the spill was from the fuel tank and not the diesel generated as originally reported to the MECF SAC. It is estimated based on when the power was restored to the site that the dewatering pumps only pumped for approx. 10hrs and the estimated fuel lost was estimated at 50L (conservative). Zibi will be abandoning the clarifier at Building 535 and replacing the treatment with a Enviro-Tank provided by Aquatech. Additional information will be provided following the call.

Email received from Taryn Glancy providing the following information:

- Eddy Lands Construction LP - Environmental Incident Report
- Diesel Spill Site Map
- Enviro-Tank Brochures and drawings
- Pictures of impacted areas of the construction site

Eddy Lands Construction LP - Environmental Incident Report

Summary: Saturday, September 22, 2018 at 1pm Eddy Lands Construction LP was notified of flooding at site. Eddy Lands Construction LP arrived on-site and began pumping of water from the site into the clarifier. During pumping it was observed that the diesel tank was submerged and leaking diesel. Tank was removed from the water and relocated to a higher elevation. As a result of dewatering operations, residual diesel was discharged into the clarifier and the Buchanan Channel. Clean Water Works was retained and arrived on-site Monday, September 24, 2018 to contain and clean-up the impacted areas.

Site does not plan to discharge off-site for several operating days, however, Milestone Environmental has been retained to pump the clarifier through a portable treatment system which would allow for future use if dewatering was to occur prior to an alternative treatment solution (ie. Aquatech Tank).

Incident Description Continuation:

Not Available

Incident Update:

Blake Turner - 2018/09/28 created; 2018/09/28 last update - Spills Action Centre
17:00-Jim Clean Waterworks to SACbt. The spill has been cleaned up completely. No further EGRs needed and no further updates.

Was there an MOE field response?	No
Were there samples collected / analyzed at any time?	No
Health / Environmental Consequences at the Time of Incident	
Health / Environmental Consequences:	2 - Minor Environment

Has a Water Body been impacted?	No
Receiving Environment:	Land, Surface Water, Source Water Zone
Incident Event:	Leak/Break
Incident Reason:	Flooding

Source Type:	Other
Specify Other:	Generator
Sector Type:	Miscellaneous Industrial
MOE/Other Agencies Involved:	Province - MOE-District Office
Was there a discharge / emission / spill of a contaminant to the environment?	
Yes	

Contaminants Table

Contaminant Name	Description	Code	UN#	Limit	Quantity	[units]	[freq]
DIESEL FUEL		13	1202		20	L	

Environmental Compliance Reporting (ECR)

Is this an air emission (measured or modelled) or wastewater (sewage) discharge exceedance that will become part of the Environmental Compliance Report?

(legislation, certificate of approval, order, or guideline)

Voluntary / Mandatory Abatement

Was there Non-Compliance/Non-Conformance Identified? ☐ Yes ☐ No

Voluntary / Mandatory Abatement Items

Not Available

Waste / EGR Information

Waste / EGR Information entries:

Requestor Name/Company/Contact Information: Paul Nagy/Clean Water Works/613-299-4978
 EGR Number: ONS0402
 Reason for EGR Issue: Spill
 Waste Specification:
 Class Name - Class Code - Hazard Description - Quantity [Units] - Physical State,Description
 Light fuels - 221 - Liquid Industrial Waste - 12800 [L] - Liquid,
 Gasoline, kerosene, diesel, tank drainings/washings/bottoms, spill clean-up residues
 Manifest No: TF96095-6
 Waste Site Name (Receiver): Clean Water Works Inc.
 Waste Site ECA (Receiver): 1857-6ZBR6H
 Waste Management System Client Name (Carrier): Clean Water Works Inc.
 Waste Management System ECA No (Carrier): 3664-6GGPRM
 Created By/APPROVED BY: Jonathan Tse

Office: Spills Action Centre
Created Date/APPROVED DATE: 09/24/2018 1:38:56 PM
Last Modified By: Jonathan Tse
Last Modified Date: 09/24/2018 1:45:39 PM

Requestor Name/Company/Contact Information: Paul Nagy/CleanWater Works/613-299-4978
EGR Number: ONS0402
Reason for EGR Issue: Spill
Waste Specification:
Class Name - Class Code - Hazard Description - Quantity [Units] - Physical State,Description
Light fuels - 221 - Liquid Industrial Waste - 8500 [L] - Liquid,
Gasoline, kerosene, diesel, tank drainings/washings/bottoms, spill clean-up residues
Manifest No: TF96096-4
Waste Site Name (Receiver): Clean Water Works Inc
Waste Site ECA (Receiver): 1857-6ZBR6H
Waste Management System Client Name (Carrier): Clean Water Works Inc.
Waste Management System ECA No (Carrier): 3664-6GGPRM
Created By/APPROVED BY: Jonathan Tse
Office: Spills Action Centre
Created Date/APPROVED DATE: 09/24/2018 4:59:17 PM
Last Modified By: Jonathan Tse
Last Modified Date: 09/24/2018 5:11:01 PM

Requestor Name/Company/Contact Information: Paul Nagy, Clean Water Works (613-299-4978)
EGR Number: ONS0402
Reason for EGR Issue: Spill
Waste Specification:
Class Name - Class Code - Hazard Description - Quantity [Units] - Physical State,Description
Light fuels - 221 - Liquid Industrial Waste - 8000 [L] - Liquid,
Gasoline, kerosene, diesel, tank drainings/washings/bottoms, spill clean-up residues
Manifest No: GT24518-7
Waste Site Name (Receiver): Clean Water Works Inc.
Waste Site ECA (Receiver): 1857-6ZBR6H
Waste Management System Client Name (Carrier): Clean Water Works Inc.
Waste Management System ECA No (Carrier): 3664-6GGPRM
Created By/APPROVED BY: Aaron Richards
Office: Spills Action Centre
Created Date/APPROVED DATE: 09/25/2018 12:58:09 PM
Last Modified By: Aaron Richards
Last Modified Date: 09/25/2018 1:16:28 PM

Requestor Name/Company/Contact Information: Paul Nagy - Clean Waterworks - 613-299-4978
EGR Number: ONS0402
Reason for EGR Issue: Spill
Waste Specification:
Class Name - Class Code - Hazard Description - Quantity [Units] - Physical State,Description
Light fuels - 221 - Liquid Industrial Waste - 12500 [L] - Liquid,
Gasoline, kerosene, diesel, tank drainings/washings/bottoms, spill clean-up residues
Manifest No: TF96097-2
Waste Site Name (Receiver): Clean Water Works Inc.
Waste Site ECA (Receiver): 1857-6ZBR6H
Waste Management System Client Name (Carrier): Clean Water Works Inc.
Waste Management System ECA No (Carrier): 3664-6GGPRM
Created By/APPROVED BY: Chris Mutton
Office: Spills Action Centre
Created Date/APPROVED DATE: 09/25/2018 3:03:26 PM
Last Modified By: Chris Mutton
Last Modified Date: 09/25/2018 3:20:30 PM


Requestor Name/Company/Contact Information: Paul Nagy, Clean Water Works (613-299-4978)

EGR Number: ONS0402
Reason for EGR Issue: Spill
Waste Specification:
Class Name - Class Code - Hazard Description - Quantity [Units] - Physical State,Description
 Light fuels - 221 - Liquid Industrial Waste - 4500 [L] - Liquid,
 Gasoline, kerosene, diesel, tank drainings/washings/bottoms, spill clean-up residues
Manifest No: TF96098-0
Waste Site Name (Receiver): Clean Water Works Inc.
Waste Site ECA (Receiver): 1857-6ZBR6H
Waste Management System Client Name (Carrier): Clean Water Works Inc.
Waste Management System ECA No (Carrier): 3664-6GGPRM
Created By/APPROVED BY: Aaron Richards
Office: Spills Action Centre
Created Date/APPROVED DATE: 09/25/2018 6:07:15 PM
Last Modified By: Aaron Richards
Last Modified Date: 09/25/2018 6:28:47 PM

Requestor Name/Company/Contact Information: 1206Paul Nagy from CWW
EGR Number: ONS0402
Reason for EGR Issue:
Waste Specification:
Class Name - Class Code - Hazard Description - Quantity [Units] - Physical State,Description
 Light fuels - 221 - Liquid Industrial Waste - 10852 [L] - Liquid,
 Gasoline, kerosene, diesel, tank drainings/washings/bottoms, spill clean-up residues
Manifest No: TF96100-4
Waste Site Name (Receiver): Clean Water Works Inc.
Waste Site ECA (Receiver): 1857-6ZBR6H
Waste Management System Client Name (Carrier): Clean Water Works Inc.
Waste Management System ECA No (Carrier): 3664-6GGPRM
Created By/APPROVED BY: Alim Khan
Office: Spills Action Centre
Created Date/APPROVED DATE: 09/26/2018 12:05:00 PM
Last Modified By: Alim Khan
Last Modified Date: 09/26/2018 12:21:53 PM

Requestor Name/Company/Contact Information: Clean Water Works
EGR Number: ONS0402
Reason for EGR Issue: Spill
Waste Specification:
Class Name - Class Code - Hazard Description - Quantity [Units] - Physical State,Description
 Light fuels - 221 - Liquid Industrial Waste - 1000 [L] - Liquid,
 Gasoline, kerosene, diesel, tank drainings/washings/bottoms, spill clean-up residues
Manifest No: TF96108-7
Waste Site Name (Receiver): Clean Water Works Inc.
Waste Site ECA (Receiver): 1857-6ZBR6H
Waste Management System Client Name (Carrier): Clean Water Works Inc.
Waste Management System ECA No (Carrier): 3664-6GGPRM
Created By/APPROVED BY: Blake Turner
Office: Spills Action Centre
Created Date/APPROVED DATE: 09/28/2018 4:57:39 PM
Last Modified By: Blake Turner
Last Modified Date: 09/28/2018 5:01:20 PM

Document Related Information

Cross Reference:	(doc link)	Task Link:	1026-B4WHUG 
Originating Document:		Created by:	Haiden McDonald
Date Created:	2018/09/24	Date Completed:	

Office Receiving Incident Report:	Spills Action Centre	Incident Info Received By:	Haiden McDonald
Bring Forward Date:		Bring Forward Reason:	

Signatures

Provincial Officer:

Name: Badge No: Work Unit: District/Area Office: Date: Signature:	
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District/Area Supervisor:

Name: Work Unit: District/Area Office: Date: Signature:	
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INCIDENT REPORT

Reference Number:	7820-9ZCNZ4	Module Type:	Spill
Status:	Recommended	File Storage Number:	SI OT OT BO 100
Program:	Water - Ground & Surface	Activity:	Spills

Caller or PO Reporting/Receiving Information

First Name:	Last Name:
Jeremie	Tremblay
Name of Company:	
EBC	

MAILING ADDRESS

Civic Address:		Unit Identifier:	
1095 Rue Valet			
Delivery Designator:		Delivery Identifier:	
Municipality/ Unorganized Twp:	County/District:	Province/State:	Postal Code:
L'Ancienne-Lorette(2)		Quebec	G2E 4M7
Postal Station:	LCD Quebec City	Country:	Canada
Telephone Number:	Extension:	Other Number:	Email Address:
514-601-5369		Fax	Jeremie.tremblay@ebcinc.com

Date Reported to MOE:	2015/08/13	Time Reported to MOE:	13 53
Date of Incident:	2015/08/13	Time of Incident:	13:45
Incident Date Confirmation:	Actual		

Client(s)

Client Details
EBC Inc. Mailing Address: Suite 200 - 160 George St, Ottawa, Ontario, Canada, K1N 9M2 Physical Address: Suite 200 - 160 George St, Ottawa, City, Ontario, Canada, K1N 9M2 Telephone: (514)884-0660

Client #: 6351-9SRMJB, Client Type: Corporation, NAICS: 236220

Site(s)

Site Details

Construction Site<UNOFFICIAL>

Address: Lot , Part , 4 Booth St, Ottawa, City,
District Office: Ottawa

Incident Summary:

EBC- Sediment release to Ottawa River

Initial Incident Description (as reported):

Created: Nicole Hebert (Spills Action Centre) - 2015/08/13 01:53:43 PM

Jeremie Tremblay 514-601-5369 to SAC(NH2): Caller reports at their construction site they are digging a big hole and the sediment is passing through there barrier and going into the Ottawa River. Caller reports he doesnt think they can stop it but they are trying to dyke or dam it. Caller reports sedmient spill is still on-going. Caller reports they will update SAC with what they end up doing.

Ottawa DO: Briefed

14:25hrs- Jeremie Tremblay to SAC(NH2): Caller reports they are putting up a rock dam to try and contain the sediment. Caller reports they are also putting in a sediment filtration unit and will be contacting a company (Caller could not remember the name) to put in a sediment curtain in the Ottawa River.

15:00hrs- MNR emailed report

1730 EBC Jeremie to SAC(ak) updates that berm has been placed and a silt fence as well, they stopped excavating in the zone. Silt curtains will be placed tomorrow.

Not in a SWPZ

SAC Action Class:

Watercourse Spills

Non-Standard Procedure:

No

Incident Description:

Last update: Tor Rustad (Ottawa District Office) - 2016/03/17 11:23:26 AM

Thursday, August 13, 2015, 15:05, at the Site. Spoke by intercom with Ms. Sasha McConnell. Ms. McConnell will have Mr. Brendan Arghittu speak with the undersigned officer.

Thursday, August 13, 2015, 15:10, at the Site: presented provincial officer's designation to Mr. Brendan Arghittu, Mr. Jeremie Tremblay and Mr. Yannick Lussier, employees of EBC Inc. EBC Inc. was hired to manage environmental affairs at the Site. Mr. B. Arghittu explained the following:

- 1) bedrock at the Site is being broken up. This excavation is now below the level of the surface water (in the Ottawa River adjacent to the Site).
- 2) surface water from the Ottawa River is now accumulating into the excavation.
- 3) an old drain (circa 1910) was built and is open. Water and silt from the excavation flows into a drain.
- 4) the silty water discharges to the Ottawa River, on the Ontario side of the river. The Quebec boundary is approximately 30 feet from the silt discharge. At the time of the inspection, no silty water was crossing into Quebec.
- 5) The drain cannot be located. Staff from EBC Inc. will use a coffer dam and silt curtains to staunch the flow of water into the drain.

- 6) The permit to take water issued to EBC Inc. for the Site authorizes construction de-watering of the water in the excavation. Staff will discharge the pump-out water in accordance with Permit to Take Water 7437-9NMQK6.
- 7) Samples of the pump out water will be tested for total suspended solids.
- 8) Dynamite will be used to further excavate the area of bedrock (adjacent to Fume #2). This may close the drain and stop the flow of silt and water into the Ottawa River.

Friday, August 14, 2015, 07:45, email from Mr. B. Arghittu: a silt wall will be installed in the Ottawa River to minimize or to prevent further silt discharges into the Ottawa River. The cause of the leak into the Ottawa River was resolved: a clay drain in the pit, on the "dry" side of the rock wall, above the elevation of the Ottawa River, was allowing water with silt into the Ottawa River. The clay drain will be sealed off, once blasting on the "dry" side of the excavation occurs. This will staunch the flow of silty water into the Ottawa River. The silt curtain will also minimize or eliminate the amount of silt water flowing into the Ottawa River.

No complaints were received at the Ottawa MOECC from members of the public. Company officials reported this incident in accordance with Section 30 of the Ontario Water Resources Act.

By March 17, 2016, officials with Chaudiere Hydro Inc. had not filed water taking reports with the Water Taking Reporting System for 2015. Company officials have until March 31, 2016, to do so for 2015.

Recommend closure of the incident report.

Incident Description Continuation:

Not Available

Incident Update:

Not Available

Was there an MOE field response?	No
Were there samples collected / analyzed at any time?	No
Health / Environmental Consequences at the Time of Incident	
Health / Environmental Consequences:	2 - Minor Environment

Has a Water Body been Impacted?	Yes
Water Body / Bodies Impacted:	Ottawa River
Receiving Environment	Surface Water
Incident Event:	Overflow/Surcharge
Incident Reason:	Material Failure - Poor Design/Substandard Material
Source Type:	Other
Specify Other:	Construction
Sector Type:	Miscellaneous Industrial
MOE/Other Agencies Involved:	Province - MOE-District Office

Was there a discharge / emission / spill of a contaminant to the environment?
Yes

Attachments:	
Attachments Names:	4 Booth Street PTTW.pdf; 4 Booth Street.pdf
Links & Comments:	

Contaminants Table

Contaminant Name	Description	Code	UN#	Limit	Quantity	[units]	[freq]
SEDIMENT (SUSPENDED SOLIDS/ SAND/ SILT)		43	n/a		5	m ³	n/a

Environmental Compliance Reporting (ECR)

Is this an air emission (measured or modelled) or wastewater (sewage) discharge exceedance that will become part of the Environmental Compliance Report?
(legislation, certificate of approval, order, or guideline)
No


Voluntary / Mandatory Abatement

Was there Non-Compliance/Non-Conformance Identified?	<input type="radio"/> Yes <input checked="" type="radio"/> No
Voluntary / Mandatory Abatement Items	
Not Available	

Waste / EGR Information

Waste / EGR Information entries:
Not Available

Document Related Information

Cross Reference:	(doc link)	Task Link:	7267-9ZCPAP 
Originating Document:		Created by:	Nicole Hebert
Date Created:	2015/08/13	Date Completed:	
Office Receiving Incident	Spills Action Centre	Incident Info Received By:	Nicole Hebert

Report:		
Bring Forward Date:		Bring Forward Reason:

Signatures

Provincial Officer:

Name:	Tor Rustad
Badge No:	392
Work Unit:	
District/Area Office:	Ottawa District Office
Date:	2016/03/17
Signature:	<i>Tor Rustad</i>

District/Area Supervisor:

Name:	
Work Unit:	
District/Area Office:	
Date:	
Signature:	

Page 78
is not relevant
est non pertinente

ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 3223-A6KPGU
Issue Date: March 10, 2016

Chaudière Hydro Inc.
3025 Albion Road North c/o Energy Ottawa
Ottawa, Ontario
K1G 3S4

Site Location: 4 Booth Street
Ottawa City

You have applied under section 20.2 of Part II.1 of the Environmental Protection Act, R.S.O. 1990, c. E. 19 (Environmental Protection Act) for approval of:

- Four (4) General Electric Prolec 3 kV/13.2kV/8.5 MVA, 3-phase, 60 Hz KNAN/FA electrical transformers with a sound power level as measured per standard IEEE Std C57.12.90-2010, including all fans operating, not exceeding 90 dBA re 10^{-12} Watts, including 5 dBA tonal penalty;
- One (1) 0.566 cubic metres per second direct drive inline air intake fan providing 124.42 Pascals E.S.P. 0.373 kiloWatts motor, 208 V, 3-phase, 60 Hz voltage. Greenheck Model SQ-120-A, sound rated to have an inlet L_{wa} of 82 dBA re 10^{-12} Watts according to AMCA International Standard 301, including 5 dBA tonal penalty;
- Two (2) 0.283 cubic metres per second direct drive sidewall exhaust fans providing 62.21 Pascals E.S.P. 0.075 kiloWatts motor, 115 V, 1-ph, 60 Hz voltage. Greenheck Model SE1-12-426-D-1, sound rated to have an outlet L_{wa} of 80 dBA re 10^{-12} Watts according to AMCA International Standard 301, including 5 dBA tonal penalty;
- Greenheck BCF-208 duct fan (air exhaust) in garage, sound rated to have an outlet L_{wa} of 83 dBA re 10^{-12} Watts according to AMCA International Standard 301, including 5 dBA tonal penalty;
- Two (2) 1.51 cubic metres per second belt-drive centrifugal inline fans providing 124.42 Pascals E.S.P. 0.56 kiloWatts motor, 208 V, 3-phase, 60 Hz voltage. Greenheck Model BSQ-160-7, sound rated to have an inlet L_{wa} of 83 dBA re 10^{-12} Watts according to AMCA International Standard 301, including 5 dBA

tonal penalty;

- One (1) rail-mounted moveable trash rake cleaning machine Kuenz TRCM H1000 situated outside on the powerhouse deck, with a sound power level as measured per standard ISO 3746, not exceeding 98 dBA re 10^{-12} Watts, including 5 dBA tonal penalty;

all in accordance with the Application for a new Environmental Compliance Approval (Noise) dated April 16, 2015 and signed by Franz Kropp, Director, Generation, Chaudière Hydro Inc., and all supporting information associated with the application including the Acoustic Assessment Report prepared by Hatch Ltd., dated December 18, 2015 and signed by Tim Kelsall.

For the purpose of this environmental compliance approval, the following definitions apply:

1. "Acoustic Assessment Report" means the report, prepared in accordance with Publication NPC-233 submitted in support of the application, that documents all sources of noise emissions and Noise Control Measures present at the Facility. "Acoustic Assessment Report" also means the Acoustic Assessment Report prepared by Hatch Ltd., dated December 18, 2015 and signed by Tim Kelsall, and the Addendum prepared by Hatch Ltd., dated March 9, 2016 and signed by Tim Kelsall.
2. "Acoustic Audit" means an investigative procedure consisting of measurements and/or acoustic modelling of all sources of noise emissions due to the operation of the Facility, assessed to determine compliance with the Performance Limits for the Facility regarding noise emissions, completed in accordance with the procedures set in Publication NPC-103 and reported in accordance with Publication NPC-233.
3. "Acoustic Audit Report" means a report presenting the results of an Acoustic Audit, prepared in accordance with Publication NPC-233.
4. "Acoustical Consultant" means a person currently active in the field of environmental acoustics and noise/vibration control, who is familiar with Ministry noise guidelines and procedures and has a combination of formal university education, training and experience necessary to assess noise emissions from a Facility.
5. "Approval" means this Environmental Compliance Approval, including the application and supporting documentation listed above.
6. "Company" means Chaudière Hydro Inc. that is responsible for the construction or operation of the Facility and includes any successors and assigns.
7. "Director" means any person appointed in writing by the Minister pursuant to section 5 of the EPA as a Director for the purposes of section 9 of the EPA.
8. "District Manager" means the District Manager of the appropriate local district office of the Ministry, where the Facility is geographically located and in operation.

9. "EPA" means the Environmental Protection Act, R.S.O. 1990, c.E. 19.
10. "Equipment" means the transformers and cooling fans, the air intake and exhaust fans, and the trash rake described in the Company's application, this Approval and in the supporting documentation submitted with the application, to the extent approved by this Approval.
11. "Facility" means the entire operation located on the property where the Equipment is located.
12. "Independent Acoustical Consultant" means an Acoustical Consultant who is not representing the Company and was not involved in preparing the Acoustic Assessment Report or the design/implementation of Noise Control Measures for the Facility and/or Equipment. The Independent Acoustical Consultant shall not be retained by the Acoustical Consultant involved in the noise impact assessment or the design/implementation of Noise Control Measures for the Facility and/or Equipment.
13. "Manual" means a document or a set of documents that provide written instructions to staff of the Company.
14. "Ministry" means the ministry of the government of Ontario responsible for the EPA and includes all officials, employees or other persons acting on its behalf.
15. "Noise Control Measures" means measures to reduce the noise emission from the Facility including, but not limited to silencers, acoustic louvres, enclosures, absorptive treatment, plenums and barriers.
16. "Publication NPC-103" means the Ministry Publication NPC-103 of the Model Municipal Noise Control By-Law, Final Report, August 1978, published by the Ministry as amended.
17. "Publication NPC-233" means the Ministry Publication NPC-233, "Information to be Submitted for Approval of Stationary Sources of Sound", October, 1995 as amended.
18. "Publication NPC-300" means the Ministry Publication NPC-300, "Environmental Noise Guideline, Stationary and Transportation Sources – Approval and Planning, Publication NPC-300", August, 2013, as amended.

You are hereby notified that this environmental compliance approval is issued to you subject to the terms and conditions outlined below:

TERMS AND CONDITIONS

1. The Company shall, at all times, ensure that the noise emissions from the Facility comply with the limits set in Ministry Publication NPC-300.
2. The Company shall restrict the operation of the trash rake to the daytime hours from 7 a.m. to 7 p.m.

OPERATION AND MAINTENANCE

3. The Company shall ensure that the Equipment is properly operated and maintained at all times. The Company shall:
- (1) prepare, before commencement of operation of the Equipment or not later than three (3) months after the date of this Approval, and update as necessary, a Manual outlining the operating procedures and a maintenance program for the Equipment, including:
 - (a) routine operating and maintenance procedures in accordance with good engineering practices and as recommended by the Equipment suppliers;
 - (b) emergency procedures;
 - (c) procedures for any record keeping activities relating to operation and maintenance of the Equipment; and
 - (d) all appropriate measures to minimize noise emissions from all potential sources;
 - (2) implement the recommendations of the Manual.

RECORD RETENTION

4. The Company shall retain, for a minimum of two (2) years from the date of their creation, all records and information related to or resulting from the recording activities required by this Approval, and make these records available for review by staff of the Ministry upon request. The Company shall retain:
- (1) all records on the maintenance, repair and inspection of the Equipment; and
 - (2) all records of any environmental complaints; including:
 - (a) a description, time and date of each incident to which the complaint relates;
 - (b) wind direction at the time of the incident to which the complaint relates; and
 - (c) a description of the measures taken to address the cause of the incident to which the complaint relates and to prevent a similar occurrence in the future.

NOTIFICATION OF COMPLAINTS

5. The Company shall notify the District Manager, in writing, of each environmental complaint within two (2) business days of the complaint. The notification shall include:
- (1) description of the nature of the complaint; and
 - (2) the time and date of the incident to which the complaint relates.

ACOUSTIC AUDIT

6.1 The Company shall carry out Acoustic Audit measurements on the actual noise emissions due to the operation of the Facility. The Company:

- (1) shall carry out Acoustic Audit measurements in accordance with the procedures in Publication NPC-103;
- (2) shall submit an Acoustic Audit Report on the results of the Acoustic Audit, prepared by an Independent Acoustical Consultant, in accordance with the requirements of Publication NPC-233, to the District Manager and the Director, not later than twelve (12) months after the issuance of an above grade building permit under the Building Code Act, 1992, for a building containing residential uses on the lands on Chaudière Island south of the Facility.

6.2 The Director:

- (1) may not accept the results of the Acoustic Audit if the requirements of Publication NPC-233 were not followed;
- (2) may require the Company to repeat the Acoustic Audit if the results of the Acoustic Audit are found unacceptable to the Director.

The reasons for the imposition of these terms and conditions are as follows:

1. Condition No. 1 is included to provide the minimum performance requirement considered necessary to prevent an adverse effect resulting from the operation of the Facility.
2. Condition No. 2 is included to ensure that the operation of the trash rake is not extended beyond the stated hours to prevent an adverse effect resulting from the operation of the Equipment.
3. Condition No. 3 is included to emphasize that the Equipment must be maintained and operated according to a procedure that will result in compliance with the EPA, the Regulations and this Approval.
4. Condition No. 4 is included to require the Company to keep records and to provide information to staff of the Ministry so that compliance with the EPA, the Regulations and this Approval can be verified.
5. Condition No. 5 is included to require the Company to notify staff of the Ministry so as to assist the Ministry with the review of the site's compliance.
6. Condition No. 6 is included to require the Company to gather accurate information and submit an Acoustic Audit Report in accordance with procedures set in the Ministry's noise guidelines, so that the environmental impact and subsequent compliance with this Approval can be verified.

In accordance with Section 139 of the Environmental Protection Act, you may by written Notice served upon me, the Environmental Review Tribunal and in accordance with Section 47 of the Environmental Bill of Rights, 1993, S.O. 1993, c. 28 (Environmental Bill of Rights), the Environmental Commissioner, within 15 days after receipt of this Notice, require a hearing by the Tribunal. The Environmental Commissioner will

place notice of your appeal on the Environmental Registry. Section 142 of the Environmental Protection Act provides that the Notice requiring the hearing shall state:

1. The portions of the environmental compliance approval or each term or condition in the environmental compliance approval in respect of which the hearing is required, and;
2. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

The Notice should also include:

3. The name of the appellant;
4. The address of the appellant;
5. The environmental compliance approval number;
6. The date of the environmental compliance approval;
7. The name of the Director, and;
8. The municipality or municipalities within which the project is to be engaged in.

And the Notice should be signed and dated by the appellant.

This Notice must be served upon:

The Secretary*
Environmental Review Tribunal
655 Bay Street, Suite 1500
Toronto, Ontario
M5G 1E5

AND

The Environmental Commissioner
1075 Bay Street, Suite 605
Toronto, Ontario
M5S 2B1

AND

The Director appointed for the purposes of
Part II.1 of the Environmental Protection Act
Ministry of the Environment and
Climate Change
135 St. Clair Avenue West, 1st Floor
Toronto, Ontario
M4V 1P5

* Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 212-6349, Fax: (416) 326-5370 or www.ert.gov.on.ca

This instrument is subject to Section 38 of the Environmental Bill of Rights, 1993, that allows residents of Ontario to seek leave to appeal the decision on this instrument. Residents of Ontario may seek leave to appeal within 15 days from the date this decision is placed on the Environmental Registry. By accessing the Environmental Registry at www.ebr.gov.on.ca, you can determine when the leave to appeal period ends.

The above noted activity is approved under s.20.3 of Part II.1 of the Environmental Protection Act.

DATED AT TORONTO this 10th day of March, 2016



Ian Greason, P. Eng.
Director
appointed for the purposes of Part II.1 of the
Environmental Protection Act

HM/

c: District Manager, MOECC Ottawa
Tim Kelsall, Hatch Ltd.

ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 3388-A3NR6P

Issue Date: February 23, 2016

Chaudiere Hydro LP
3025 Albion Rd N c/o Energy Ottawa, Franz Kropp,
Director, Generation, Ottawa,
Ontario, K1G 3S4

Site Location: 4 Booth Street, City of Ottawa

You have applied under section 20.2 of Part II.1 of the Environmental Protection Act, R.S.O. 1990, c. E. 19 (Environmental Protection Act) for approval of:

the establishment of sewage works for the collection, transmission, treatment of the facility site drainage, powerhouse sewage works, non-contact cooling water, transformer spill containment and disposal of sanitary sewage from the proposed 29 Megawatt, Chaudière Falls Hydroelectric Generating Station located on a 2.1 hectares site presently housing the Ottawa No.2 and No.3 Generating Stations consisting of the following:

Powerhouse Sewage Works:

Drainage and Piping Systems: Various drains and piping systems consisting of:

- stormwater run-off via a network of drains on top of the powerhouse roof and annex building, and surface drains on the powerhouse tailrace deck are to discharge into the Ottawa River;
- surface drains and connecting piping inside the powerhouse to convey stormwater run-off and potential spills from the powerhouse loading bay ramp and transformer spill containment area, floor drains and connecting piping are to convey water seepage and wastewater (e.g. floor washing) into an **Oil Water Separator** in the powerhouse;
- grating-covered drain trenches, floor drains and connecting piping inside the powerhouse to convey water seepage and oil leakage (e.g., from equipment, accidental spills) and wastewater (e.g., floor washing) entering floor drains from within the powerhouse draining to an **Oil Interceptor** in the powerhouse as described below:

Oil Interceptor (OI):- one (1) Oil Interceptor made of concrete tank approximately 3.6 metres long X 1.63 metres wide with working depth of 800 millimeters, embedded in concrete in the powerhouse basement, with a working volume of approximately 3,900 litres, receiving seepage or leakage water, residual water in the unwatering valve pit and wastewater (e.g. floor washing) from within the powerhouses, with:

- a maximum design flow rate of approximately 757 litres per minute, with two 150 millimetre diameter PVC inlet pipes;

- internal baffling and coalescing plates made of oleophilic polypropylene;
- an oil recovery tank alongside the Oil Interceptor with an oil capture volume of approximately 1600 litres;
- a portable submersible pump, capable of pumping oil out of the oil recovery tank and into an oil drum for off-site disposal;
- an oil level monitoring system with a high level alarm to alert the operator to remove the accumulated oil once the oil recovery tank is full;
- effluent sampling from the Oil Interceptor using a hand held "EasyVac PUM 38-VX" sampler;
- the Oil Interceptor will discharge clear effluent water via a 200 millimetre diameter PVC pipe into the powerhouse Drainage Sump as described below:

Drainage Sump (DS):The Drainage Sump consisting of:

- one (1) Drainage Sump consisting of a concrete pit approximately 3.2 metres square by 2.75 metres deep in the powerhouse basement with a working volume of approximately 10,300 litres, receiving clear water effluent discharge from the Oil Interceptor via a 200 millimetre diameter PVC pipe, with:
- two (2) submersible pumps, each rated at a maximum flow of approximately 1,100 litres per minute, operating on level control; each pump will connect to a common discharge header via separate 100 millimetre diameter carbon steel pipes;
- an oil water detector with SCADA transmitter capability and connected to the Operator;
- a Drainage Sump low level pump shut-off at approximately 0.28 metres above the pit floor and a high water level alarm at 1.75 metres, which is transmitted to the operator;
- the Drainage Sump will discharge clear effluent water to the Ottawa River via a 150 millimetre diameter carbon steel pipe.

Facility Site Sewage Works:- Stormwater drainage from spill containment works for four electrical transformers outside of the powerhouse and the loading bay ramp to be conveyed to an Oil-Water Separator located inside the powerhouse for subsequent discharge of clear effluent water to the Ottawa River.

Transformer Spill Containment (TSC):The Transformer Spill Containment consisting of:

- one (1) Transformer Spill Containment located outside on the powerhouse tailrace deck consisting of four (4) separate concrete areas, each approximately 6.8 metres by 5.3 metres with a 0.70 metre high concrete wall, and a gross volume of 25,228 litres, including:
- a sloped concrete floor with four (4) drains at each corner connected with piping to a common header to discharge into the Oil-Water Separator;
- gross dimensions of approximately 36 square metres and net dimensions of approximately 29.9 square metres;
- a central concrete foundation pad/transformer pedestal;
- a layer of approximately 600 millimetres of crushed stone with a void ratio of 0.35;
- the Transformer Spill Containment will discharge to the Oil-Water Separator via a 200 millimetre diameter carbon steel outlet pipe;
- the Transformer Spill Containment area drains via connecting piping inside the powerhouse to convey stormwater run-off and/or transformer oil leakage up to an estimated maximum flow rate of approximately 600 litres per minute (100-yr rainfall) to an Oil Water Separator in the Powerhouse.

Oil-Water Separator (OWS) in the Powerhouse:

- one (1) Oil-Water Separator consisting of a 2-celled concrete tank with impervious polyurea lining, approximately 6.70 metres long X 3.95 metres wide by 3.56 metres deep, and a total volume of approximately 75,000 litres, serving the transformer spill containment and the powerhouse loading bay and loading ramp via a 100 millimetre diameter PVC inlet pipe and two (2) 200 millimetre diameter PVC inlet pipes, a 50 millimetre diameter tie-in pipe from the service water and air drain station; and a 50 millimetre diameter tie-in pipe from the fire protection header into the clear water sump;
- a design flow of 1320 litres per minute and a maximum effluent oil-in-water concentration of 10 parts per million;
- an oil-water separation cell containing internal baffling and coalescing plates made of oleophilic polypropylene with a galvanized steel frame, with an oil capture volume of approximately 18,000 litres;
- an oil-in-water monitoring system with high level alarm system to notify the operator;
- an oil-in-water detector in the clear water sump to notify the operator;
- a clean water cell (i.e., sump) containing two (2) submersible pumps, each rated at a maximum flow of approximately 2,000 litres per minute, operating on level control, each pump will connect to a common discharge header via separate 150 millimetre diameter carbon steel pipes;
- effluent sampling from the clear water sump using a hand held "EasyVac PUM 38-VX" sampler;
- accumulated oil will be pumped to an oil drum for off-site disposal;
- each pump will have a low level pump shut-off at approximately 0.35 metres above the bottom of the sump floor and a high water level alarm at 2.95 metres, which is transmitted to the operator;
- the Oil-Water Separator will discharge clear effluent water to the Ottawa River via a 200 millimetre diameter carbon steel pipe.

Facility Site Sewage (External) Works:

Drainage and Piping Systems: Various surface drains and storm sewers consisting of the following:

- a network of catchbasins and storm sewers within the powerhouse parking area to convey stormwater run-off from the parking area, a portion of the annex building roof, and the parking garage roof, up to an estimated total maximum flow rate of approximately 6,780 litres per minute (5-yr rainfall) to an Oil Grit Separator located in Manhole 9 as described below:

Oil Grit Separator (OGS):

- one (1) Oil Grit Separator, (Stormceptor® Model STC750 or approved equivalent) consisting of a precast 1800 millimetre diameter concrete manhole with a total volume of 4,070 litres to service the stormwater run-off from the roof of the underground parking garage, a portion of the roof of the annex building and the ramps and powerhouse parking area, with:
- a design flow of up to 6,780 litres per minute, a 450 millimetre diameter concrete storm sewer inlet pipe, and a 450 millimetre diameter concrete storm sewer outlet pipe;
- a fiberglass insert and weir with a 203 millimetre diameter orifice plate connected to a 305 millimetre diameter inlet drop pipe discharging into the lower portion of the manhole, with an oil capture volume of 915 litres and a sediment capture volume of 3,000 litres;
- a 642 millimetre diameter inverted riser pipe from the lower portion of the manhole discharging to the 450 millimetre diameter outlet pipe;

- a 152 millimetre diameter oil clean out port (i.e., riser pipe) accessible by means of a removable manhole cover;
- a 450 millimetre diameter concrete storm sewer pipe to discharge clear effluent water to the Ottawa River;

Sanitary Sewage System:

- Sanitary wastewater from toilets, sinks, hot water tank and emergency shower and eyewash station from the powerhouse and a separate CWPI service building conveyed to a sanitary holding tank for subsequent off-site haulage and disposal.
- Various plumbing fixtures and connecting piping in the powerhouse and CWPI service building to collect sanitary wastewater from toilets, kitchen and washroom sinks discharging to two (2) intermediate on-site sewage holding tanks, and routed to a single on-site sewage holding tank system as described below:
 - One (1) Temporary Sanitary Holding Tank with a maximum volume of 600 litres located in the powerhouse, receiving sanitary wastewater from powerhouse washrooms, kitchen, hot water tank, and emergency shower and eye wash station, with:
 - two (2) submersible grinder pumps, each rated at a maximum flow of approximately 15 litres per minute, operating on level control, discharging to the Main Sanitary Holding Tank located at the powerhouse;
 - a high level alarm.
 - One (1) Temporary Sanitary Holding Tank with a maximum volume of 600 litres located in the CWPI service building, receiving sanitary wastewater from the CWPI washroom and kitchenette, and public washrooms and hot water tank, with:
 - two (2) submersible grinder pumps, each rated at a maximum flow of approximately 15 litres per minute, operating on level control, discharging to the Main Sanitary Holding Tank located at the powerhouse;
 - a high level alarm.
 - One (1) Main Sanitary Holding Tank with a maximum holding volume of 7,500 litres located below ground at the powerhouse, receiving sanitary wastewater from the Temporary Sanitary Holding Tank at the powerhouse and the Temporary Sanitary Holding Tank at the CWPI service building, with:
 - a high level alarm; including,
 - vacuum tanker truck connection attachments;

Unwatering System for Turbine Dewatering (UWSTDW):

One (1) unwatering valve pit consisting of a concrete pit approximately 3.6 metres long by 1.6 metres wide by 0.65 metres deep in the powerhouse turbine gallery floor complete with the following:

- Four (4) 250 millimetre diameter separate collection pipe systems, with separate shut-off valves for each turbine water passage, to be used when the turbine dewatering is required;
- each dewatering system connected to an intake located upstream of the draft tube gates, and outlet

- located immediately downstream of the trash racks;
- dewatering of turbine water passage to be conducted using Owner supplied portable submersible pumps and with flexible hoses lowered through upstream access hatches into a sump recess in the water passage, using a motorized chain fall;
- pumped water will be discharged directly into the Ottawa River on the upstream side of the powerhouse (head pond);
- any residual water in the unwatering valve pit will be discharged in to the Oil Interceptor via a 100 millimetre diameter drainage pipe.

Untreated Discharges (UTD):

Stormwater run-off from a portion of the powerhouse roof excluding the transformer spill containment area, a portion of the annex building roof including trash rack storage vault but excluding the stop log storage vault are routed through internal piping within the powerhouse and direct discharge to the Ottawa River as follows:

- a network of drains on top of the powerhouse roof and annex building and connecting piping inside the powerhouse to convey stormwater run-off up to an estimated maximum flow rate of approximately 2200 Litres per minute (50-yr rainfall) to the Ottawa River via a 300 millimetre diameter steel/pvc discharge pipe, an estimated maximum flow rate of approximately 708 Litres per minute (50-yr rainfall) to the Ottawa River via 200 millimetre diameter PVC discharge pipe, and 303 Litres per minute (50-yr rainfall) to the Ottawa River via two (2) 100 millimetre diameter PVC discharge pipes;
- additional drains and discharge down pipes to convey stormwater run-off from a portion of the tailrace deck up to an estimated maximum flow rate of 327 Litres per minutes (50-yr rainfall) to the Ottawa River via four (4) 100 millimetre diameter PVC discharge pipes;
- discharges from once through cooling water system consisting of three (3) water intakes, 100 millimetre diameter each, split into four (4) similar but separate cooling water distribution systems, one for each dynamic static VAR compensators (DSVCs), typically providing approximately 267 Litres per minute of once through cooling water for each DSVC (1067 litres per minute total) discharging to the Ottawa River via a single 150 millimetre diameter carbon steel discharge pipe;

including all other controls, electrical equipment, sampling and monitoring, instrumentation, piping, pumps, valves and appurtenances essential for the proper operation of the sewage works;

all in accordance with the documents listed in Schedule A.

For the purpose of this environmental compliance approval, the following definitions apply:

"Approval" means this entire document and any schedules attached to it, and the application;

"District Manager" means the District Manager of the Ottawa District Office of the Ministry;

"Director" means a person appointed by the Minister pursuant to section 5 of the EPA for the purposes of Part II.1 of the EPA;

"EPA" means the Environmental Protection Act , R.S.O. 1990, c.E.19, as amended;

"Ministry" means the ministry of the government of Ontario responsible for the EPA and OWRA and includes all officials, employees or other persons acting on its behalf;

"Owner" means Chaudiere Hydro Inc. and its successors and assignees;

"Previous Works" means those portions of the sewage works previously constructed and approved under an Approval;

"Proposed Works" means the sewage works described in the Owner's application, this Approval, to the extent approved by this Approval;

"Regional Director" means the Regional Director of the Eastern Region of the Ministry;

"Works" means the sewage works described in the Owner's application, and this Approval, and includes both Proposed Works and Previous Works.

You are hereby notified that this environmental compliance approval is issued to you subject to the terms and conditions outlined below:

TERMS AND CONDITIONS

1. GENERAL CONDITION

(1) The Owner shall ensure that any person authorized to carry out work on or operate any aspect of the Works is notified of this Approval and the conditions herein and shall take all reasonable measures to ensure any such person complies with the same.

(2) Except as otherwise provided by these conditions, the Owner shall design, build, install, operate and maintain the Works in accordance with the description given in this Approval, and the application for approval of the Works.

(3) Where there is a conflict between a provision of any document in the schedule referred to in this Approval and the conditions of this Approval, the Conditions in this Approval shall take precedence, and where there is a conflict between the documents in the schedule, the document bearing the most recent date shall prevail.

(4) Where there is a conflict between the documents listed in the Schedule A, and the application, the application shall take precedence unless it is clear that the purpose of the document was to amend the application.

(5) The Conditions of this Approval are severable. If any Condition of this Approval, or the application of any requirement of this Approval to any circumstance, is held invalid or unenforceable, the application of such condition to other circumstances and the remainder of this Approval shall not be affected thereby.

2. CHANGE OF OWNER

(1) The Owner shall notify the District Manager and the Director, in writing, of any of the following changes within thirty (30) days of the change occurring:

- (a) change of Owner or operating authority, or both;
- (b) change of address of Owner or operating authority or address of new Owner or operating authority; (c) change of partners where the Owner or operating authority is or at any time becomes a partnership, and a copy of the most recent declaration filed under the *Partnerships Registration Act*;
- (d) change of name of the corporation where the Owner or operator is or at any time becomes a corporation, and a copy of the most current "Initial Notice or Notice of Change" (Form 1, 2 or 3 of O. Reg. 189, R.R.O. 1980, as amended from time to time), filed under the *Corporations Information Act*, shall be included in the notification to the District Manager.

(2) In the event of any change in ownership of the Works, the Owner shall notify in writing the succeeding owner of the existence of this Approval, and a copy of such notice shall be forwarded to the District Manager.

(3) The Owner shall ensure that all communications made pursuant to this condition will refer to this Approval's number.

3. OPERATIONS AND MAINTENANCE

(1) The Owner shall prepare an operations manual prior to the commencement of operation of the sewage works, that includes, but not necessarily limited to, the following information:

- (a) operating procedures for routine operation of the Works;
- (b) inspection programs, including frequency of inspection, for the Works and the methods or tests employed to detect when maintenance is necessary;
- (c) repair and maintenance programs, including the frequency of repair and maintenance for the Works;
- (d) contingency plans and procedures for dealing with potential spill, bypasses and any other abnormal situations and for notifying the District Manager; and
- (e) complaint procedures for receiving and responding to public complaints.

(2) The Owner shall maintain the operations manual up to date through revisions undertaken from time to time and retain a copy at the location of the sewage works. Upon request, the Owner shall make the manual available for inspection and copying by Ministry personnel.

(3) The Owner shall maintain routine clean out of the accumulated oil, mixture of oil and grit in the separators by vacuum tanker truck operated by licensed sewage disposal contractor for off-site haulage and disposal at the City of Ottawa Wastewater Treatment Plant or into a licensed disposal facility as appropriate.

(4) The Owner shall maintain routine clean out of sanitary sewage sludge from the main sanitary sewage holding tank (s) by vacuum tanker truck operated by a licensed sewage disposal contractor for off-site haulage and disposal into the City of Ottawa, Robert O. Pickard Wastewater Treatment Plant.

4. **EFFLUENT - VISUAL OBSERVATIONS**

Notwithstanding any other condition in this Approval, the Owner shall ensure that the effluent from the Works is essentially free of floating and settleable solids and does not contain oil or any other substance in amounts sufficient to create a visible film, sheen or foam on the receiving waters.

5. **EFFLUENT OBJECTIVES**

(1) The Owner shall use best efforts to design, construct and operate the Works with the objective that the concentrations of the materials named below as effluent parameters are not exceeded in the effluent from the Works, prior to discharge into the Ottawa River.

Table 1 - Effluent Objectives	
Effluent Parameter	Average Concentration Objective (milligrams per litre unless otherwise indicated)
Total Suspended Solids	10
Benzene	2.5
Toluene	15
o,m,p-Xylenes (total)	200
Petroleum Hydrocarbons	300

(2) As a further effluent objective, the Owner shall use best efforts to maintain the pH of the effluent from the Works within the range of (6.0 to 9.5), inclusive, at all times.

(3) The Owner shall include in all reports submitted in accordance with Conditions and a summary of the efforts made and results achieved under this Condition.

6. **EFFLUENT LIMITS**

(1) The Owner shall design, construct and operate the Works such that the concentrations of the materials named below as effluent parameters are not exceeded in the effluent from the Works.

Table 2 - Effluent Limits	
Effluent Parameter	Average Concentration Limit (milligrams per litre unless otherwise indicated)
Total Suspended Solids	15
Benzene	5
Toluene	24
Petroleum Hydrocarbons	500
o,m,p-Xylenes (total)	300
pH of the effluent maintained between 6.5 to 9.5, inclusive, at all times	

(2) For the purposes of determining compliance with and enforcing subsection (1): non-compliance with respect to an Average Concentration Limit is deemed to have occurred when the arithmetic mean concentration of all samples taken in a month, analyzed for a parameter named in Column 1 of Table 2 is greater than the corresponding average concentration set out in Column 2 of Table 2;

(3) For the purposes of determining non-compliance with and enforcing Subsections (1) and (2): non-compliance with respect to pH is deemed to have occurred when any single measurement is outside of the indicated range in Table 2.

7. **EFFLUENT MONITORING AND RECORDING**

The Owner shall, upon commencement of operation of the sewage works, carry out the following monitoring program:

(1) All samples and measurements taken for the purposes of this Approval are to be taken at a time and in a location characteristic of the quality and quantity of the effluent stream over the time period being monitored.

(2) Samples shall be collected and analyzed at the following sampling point(s), at the sampling frequencies and using the sample type specified for each parameter listed: All discharge streams into the Ottawa River shall be sampled and monitored as specified in Table 3 below and the results are to be recorded and reported.

Table-3- Monitoring

EFFLUENT PARAMETER	MONITORING FREQUENCY		SAMPLING POINTS	SAMPLE TYPE*
	Start-up & Commissioning	Normal Operation		
Benzene	Weekly	Monthly	Outlets of: OI, OWS & OGS,	Grab
Total Suspended Solids	W	M	OI, OWS & OGS,	Grab
Toluene	W	M	OI, OWS & OGS,	Grab
o,m,p-Xylenes	W	M	OI, OWS & OGS,	Grab
Petroleum Hydrocarbons	W	M	OI, OWS & OGS,	Grab
Temperature (T)	W	M	UWSTDW & UTD	Grab
Hydrogen Ion (pH)	W	M	UWSTDW & UTD	Grab

* manual sample may be replaced by digital prob reading for T & pH

(3) The methods and protocols for sampling, analysis, toxicity testing, and recording shall conform, in order of precedence, to the methods and protocols specified in the following:

- (a) the Ministry's publication "Protocol for the Sampling and Analysis of Industrial/Municipal Wastewater" (August 1994), ISBN 0-7778-1880-9, as amended from time to time by more recently published editions;
- (b) the publication "Standard Methods for the Examination of Water and Wastewater" (21st edition) as amended from time to time by more recently published editions; and,
- (c) in respect of any parameters not mentioned in (a) - (c), the written approval of the District Manager, which approval shall be obtained prior to sampling.

(4) The measurement frequencies specified in subsection (2) in respect of any parameter are minimum requirements which may, after (24) months of monitoring in accordance with this Condition, may be modified by the Director in writing from time to time. In case the Owner's engineer, based on the monitoring results recommends cessation of sampling and monitoring of any of the parameter (s) after 24 months of operation and satisfactory results, the District Manager may accept the recommendation for such waiver.

(5) Flow measuring device(s) shall be installed in the Drainage Sump and Oil Water Separator Sump and maintained to measure the flowrate of the effluent from the sewage works, with an accuracy to within plus or minus 10 per cent of the actual flowrate for the entire design range of the flow measuring device and the Owner shall measure, record and calculate the flowrate for each effluent stream on each day of sampling.

(6) The Owner shall retain for a minimum of five (5) years from the date of their creation, all records and information related to or resulting from the monitoring activities required by this Approval.

8. REPORTING

(1) One week prior to the start up of the operation of the Works, the Owner shall notify the District Manager (in writing) of the pending start up date.

(2) The Owner shall report to the District Manager or designate, any exceedance of any parameter specified in Condition 6 orally, as soon as reasonably possible, and in writing within seven (7) days of the exceedance.

(3) In addition to the obligations under Part X of the *Environmental Protection Act*, the Owner shall, within ten (10) working days of the occurrence of any reportable spill as defined in Ontario Regulation 675/98, bypass or loss of any product, by-product, intermediate product, oil, solvent, waste material or any other polluting substance into the environment, submit a full written report of the occurrence to the District Manager describing the cause and discovery of the spill or loss, clean-up and recovery measures taken, preventative measures to be taken and schedule of implementation.

(4) The Owner shall prepare and submit a performance report to the District Manager on an annual basis within 30 days following the end of the period being reported upon. The first such report shall cover the first annual period following the commencement of operation of the Works and subsequent reports shall be submitted to cover successive annual periods following thereafter. The reports shall contain, but shall not be limited to, the following information:

- (a) a summary and interpretation of all monitoring data and a comparison to the effluent objectives/limits outlined in Conditions 5 and 6, including an overview of the success and adequacy of the sewage works;
- (b) a description of any operating problems encountered and corrective actions taken;
- (c) a summary of all maintenance carried out on any major structure, equipment, apparatus, mechanism or thing forming part of the sewage works;
- (d) a summary of any effluent quality assurance or control measures undertaken in the reporting period;
- (e) a summary of the calibration and maintenance carried out on all effluent monitoring equipment;
- (f) a description of efforts made and results achieved in meeting the Effluent Objectives.

The reasons for the imposition of these terms and conditions are as follows:

1. Condition 1 is imposed to ensure that the Works are built and operated in the manner in which they were described for review and upon which approval was granted. This condition is also included to emphasize the precedence of Conditions in the Approval and the practice that the Approval is based on the most current document, if several conflicting documents are submitted for review.
2. Condition 2 is included to ensure that the Ministry records are kept accurate and current with respect to approved works and to ensure that subsequent owners of the Works are made aware of the Approval and continue to operate the Works in compliance with it.

3. Condition 3 is included to ensure that a comprehensive operations manual governing all significant areas of operation, maintenance and repair is prepared, implemented and kept up-to-date by the Owner and made available to the Ministry. Such a manual is an integral part of the operation of the Works. Its compilation and use should assist the owner in staff training, in proper plant operation and in identifying and planning for contingencies during possible abnormal conditions. The manual will also act as a benchmark for Ministry staff when reviewing the owner's operation and maintenance of the Works.
4. Condition 5 is imposed to establish non-enforceable effluent quality objectives which the Owner is obligated to use best efforts to strive towards on an ongoing basis. These objectives are to be used as a mechanism to trigger corrective action proactively and voluntarily before environmental impairment occurs and before the compliance limits of Condition 6 are exceeded.
5. Condition(s) 4 and 6 are imposed to ensure that the effluent discharged from the Works to the Ottawa River meets the Ministry's effluent quality requirements thus minimizing environmental impact on the receiver.
6. Condition 7 is included to require the Owner to demonstrate on a continual basis that the quality and quantity of the effluent from the approved works is consistent with the design objectives and effluent limits specified in the Approval and that the approved works do not cause any impairment to the receiving watercourse.
7. Condition 8 is included to provide a performance record for future references and to ensure that the Ministry is made aware of problems as they arise, so that the Ministry can work with the Owner in resolving the problems in a timely manner.

Schedule A:

1. Application for Approval of Industrial Sewage Works, Intake and Discharge Channel to serve 29MW Hydroelectric Generating Station, City of Ottawa, dated January 13, 2015 prepared and submitted by Paul D. Holmes, P.Eng., Hatch Ltd., Consulting Engineers.
2. Reply to Ministry's information request letter dated November 4, 2015 received on January 21, 2016 along with revised ECA draft prepared and submitted by Paul D. Holmes, P.Eng., Hatch Ltd., Consulting Engineers.
3. Reply to Ministry's information request letter dated January 29, 2016, received on February 1, 2016 along with revised ECA draft prepared and submitted by Paul D. Holmes, P.Eng., Hatch Ltd., Consulting Engineers.
4. Reply to Ministry's information request letter dated February 03, 2016, received on February 04, 2016 along with revised ECA draft prepared and submitted by Paul D. Holmes, P.Eng., Hatch Ltd., Consulting Engineers.
5. Reply to Ministry's information request letter dated February 08, 2016, received on February 09, 2016 along with revised ECA draft prepared and submitted by Paul D. Holmes, P.Eng., Hatch Ltd., Consulting Engineers.

In accordance with Section 139 of the Environmental Protection Act, you may by written Notice served upon me, the Environmental Review Tribunal and in accordance with Section 47 of the Environmental Bill of Rights, 1993, S.O. 1993, c. 28 (Environmental Bill of Rights), the Environmental Commissioner, within 15 days after receipt of this Notice, require a hearing by the Tribunal. The Environmental Commissioner will place notice of your appeal on the Environmental Registry. Section 142 of the Environmental Protection Act provides that the Notice requiring the hearing shall state:

1. The portions of the environmental compliance approval or each term or condition in the environmental compliance approval in respect of which the hearing is required, and;
2. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

The Notice should also include:

3. The name of the appellant,
4. The address of the appellant,
5. The environmental compliance approval number,
6. The date of the environmental compliance approval,
7. The name of the Director, and,
8. The municipality or municipalities within which the project is to be engaged in.

And the Notice should be signed and dated by the appellant.

This Notice must be served upon:

The Secretary*
Environmental Review Tribunal
655 Bay Street, Suite 1500
Toronto, Ontario
M5G 1E5

AND

The Environmental Commissioner
1075 Bay Street, Suite 605
Toronto, Ontario
M5S 2B1

AND

The Director appointed for the purposes of
Part II.1 of the Environmental Protection Act
Ministry of the Environment and
Climate Change
135 St. Clair Avenue West, 1st Floor
Toronto, Ontario
M4V 1P5

* Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 212-6349, Fax: (416) 326-5370 or www.ert.gov.on.ca

This instrument is subject to Section 38 of the Environmental Bill of Rights, 1993, that allows residents of Ontario to seek leave to appeal the decision on this instrument. Residents of Ontario may seek leave to appeal within 15 days from the date this decision is placed on the Environmental Registry. By accessing the Environmental Registry at www.ebr.gov.on.ca, you can determine when the leave to appeal period ends.

The above noted activity is approved under s.20.3 of Part II.1 of the Environmental Protection Act.

DATED AT TORONTO this 23rd day of February, 2016

Fariha Pannu.

Fariha Pannu, P.Eng.

Director

appointed for the purposes of Part II.1 of the
Environmental Protection Act

MN/

c: District Manager, MOECC Ottawa

Paul D. Holmes, P.Eng., Hatch Ltd., Chaudiere Hydro Inc.

ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 3388-A3NR6P

Issue Date: February 23, 2016

Chaudiere Hydro LP
3025 Albion Rd N c/o Energy Ottawa, Franz Kropp,
Director, Generation, Ottawa,
Ontario, K1G 3S4

Site Location: 4 Booth Street, City of Ottawa

You have applied under section 20.2 of Part II.1 of the Environmental Protection Act, R.S.O. 1990, c. E. 19 (Environmental Protection Act) for approval of:

the establishment of sewage works for the collection, transmission, treatment of the facility site drainage, powerhouse sewage works, non-contact cooling water, transformer spill containment and disposal of sanitary sewage from the proposed 29 Megawatt, Chaudière Falls Hydroelectric Generating Station located on a 2.1 hectares site presently housing the Ottawa No.2 and No.3 Generating Stations consisting of the following:

Powerhouse Sewage Works:

Drainage and Piping Systems: Various drains and piping systems consisting of:

- stormwater run-off via a network of drains on top of the powerhouse roof and annex building, and surface drains on the powerhouse tailrace deck are to discharge into the Ottawa River;
- surface drains and connecting piping inside the powerhouse to convey stormwater run-off and potential spills from the powerhouse loading bay ramp and transformer spill containment area, floor drains and connecting piping are to convey water seepage and wastewater (e.g. floor washing) into an **Oil Water Separator** in the powerhouse;
- grating-covered drain trenches, floor drains and connecting piping inside the powerhouse to convey water seepage and oil leakage (e.g., from equipment, accidental spills) and wastewater (e.g., floor washing) entering floor drains from within the powerhouse draining to an **Oil Interceptor** in the powerhouse as described below:

Oil Interceptor (OI):- one (1) Oil Interceptor made of concrete tank approximately 3.6 metres long X 1.63 metres wide with working depth of 800 millimeters, embedded in concrete in the powerhouse basement, with a working volume of approximately 3,900 litres, receiving seepage or leakage water, residual water in the unwatering valve pit and wastewater (e.g. floor washing) from within the powerhouses, with:

- a maximum design flow rate of approximately 757 litres per minute, with two 150 millimetre diameter PVC inlet pipes;
- internal baffling and coalescing plates made of oleophilic polypropylene;
- an oil recovery tank alongside the Oil Interceptor with an oil capture volume of approximately 1600 litres;
- a portable submersible pump, capable of pumping oil out of the oil recovery tank and into an oil drum for off-site disposal;

- an oil level monitoring system with a high level alarm to alert the operator to remove the accumulated oil once the oil recovery tank is full;
- effluent sampling from the Oil Interceptor using a hand held "EasyVac PUM 38-VX" sampler;
- the Oil Interceptor will discharge clear effluent water via a 200 millimetre diameter PVC pipe into the powerhouse Drainage Sump as described below:

Drainage Sump (DS): The Drainage Sump consisting of:

- one (1) Drainage Sump consisting of a concrete pit approximately 3.2 metres square by 2.75 metres deep in the powerhouse basement with a working volume of approximately 10,300 litres, receiving clear water effluent discharge from the Oil Interceptor via a 200 millimetre diameter PVC pipe, with:
- two (2) submersible pumps, each rated at a maximum flow of approximately 1,100 litres per minute, operating on level control; each pump will connect to a common discharge header via separate 100 millimetre diameter carbon steel pipes;
- an oil water detector with SCADA transmitter capability and connected to the Operator;
- a Drainage Sump low level pump shut-off at approximately 0.28 metres above the pit floor and a high water level alarm at 1.75 metres, which is transmitted to the operator;
- the Drainage Sump will discharge clear effluent water to the Ottawa River via a 150 millimetre diameter carbon steel pipe.

Facility Site Sewage Works:- Stormwater drainage from spill containment works for four electrical transformers outside of the powerhouse and the loading bay ramp to be conveyed to an Oil-Water Separator located inside the powerhouse for subsequent discharge of clear effluent water to the Ottawa River.

Transformer Spill Containment (TSC): The Transformer Spill Containment consisting of:

- one (1) Transformer Spill Containment located outside on the powerhouse tailrace deck consisting of four (4) separate concrete areas, each approximately 6.8 metres by 5.3 metres with a 0.70 metre high concrete wall, and a gross volume of 25,228 litres, including:
- a sloped concrete floor with four (4) drains at each corner connected with piping to a common header to discharge into the Oil-Water Separator;
- gross dimensions of approximately 36 square metres and net dimensions of approximately 29.9 square metres;
- a central concrete foundation pad/transformer pedestal;
- a layer of approximately 600 millimetres of crushed stone with a void ratio of 0.35;
- the Transformer Spill Containment will discharge to the Oil-Water Separator via a 200 millimetre diameter carbon steel outlet pipe;
- the Transformer Spill Containment area drains via connecting piping inside the powerhouse to convey stormwater run-off and/or transformer oil leakage up to an estimated maximum flow rate of approximately 600 litres per minute (100-yr rainfall) to an Oil Water Separator in the Powerhouse.

Oil-Water Separator (OWS) in the Powerhouse:

- one (1) Oil-Water Separator consisting of a 2-celled concrete tank with impervious polyurea lining, approximately 6.70 metres long X 3.95 metres wide by 3.56 metres deep, and a total volume of approximately 75,000 litres, serving the transformer spill containment and the powerhouse loading bay and loading ramp via a 100 millimetre diameter PVC inlet pipe and two (2) 200 millimetre diameter PVC inlet pipes, a 50 millimetre diameter tie-in pipe from the service water and air drain station; and a 50 millimetre diameter tie-in pipe from the fire protection header into the clear water sump;

- a design flow of 1320 litres per minute and a maximum effluent oil-in-water concentration of 10 parts per million;
- an oil-water separation cell containing internal baffling and coalescing plates made of oleophilic polypropylene with a galvanized steel frame, with an oil capture volume of approximately 18,000 litres;
- an oil-in-water monitoring system with high level alarm system to notify the operator;
- an oil-in-water detector in the clear water sump to notify the operator;
- a clean water cell (i.e., sump) containing two (2) submersible pumps, each rated at a maximum flow of approximately 2,000 litres per minute, operating on level control, each pump will connect to a common discharge header via separate 150 millimetre diameter carbon steel pipes;
- effluent sampling from the clear water sump using a hand held "EasyVac PUM 38-VX" sampler;
- accumulated oil will be pumped to an oil drum for off-site disposal;
- each pump will have a low level pump shut-off at approximately 0.35 metres above the bottom of the sump floor and a high water level alarm at 2.95 metres, which is transmitted to the operator;
- the Oil-Water Separator will discharge clear effluent water to the Ottawa River via a 200 millimetre diameter carbon steel pipe.

Facility Site Sewage (External) Works:

Drainage and Piping Systems: Various surface drains and storm sewers consisting of the following:

- a network of catchbasins and storm sewers within the powerhouse parking area to convey stormwater run-off from the parking area, a portion of the annex building roof, and the parking garage roof, up to an estimated total maximum flow rate of approximately 6,780 litres per minute (5-yr rainfall) to an Oil Grit Separator located in Manhole 9 as described below:

Oil Grit Separator (OGS):

- one (1) Oil Grit Separator, (Stormceptor® Model STC750 or approved equivalent) consisting of a precast 1800 millimetre diameter concrete manhole with a total volume of 4,070 litres to service the stormwater run-off from the roof of the underground parking garage, a portion of the roof of the annex building and the ramps and powerhouse parking area, with:
- a design flow of up to 6,780 litres per minute, a 450 millimetre diameter concrete storm sewer inlet pipe, and a 450 millimetre diameter concrete storm sewer outlet pipe;
- a fiberglass insert and weir with a 203 millimetre diameter orifice plate connected to a 305 millimetre diameter inlet drop pipe discharging into the lower portion of the manhole, with an oil capture volume of 915 litres and a sediment capture volume of 3,000 litres;
- a 642 millimetre diameter inverted riser pipe from the lower portion of the manhole discharging to the 450 millimetre diameter outlet pipe;
- a 152 millimetre diameter oil clean out port (i.e., riser pipe) accessible by means of a removable manhole cover;
- a 450 millimetre diameter concrete storm sewer pipe to discharge clear effluent water to the Ottawa River;

Sanitary Sewage System:

- Sanitary wastewater from toilets, sinks, hot water tank and emergency shower and eyewash station from the powerhouse and a separate CWPI service building conveyed to a sanitary holding tank for subsequent off-site haulage and disposal.
- Various plumbing fixtures and connecting piping in the powerhouse and CWPI service building to collect sanitary wastewater from toilets, kitchen and washroom sinks discharging to two (2)

intermediate on-site sewage holding tanks, and routed to a single on-site sewage holding tank system as described below:

- One (1) Temporary Sanitary Holding Tank with a maximum volume of 600 litres located in the powerhouse, receiving sanitary wastewater from powerhouse washrooms, kitchen, hot water tank, and emergency shower and eye wash station, with:
 - two (2) submersible grinder pumps, each rated at a maximum flow of approximately 15 litres per minute, operating on level control, discharging to the Main Sanitary Holding Tank located at the powerhouse;
 - a high level alarm.
- One (1) Temporary Sanitary Holding Tank with a maximum volume of 600 litres located in the CWPI service building, receiving sanitary wastewater from the CWPI washroom and kitchenette, and public washrooms and hot water tank, with:
 - two (2) submersible grinder pumps, each rated at a maximum flow of approximately 15 litres per minute, operating on level control, discharging to the Main Sanitary Holding Tank located at the powerhouse;
 - a high level alarm.
- One (1) Main Sanitary Holding Tank with a maximum holding volume of 7,500 litres located below ground at the powerhouse, receiving sanitary wastewater from the Temporary Sanitary Holding Tank at the powerhouse and the Temporary Sanitary Holding Tank at the CWPI service building, with:
 - a high level alarm; including,
 - vacuum tanker truck connection attachments;

Unwatering System for Turbine Dewatering (UWSTDW):

One (1) unwatering valve pit consisting of a concrete pit approximately 3.6 metres long by 1.6 metres wide by 0.65 metres deep in the powerhouse turbine gallery floor complete with the following:

- Four (4) 250 millimetre diameter separate collection pipe systems, with separate shut-off valves for each turbine water passage, to be used when the turbine dewatering is required;
- each dewatering system connected to an intake located upstream of the draft tube gates, and outlet located immediately downstream of the trash racks;
- dewatering of turbine water passage to be conducted using Owner supplied portable submersible pumps and with flexible hoses lowered through upstream access hatches into a sump recess in the water passage, using a motorized chain fall;
- pumped water will be discharged directly into the Ottawa River on the upstream side of the powerhouse (head pond);
- any residual water in the unwatering valve pit will be discharged in to the Oil Interceptor via a 100 millimetre diameter drainage pipe.

Untreated Discharges (UTD):

Stormwater run-off from a portion of the powerhouse roof excluding the transformer spill containment area, a portion of the annex building roof including trash rack storage vault but excluding the stop log storage vault are routed through internal piping within the powerhouse and direct discharge to the Ottawa River as follows:

- a network of drains on top of the powerhouse roof and annex building and connecting piping inside the powerhouse to convey stormwater run-off up to an estimated maximum flow rate of

approximately 2200 Litres per minute (50-yr rainfall) to the Ottawa River via a 300 millimetre diameter steel/pvc discharge pipe, an estimated maximum flow rate of approximately 708 Litres per minute (50-yr rainfall) to the Ottawa River via 200 millimetre diameter PVC discharge pipe, and 303 Litres per minute (50-yr rainfall) to the Ottawa River via two (2) 100 millimetre diameter PVC discharge pipes;

- additional drains and discharge down pipes to convey stormwater run-off from a portion of the tailrace deck up to an estimated maximum flow rate of 327 Litres per minutes (50-yr rainfall) to the Ottawa River via four (4) 100 millimetre diameter PVC discharge pipes;
- discharges from once through cooling water system consisting of three (3) water intakes, 100 millimetre diameter each, split into four (4) similar but separate cooling water distribution systems, one for each dynamic static VAR compensators (DSVCs), typically providing approximately 267 Litres per minute of once through cooling water for each DSVC (1067 litres per minute total) discharging to the Ottawa River via a single 150 millimetre diameter carbon steel discharge pipe;

including all other controls, electrical equipment, sampling and monitoring, instrumentation, piping, pumps, valves and appurtenances essential for the proper operation of the sewage works;

all in accordance with the documents listed in Schedule A.

For the purpose of this environmental compliance approval, the following definitions apply:

"Approval" means this entire document and any schedules attached to it, and the application;

"District Manager" means the District Manager of the Ottawa District Office of the Ministry;

"Director" means a person appointed by the Minister pursuant to section 5 of the EPA for the purposes of Part II.1 of the EPA;

"EPA" means the Environmental Protection Act, R.S.O. 1990, c.E.19, as amended;

"Ministry" means the ministry of the government of Ontario responsible for the EPA and OWRA and includes all officials, employees or other persons acting on its behalf;

"Owner" means Chaudiere Hydro Inc. and its successors and assignees;

"Previous Works" means those portions of the sewage works previously constructed and approved under an Approval;

"Proposed Works" means the sewage works described in the Owner's application, this Approval, to the extent approved by this Approval;

"Regional Director" means the Regional Director of the Eastern Region of the Ministry;

"Works" means the sewage works described in the Owner's application, and this Approval, and includes both Proposed Works and Previous Works.

You are hereby notified that this environmental compliance approval is issued to you subject to the terms and conditions outlined below:

TERMS AND CONDITIONS

1. GENERAL CONDITION

(1) The Owner shall ensure that any person authorized to carry out work on or operate any aspect of the Works is notified of this Approval and the conditions herein and shall take all reasonable measures to ensure any such person complies with the same.

(2) Except as otherwise provided by these conditions, the Owner shall design, build, install, operate and maintain the Works in accordance with the description given in this Approval, and the application for approval of the Works.

(3) Where there is a conflict between a provision of any document in the schedule referred to in this Approval and the conditions of this Approval, the Conditions in this Approval shall take precedence, and where there is a conflict between the documents in the schedule, the document bearing the most recent date shall prevail.

(4) Where there is a conflict between the documents listed in the Schedule A, and the application, the application shall take precedence unless it is clear that the purpose of the document was to amend the application.

(5) The Conditions of this Approval are severable. If any Condition of this Approval, or the application of any requirement of this Approval to any circumstance, is held invalid or unenforceable, the application of such condition to other circumstances and the remainder of this Approval shall not be affected thereby.

2. CHANGE OF OWNER

(1) The Owner shall notify the District Manager and the Director, in writing, of any of the following changes within thirty (30) days of the change occurring:

- (a) change of Owner or operating authority, or both;
- (b) change of address of Owner or operating authority or address of new Owner or operating authority;
- (c) change of partners where the Owner or operating authority is or at any time becomes a partnership, and a copy of the most recent declaration filed under the *Partnerships Registration Act*;
- (d) change of name of the corporation where the Owner or operator is or at any time becomes a corporation, and a copy of the most current "Initial Notice or Notice of Change" (Form 1, 2 or 3 of O. Reg. 189, R.R.O. 1980, as amended from time to time), filed under the *Corporations Information Act*, shall be included in the notification to the District Manager.

(2) In the event of any change in ownership of the Works, the Owner shall notify in writing the succeeding owner of the existence of this Approval, and a copy of such notice shall be forwarded to the District Manager.

(3) The Owner shall ensure that all communications made pursuant to this condition will refer to this Approval's number.

3. OPERATIONS AND MAINTENANCE

(1) The Owner shall prepare an operations manual prior to the commencement of operation of the sewage works, that includes, but not necessarily limited to, the following information:

- (a) operating procedures for routine operation of the Works;
- (b) inspection programs, including frequency of inspection, for the Works and the methods or tests employed to detect when maintenance is necessary;
- (c) repair and maintenance programs, including the frequency of repair and maintenance for the Works;

- (d) contingency plans and procedures for dealing with potential spill, bypasses and any other abnormal situations and for notifying the District Manager; and
- (e) complaint procedures for receiving and responding to public complaints.

(2) The Owner shall maintain the operations manual up to date through revisions undertaken from time to time and retain a copy at the location of the sewage works. Upon request, the Owner shall make the manual available for inspection and copying by Ministry personnel.

(3) The Owner shall maintain routine clean out of the accumulated oil, mixture of oil and grit in the separators by vacuum tanker truck operated by licensed sewage disposal contractor for off-site haulage and disposal at the City of Ottawa Wastewater Treatment Plant or into a licensed disposal facility as appropriate.

(4) The Owner shall maintain routine clean out of sanitary sewage sludge from the main sanitary sewage holding tank (s) by vacuum tanker truck operated by a licensed sewage disposal contractor for off-site haulage and disposal into the City of Ottawa, Robert O. Pickard Wastewater Treatment Plant.

4. EFFLUENT - VISUAL OBSERVATIONS

Notwithstanding any other condition in this Approval, the Owner shall ensure that the effluent from the Works is essentially free of floating and settleable solids and does not contain oil or any other substance in amounts sufficient to create a visible film, sheen or foam on the receiving waters.

5. EFFLUENT OBJECTIVES

(1) The Owner shall use best efforts to design, construct and operate the Works with the objective that the concentrations of the materials named below as effluent parameters are not exceeded in the effluent from the Works, prior to discharge into the Ottawa River.

Table 1 - Effluent Objectives	
Effluent Parameter	Average Concentration Objective (milligrams per litre unless otherwise indicated)
Total Suspended Solids	10
Benzene	2.5
Toluene	15
o,m,p-Xylenes (total)	200
Petroleum Hydrocarbons	300

(2) As a further effluent objective, the Owner shall use best efforts to maintain the pH of the effluent from the Works within the range of (6.0 to 9.5), inclusive, at all times.

(3) The Owner shall include in all reports submitted in accordance with Conditions and a summary of the efforts made and results achieved under this Condition.

6. **EFFLUENT LIMITS**

(1) The Owner shall design, construct and operate the Works such that the concentrations of the materials named below as effluent parameters are not exceeded in the effluent from the Works.

Table 2 - Effluent Limits	
Effluent Parameter	Average Concentration Limit (milligrams per litre unless otherwise indicated)
Total Suspended Solids	15
Benzene	5
Toluene	24
Petroleum Hydrocarbons	500
o,m,p-Xylenes (total)	300
pH of the effluent maintained between 6.5 to 9.5, inclusive, at all times	

(2) For the purposes of determining compliance with and enforcing subsection (1): non-compliance with respect to an Average Concentration Limit is deemed to have occurred when the arithmetic mean concentration of all samples taken in a month, analyzed for a parameter named in Column 1 of Table 2 is greater than the corresponding average concentration set out in Column 2 of Table 2;

(3) For the purposes of determining non-compliance with and enforcing Subsections (1) and (2): non-compliance with respect to pH is deemed to have occurred when any single measurement is outside of the indicated range in Table 2.

7. **EFFLUENT MONITORING AND RECORDING**

The Owner shall, upon commencement of operation of the sewage works, carry out the following monitoring program:

(1) All samples and measurements taken for the purposes of this Approval are to be taken at a time and in a location characteristic of the quality and quantity of the effluent stream over the time period being monitored.

(2) Samples shall be collected and analyzed at the following sampling point(s), at the sampling frequencies and using the sample type specified for each parameter listed: All discharge streams into the Ottawa River shall be sampled and monitored as specified in Table 3 below and the results are to be recorded and reported.

Table-3- Monitoring

EFFLUENT PARAMETER	MONITORING FREQUENCY		SAMPLING POINTS	SAMPLE TYPE*
	Start-up & Commissioning	Normal Operation		
			Outlets of:	
Benzene	Weekly	Monthly	OI, OWS & OGS,	Grab
Total Suspended Solids	W	M	OI, OWS & OGS,	Grab
Toluene	W	M	OI, OWS & OGS,	Grab
o,m,p-Xylenes	W	M	OI, OWS & OGS,	Grab
Petroleum Hydrocarbons	W	M	OI, OWS & OGS,	Grab
Temperature (T)	W	M	UWSTDW & UTD	Grab
Hydrogen Ion (pH)	W	M	UWSTDW & UTD	Grab

* manual sample may be replaced by digital prob reading for T & pH

(3) The methods and protocols for sampling, analysis, toxicity testing, and recording shall conform, in order of precedence, to the methods and protocols specified in the following:

- (a) the Ministry's publication "Protocol for the Sampling and Analysis of Industrial/Municipal Wastewater" (August 1994), ISBN 0-7778-1880-9, as amended from time to time by more recently published editions;
- (b) the publication "Standard Methods for the Examination of Water and Wastewater" (21st edition) as amended from time to time by more recently published editions; and,
- (c) in respect of any parameters not mentioned in (a) - (c), the written approval of the District Manager, which approval shall be obtained prior to sampling.

(4) The measurement frequencies specified in subsection (2) in respect of any parameter are minimum requirements which may, after (24) months of monitoring in accordance with this Condition, may be modified by the Director in writing from time to time. In case the Owner's engineer, based on the monitoring results recommends cessation of sampling and monitoring of any of the parameter (s) after 24 months of operation and satisfactory results, the District Manager may accept the recommendation for such waiver.

(5) Flow measuring device(s) shall be installed in the Drainage Sump and Oil Water Separator Sump and maintained to measure the flowrate of the effluent from the sewage works, with an accuracy to within plus or minus 10 per cent of the actual flowrate for the entire design range of the flow measuring device and the Owner shall measure, record and calculate the flowrate for each effluent stream on each day of sampling.

(6) The Owner shall retain for a minimum of five (5) years from the date of their creation, all records and information related to or resulting from the monitoring activities required by this Approval.

8. REPORTING

(1) One week prior to the start up of the operation of the Works, the Owner shall notify the District Manager (in writing) of the pending start up date.

(2) The Owner shall report to the District Manager or designate, any exceedance of any parameter specified in Condition 6 orally, as soon as reasonably possible, and in writing within seven (7) days of the exceedance.

(3) In addition to the obligations under Part X of the *Environmental Protection Act*, the Owner shall, within ten (10) working days of the occurrence of any reportable spill as defined in Ontario Regulation 675/98, bypass or loss of any product, by-product, intermediate product, oil, solvent, waste material or any other polluting substance into the environment, submit a full written report of the occurrence to the District Manager describing the cause and discovery of the spill or loss, clean-up and recovery measures taken, preventative measures to be taken and schedule of implementation.

(4) The Owner shall prepare and submit a performance report to the District Manager on an annual basis within 30 days following the end of the period being reported upon. The first such report shall cover the first annual period following the commencement of operation of the Works and subsequent reports shall be submitted to cover successive annual periods following thereafter. The reports shall contain, but shall not be limited to, the following information:

- (a) a summary and interpretation of all monitoring data and a comparison to the effluent objectives/limits outlined in Conditions 5 and 6, including an overview of the success and adequacy of the sewage works;
- (b) a description of any operating problems encountered and corrective actions taken;
- (c) a summary of all maintenance carried out on any major structure, equipment, apparatus, mechanism or thing forming part of the sewage works;
- (d) a summary of any effluent quality assurance or control measures undertaken in the reporting period;
- (e) a summary of the calibration and maintenance carried out on all effluent monitoring equipment;
- (f) a description of efforts made and results achieved in meeting the Effluent Objectives.

The reasons for the imposition of these terms and conditions are as follows:

1. Condition 1 is imposed to ensure that the Works are built and operated in the manner in which they were described for review and upon which approval was granted. This condition is also included to emphasize the precedence of Conditions in the Approval and the practice that the Approval is based on the most current document, if several conflicting documents are submitted for review.
2. Condition 2 is included to ensure that the Ministry records are kept accurate and current with respect to approved works and to ensure that subsequent owners of the Works are made aware of the Approval and continue to operate the Works in compliance with it.
3. Condition 3 is included to ensure that a comprehensive operations manual governing all significant areas of operation, maintenance and repair is prepared, implemented and kept up-to-date by the Owner and made available to the Ministry. Such a manual is an integral part of the operation of the Works. Its compilation and use should assist the owner in staff training, in proper plant operation and in identifying and planning for contingencies during possible abnormal conditions. The manual will also act as a benchmark for Ministry staff when reviewing the owner's operation and maintenance of the Works.
4. Condition 5 is imposed to establish non-enforceable effluent quality objectives which the Owner is obligated to use best efforts to strive towards on an ongoing basis. These objectives are to be used as a mechanism to trigger corrective action proactively and voluntarily before environmental impairment occurs and before the compliance limits of Condition 6 are exceeded.
5. Condition(s) 4 and 6 are imposed to ensure that the effluent discharged from the Works to the Ottawa River

meets the Ministry's effluent quality requirements thus minimizing environmental impact on the receiver.

6. Condition 7 is included to require the Owner to demonstrate on a continual basis that the quality and quantity of the effluent from the approved works is consistent with the design objectives and effluent limits specified in the Approval and that the approved works do not cause any impairment to the receiving watercourse.
7. Condition 8 is included to provide a performance record for future references and to ensure that the Ministry is made aware of problems as they arise, so that the Ministry can work with the Owner in resolving the problems in a timely manner.

Schedule A:

1. Application for Approval of Industrial Sewage Works, Intake and Discharge Channel to serve 29MW Hydroelectric Generating Station, City of Ottawa, dated January 13, 2015 prepared and submitted by Paul D. Holmes, P.Eng., Hatch Ltd., Consulting Engineers.
2. Reply to Ministry's information request letter dated November 4, 2015 received on January 21, 2016 along with revised ECA draft prepared and submitted by Paul D. Holmes, P.Eng., Hatch Ltd., Consulting Engineers.
3. Reply to Ministry's information request letter dated January 29, 2016, received on February 1, 2016 along with revised ECA draft prepared and submitted by Paul D. Holmes, P.Eng., Hatch Ltd., Consulting Engineers.
4. Reply to Ministry's information request letter dated February 03, 2016, received on February 04, 2016 along with revised ECA draft prepared and submitted by Paul D. Holmes, P.Eng., Hatch Ltd., Consulting Engineers.
5. Reply to Ministry's information request letter dated February 08, 2016, received on February 09, 2016 along with revised ECA draft prepared and submitted by Paul D. Holmes, P.Eng., Hatch Ltd., Consulting Engineers.

In accordance with Section 139 of the Environmental Protection Act, you may by written Notice served upon me, the Environmental Review Tribunal and in accordance with Section 47 of the Environmental Bill of Rights, 1993, S.O. 1993, c. 28 (Environmental Bill of Rights), the Environmental Commissioner, within 15 days after receipt of this Notice, require a hearing by the Tribunal. The Environmental Commissioner will place notice of your appeal on the Environmental Registry. Section 142 of the Environmental Protection Act provides that the Notice requiring the hearing shall state:

1. The portions of the environmental compliance approval or each term or condition in the environmental compliance approval in respect of which the hearing is required, and;
2. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

The Notice should also include:

3. The name of the appellant;
4. The address of the appellant;
5. The environmental compliance approval number;
6. The date of the environmental compliance approval;
7. The name of the Director, and;
8. The municipality or municipalities within which the project is to be engaged in.

And the Notice should be signed and dated by the appellant.

This Notice must be served upon:

The Secretary*
Environmental Review Tribunal
655 Bay Street, Suite 1500
Toronto, Ontario
M5G 1E5

AND

The Environmental Commissioner
1075 Bay Street, Suite 605
Toronto, Ontario
M5S 2B1

AND

The Director appointed for the purposes of
Part II.1 of the Environmental Protection Act
Ministry of the Environment and
Climate Change
135 St. Clair Avenue West, 1st Floor
Toronto, Ontario
M4V 1P5

* Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 212-6349, Fax: (416) 326-5370 or www.ert.gov.on.ca

This instrument is subject to Section 38 of the Environmental Bill of Rights, 1993, that allows residents of Ontario to seek leave to appeal the decision on this instrument. Residents of Ontario may seek leave to appeal within 15 days from the date this decision is placed on the Environmental Registry. By accessing the Environmental Registry at www.ebr.gov.on.ca, you can determine when the leave to appeal period ends.

The above noted activity is approved under s.20.3 of Part II.1 of the Environmental Protection Act.

DATED AT TORONTO this 23rd day of February, 2016

Fariha Pannu.

Fariha Pannu, P.Eng.

Director

appointed for the purposes of Part II.1 of the
Environmental Protection Act

MN/

c: District Manager, MOECC Ottawa

Paul D. Holmes, P.Eng., Hatch Ltd., Chaudiere Hydro Inc.

Anna Graham

From: Public Information Services <publicinformationsservices@tssa.org>
Sent: November-01-18 11:56 AM
To: Anna Graham
Subject: RE: Records search request for 4 Booth Street

Good morning Anna,

Thank you for your request for confirmation of public information.

I have searched the below noted addresses and I have located the following record:

Inst Number	Context	Address	City	Province	Postal Code	Inststatusname	Segment1
9389943	FS Facility	6 BOOTH ST	OTTAWA	ON	K1R 6K8	EXPIRED	FS PRIVATE FUEL OUTLET - SELF SE
10096759	FS Facility	6 BOOTH ST	OTTAWA	ON	K1R 6K8	Under Review	FS PROPANE REFILL CNTR - MOTOR FILL
11278493	FS Propane Tank	6 BOOTH ST	OTTAWA	ON	K1R 6K8	Active	FS PROPANE TANK
10901243	FS Liquid Fuel Tank	6 BOOTH ST	OTTAWA	ON	K1R 6K8	EXPIRED	FS LIQUID FUEL TANK

For a further search in our archives, or for copies of documents, please complete our release of public information form found at <https://www.tssa.org/en/about-tssa/release-of-public-information.aspx? mid =392> and email the completed form to publicinformationsservices@tssa.org or through mail along with a fee of \$56.50 (including HST) per location. The fee is payable with credit card (Visa or MasterCard) or with a Cheque made payable to TSSA.

Although TSSA believes the information provided pursuant to your request is accurate, please note that TSSA does not warrant this information in any way whatsoever.

Kind regards,



Sarah Quibell | Public Information Agent

Facilities

345 Carlingview Drive

Toronto, Ontario M9W 6N9

Tel: +1-877-682-8772 | Fax: +1-416-231-6183 | E-Mail: squibell@tssa.org

www.tssa.org



From: Anna Graham <AGraham@Patersongroup.ca>

Sent: November 1, 2018 11:43 AM

To: Public Information Services <publicinformationservices@tssa.org>

Subject: Records search request for 4 Booth Street

Good morning,

Could you please complete a search of your records for underground/aboveground storage tanks, historical spills or other incidents/infractions for the following addresses for properties located in the City of Ottawa, ON:

3 Booth Street

4 Booth Street

5 Booth Street

6 Booth Street

33 Booth Street

138 Middle Street

161 Middle Street

149 Middle Street

Thank you,

Anna Graham, B.Sc., M.E.S.

patersongroup

solution oriented engineering

154 Colonnade Road South

Ottawa, Ontario, K2E 7J5

Tel: (613) 226-7381 Ext. 228

Fax: (613) 226-6344

Email: agraham@patersongroup.ca

This electronic message and any attached documents are intended only for the named recipients. This communication from the Technical Standards and Safety Authority may contain information that is privileged, confidential or otherwise protected from disclosure and it must not be disclosed, copied, forwarded or distributed without authorization. If you have received this message in error, please notify the sender immediately and delete the original message.



File Number: D06-03-18-0088

December 10, 2018

Paterson Group
154 Colonnade Road
Ottawa, ON K23 7J5

Sent via email [agraham@patersongroup.ca]

Dear Paterson Group,

**Re: Information Request
4 Booth Street, Ottawa, Ontario ("Subject Property")**

Internal Department Circulation

The Planning, Infrastructure and Economic Development Department has the following information in response to your request for information regarding the Subject Property:

- Sewer Use Program: Sanitary Sewer Agreement for construction dewatering and later changed to groundwater remediation (2015-11-04 until 2017-04-24); Self-Monitoring analysis; payment of discharge fees; site inspections; multiple notice of violations for discharge violations.
- Disposals & Environmental Remediation: The subject property is within 500 M of former landfill Ur-44. The City's Environmental Remediation Unit has no information regarding the current environmental conditions of this former landfill as the site is under private ownership.

Search of Historical Land Use Inventory

This acknowledges receipt of the signed Disclaimer regarding your request for information from the City's Historical Land Use Inventory (HLUI 2005) database for the Subject Property.

A search of the HLUI database revealed the following information:

- There are nineteen (19) activities associated with the Subject Property: Activity Numbers 2251, 1613, 3486, 6985, 4696, 2757, 2976, 2987, 3004, 3378, 7167, 3016, 3018, 12380, 741, 15075, 2153, 8628, 2162

*Shaping our future together
Ensemble, formons notre avenir*

City of Ottawa
Planning, Infrastructure and Economic
Development Department

110 Laurier Avenue West, 4th Floor
Ottawa, ON K1P 1J1
Tel: (613) 580-2424 ext. 14743
Fax: (613) 560-6006
www.ottawa.ca

Ville d'Ottawa
Services de la planification, de l'infrastructure et
du développement économique

110, avenue Laurier Ouest, 4e étage
Ottawa (Ontario) K1P 1J1
Tél.: (613) 580-2424 ext. 14743
Télééc: (613) 560-6006
www.ottawa.ca

The HLUI database was also searched for activity associated with properties located within 50m of the Subject Property. The search revealed the following:

- There are twenty (20) activities associated with properties located within 50m of the Subject Property: Activity Numbers 8847, 980, 10041, 3775, 2251, 1613, 2268, 654, 2611, 3781, 4696, 2757, 2976, 2987, 3004, 3378, 4791, 4689, 926, 3713

Please note that Activity Numbers 2251, 1613, 3486, 6985, 4696, 2757, 2976, 2987, 3004, 3378, 7167, 3016, 3018, 12380, 741, 15075, 2153, 4689, 926, 3713, 8847, 980 have a PIN Certainty of “2”. This identifier acknowledges that there is some uncertainty about the exact location of the land use activity and that the activity may or may not have been located on the Subject Property. All database entries with a PIN Certainty of “2” require independent verification as to their precise location.

A site map has been included to show the location of the Subject Property as well as the location of all the activities noted above, including the HLUI database’s location of the Activity Numbers with a PIN Certainty of “2”.

Additional information may be obtained by contacting:

Ontario’s Environmental Registry

The Environmental Registry found at <http://www.ebr.gov.on.ca/ERS-WEB-External/> contains "public notices" about environmental matters being proposed by all government ministries covered by the Environmental Bill of Rights. The public notices may contain information about proposed new laws, regulations, policies and programs or about proposals to change or eliminate existing ones. By using keys words i.e. name of proponent/owner and the address one can ascertain if there is any information on the proponent and address under the following categories: Ministry, keywords, notice types, Notice Status, Acts, Instruments and published date (all years).

The Ontario Land Registry Office

Registration of real property is recorded in the Ontario Land Registry Office through the Land Titles Act or the Registry Act. Documents relating to title and other agreements that may affect your property are available to the public for a fee. It is recommended that a property search at the Land Registry Office be included in any investigation as to the historic use of your property. The City of Ottawa cannot comment on any documents to which it is not a party.

Court House
161 Elgin Street 4th Floor
Ottawa ON K2P 2K1
Tel: (613) 239-1230
Fax: (613) 239-1422

Please note, as per the HLUI Disclaimer, that the information contained in the HLUI database has been compiled from publicly available records and other sources of information. The HLUI may contain erroneous information given that the records used as sources of information may be flawed. For instance, changes in municipal addresses over time may introduce error. Accordingly, all information from the HLUI database is provided on an “as is” basis with no representation or warranty by the City with respect to the information’s accuracy or exhaustiveness in responding to the request.

Furthermore, the HLUI database and the results of this search in no way confirm the presence or absence of contamination or pollution of any kind. This information is provided on the assumption that it will not be relied upon by any person for any purpose whatsoever. The City of Ottawa denies all liability to any persons attempting to rely on any information provided from the HLUI database.

Please note that in responding to your request, the City of Ottawa does not guarantee or comment on the environmental condition of the Subject Property. You may wish to contact the Ontario Ministry of Environment and Climate Change for additional information.

If you have any further questions or comments, please contact Colette Gorni at 613-580-2424 ext. 14743 or HLUI@ottawa.ca

Sincerely,

A handwritten signature in dark ink, appearing to read "Colette Gorni".

Colette Gorni

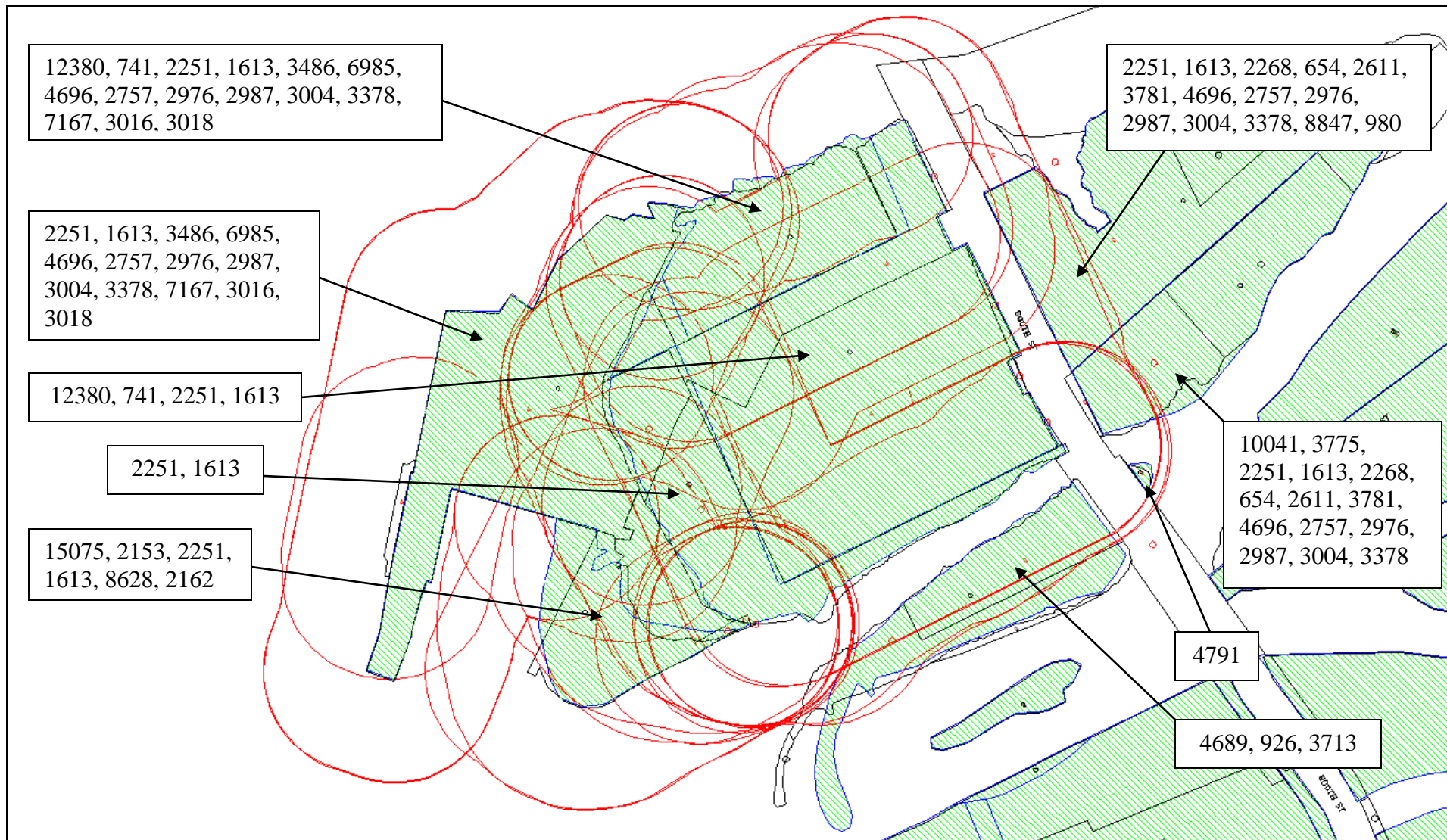
Per:



Michael Boughton, MCIP, RPP
Senior Planner
Development Review East
Planning Services
Planning, Infrastructure and Economic Development Department

MB / CG

Attach: 10

cc: File no. D06-03-18-0088



<p>Scale 1: n/a</p>	<p>4 Booth Street Ottawa, ON File # D06-03-18-0088 Colette Gorni</p> 	<p><u>Overview</u></p> <p>ID# = Activity Identification Number</p> <p> = Subject Site</p>
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CITY OF OTTAWA
HLUI ID: __679GAW
AREA (Square Metres): 20657.013

Report: RPTC_OT_DEV0122
Run On: 03 Dec 2018 at: 11:25:21

Study Year
1998

PIN
040970091

Multi-NAIC
Y

Multiple Activities
Y

Activity ID: 12380 **Multiple PINS:** Y
PIN Certainty: 2 **Previous Activity ID(s) :** 741
Related PINS: 040970091
Name: SAW MILL
Address: BOOTH STREET WEST, OTTAWA
Facility Type: Sawmill, Planing Mill and Shingle Mill Products Industries
Comments 1: This part of Booth called Bridge St. in 1900 and 1910. E>B> Eddy Co. listed at 6 Booth in 1940 and 1950.
Comments 2:
Generator Number:
Storage Tanks:
HL References 1: M.1900, M.1910, M.1920, M.1930, M.1940, M.1950
HL References 2:
HL References 3:

NAICS	SIC
321111	251
321112	251
321920	251
321919	251

Company Name	Year of Operation
E.B. Eddy Co. Ottawa Mill	c. 1940-1950
J.R. Booth	c. 1920-1930



CITY OF OTTAWA
HLUI ID: __679GAW
AREA (Square Metres): 20657.013

Report: RPTC_OT_DEV0122

Run On: 03 Dec 2018 at: 11:25:21

Study Year
1998

PIN
040970091

Multi-NAIC
Y

Multiple Activities
Y

Activity ID: 2251 Multiple PINS: Y
PIN Certainty: 2 Previous Activity ID(s) : 1613
Related PINS: 040970088
Name: BOOTH J.R. LIMITED
Address: HEAD STREET, OTTAWA
Facility Type: Pulp and Paper Industries
Comments 1: Dealers in lumber, groundwood and sulphite, cardboard, newpring, hanging, wrapping and specialty papers
Comments 2:
Generator Number:
Storage Tanks:
HL References 1: M.1900, M.1910, M.1920, M.1930, M.1940, M.1950
HL References 2:
HL References 3:

NAICS	SIC
322130	271
322112	271
322299	273
322212	273
322121	271
322219	273
322211	273
321111	251
322111	271
321112	251
321920	251
321919	251
322122	271

Company Name

Booth J.R. Ltd.
E.B. Eddy Co. Ltd.

Year of Operation

c. 1910-1940
c. 1950



CITY OF OTTAWA
HLUI ID: __679GQK
AREA (Square Metres): 7074.161

Report: RPTC_OT_DEV0122
Run On: 03 Dec 2018 at: 11:27:41

Study Year
1998

PIN
040970093

Multi-NAIC
Y

Multiple Activities
N

Activity ID: 2251 Multiple PINS: Y
PIN Certainty: 2 Previous Activity ID(s) : 1613
Related PINS: 040970088
Name: BOOTH J.R. LIMITED
Address: HEAD STREET, OTTAWA
Facility Type: Pulp and Paper Industries
Comments 1: Dealers in lumber, groundwood and sulphite, cardboard, newpring, hanging, wrapping and specialty papers
Comments 2:
Generator Number:
Storage Tanks:
HL References 1: M.1900, M.1910, M.1920, M.1930, M.1940, M.1950
HL References 2:
HL References 3:

NAICS	SIC
322130	271
322112	271
322299	273
322212	273
322121	271
322219	273
322211	273
321111	251
322111	271
321112	251
321920	251
321919	251
322122	271

Company Name

Booth J.R. Ltd.
E.B. Eddy Co. Ltd.

Year of Operation

c. 1910-1940
c. 1950



CITY OF OTTAWA
HLUI ID: __679FCF
AREA (Square Metres): 3924.403

Report: RPTC_OT_DEV0122
Run On: 03 Dec 2018 at: 11:28:55

Study Year
1998

PIN
040970089

Multi-NAIC
Y

Multiple Activities
Y

Activity ID: 15075 **Multiple PINS:** N
PIN Certainty: 2 **Previous Activity ID(s) :** 2153
Related PINS: 040970089
Name: Canadian Pacific Railway
Address: BAYVIEW RD, OTTAWA
Facility Type: Repair Shop for Railway Engines
Comments 1: Railway roundhouse
Comments 2: before #157
Generator Number:
Storage Tanks:
HL References 1: M.1900, M.1910, M.1920, M.1930, M.1940, M.1950
HL References 2:
HL References 3:

NAICS **SIC**
0 326

Company Name

Canadian Pacific Railway

Year of Operation

c. 1920-1950



CITY OF OTTAWA
HLUI ID: __679FCF
AREA (Square Metres): 3924.403

Report: RPTC_OT_DEV0122

Run On: 03 Dec 2018 at: 11:28:55

Study Year
1998

PIN
040970089

Multi-NAIC
Y

Multiple Activities
Y

Activity ID: 2251 Multiple PINS: Y
PIN Certainty: 2 Previous Activity ID(s) : 1613
Related PINS: 040970088
Name: BOOTH J.R. LIMITED
Address: HEAD STREET, OTTAWA
Facility Type: Pulp and Paper Industries
Comments 1: Dealers in lumber, groundwood and sulphite, cardboard, newpring, hanging, wrapping and specialty papers
Comments 2:
Generator Number:
Storage Tanks:
HL References 1: M.1900, M.1910, M.1920, M.1930, M.1940, M.1950
HL References 2:
HL References 3:

NAICS	SIC
322130	271
322112	271
322299	273
322212	273
322121	271
322219	273
322211	273
321111	251
322111	271
321112	251
321920	251
321919	251
322122	271

Company Name

Booth J.R. Ltd.
E.B. Eddy Co. Ltd.

Year of Operation

c. 1910-1940
c. 1950



CITY OF OTTAWA
HLUI ID: __679FCF
AREA (Square Metres): 3924.403

Report: RPTC_OT_DEV0122

Run On: 03 Dec 2018 at: 11:28:55

Study Year
1998

PIN
040970089

Multi-NAIC
Y

Multiple Activities
Y

Activity ID: 8628 **Multiple PINS:** N
PIN Certainty: 1 **Previous Activity ID(s) :** 2162
Related PINS: 040970089
Name: MODERN CONTAINERS LIMITED
Address: BAYVIEW ROAD, OTTAWA
Facility Type: Foamed and Expanded Plastic Products Industry
Comments 1: M. Zagerman & Co. Ltd. (building supplier and wood wholesale/dealer) listed at this address in 1940.
Comments 2:
Generator Number:
Storage Tanks:
HL References 1: M.1900, M.1910, M.1920, M.1930, M.1940, M.1950
HL References 2:
HL References 3:

NAICS	SIC
326130	169
326160	169
326191	169
326140	161
326150	161
326111	169
326198	169
327214	356
337215	169

Company Name

Modern Containers Ltd.

Year of Operation

c. 1950

**CITY OF OTTAWA**

HLUI ID: __679GM0

AREA (Square Metres): 6047.138

Report: RPTC_OT_DEV0122

Run On: 03 Dec 2018 at: 11:30:37

Study Year
1998PIN
040970090Multi-NAIC
YMultiple Activities
N

Activity ID: 4689 **Multiple PINS:** N

PIN Certainty: 2 **Previous Activity ID(s) :** 926, 3713

Related PINS: 040970090

Name: E. B. EDDY CO.

Address: 6 BOOTH STREET, OTTAWA

Facility Type: Electric Power Systems Industry

Comments 1: From M.1920-1930, the location of the company was listed before Chaudiere and Oregon, but no number is given. MOE PCB Site #40288A224.

Comments 2: Transformers containing high PCB levels (>1000ppm) and other materials containing low PCB levels (<1000ppm) are stored on site. Generator #ON0009802 (waste generator)

Generator Number:

Storage Tanks: 300 Gallon UST (gas/diesel); two (2) coal bins on site in 1922.

HL References 1: M.1899-M.1980; S.1958, S.1961, S.1964/65, S.1970/71; PID1994; MOEE PCB Inventory-1995; FIP1901-103-537,vol2; FIP1912-103-537,vol2; FIP1922-103-537,vol2; FIP1948-102A-537,vol1; FIP1956-103-537,vol1.

HL References 2:

HL References 3:

NAICS	SIC
221119	491
493190	479
221121	491
322121	271
221122	491
322122	271
321919	251
321920	251
322111	271
321111	251
221111	491
322112	271
322130	271
493120	479
221112	491
321112	251
221113	491
493130	479

Company Name

E. B. Eddy Co.

J.R. Booth Ltd.

Year of Operation

c. 1901-1994

c. 1920-1940



CITY OF OTTAWA
HLUI ID: __679A2B
AREA (Square Metres): 87.404

Report: RPTC_OT_DEV0122
Run On: 03 Dec 2018 at: 11:32:13

Study Year
2005

PIN
040970086

Multi-NAIC
N

Multiple Activities
N

Activity ID: 4791 Multiple PINS: Y
PIN Certainty: 1 Previous Activity ID(s) :
Related PINS: 040970086
Name: DOMTAR INC.
Address: 6 BOOTH STREET, OTTAWA
Facility Type: Pulp and Paper Industries
Comments 1:
Comments 2:
Generator Number: ON0009802
Storage Tanks:
HL References 1:
HL References 2:
HL References 3: 2003 PID

NAICS	SIC
322121	0
322112	0
322111	0
322122	0

Company Name	Year of Operation
DOMTAR INC.	c. 2005
DOMTAR INC.	c. 2003
EDDY SPECIALTY PAPERS	c. 2001

**CITY OF OTTAWA**

HLUI ID: __679GRR

AREA (Square Metres): 7646.924

Report: RPTC_OT_DEV0122

Run On: 03 Dec 2018 at: 11:33:32

Study Year
1998**PIN**
042800006**Multi-NAIC**
Y**Multiple Activities**
Y

Activity ID: 10041 **Multiple PINS:** N

PIN Certainty: 1 **Previous Activity ID(s) :** 3775

Related PINS: 042800006

Name: OTTAWA ELECTRIC POWER HOUSE NO. 4

Address: CHAUDIERE ISLAND, OTTAWA

Facility Type: Electric Power Systems Industry

Comments 1: Site located south of Head St., north of the River Channel. The site was previously the location of Ottawa Electric Power House No. 1

Comments 2:

Generator Number:

Storage Tanks:

HL References 1: M.1900, M.1910, M.1920, M.1923, M.1923, M.1930, M.1940, M.1950; FIP1901-104-531,vol2; FIP1912-104-531,vol2; FIP1922-104-531,vol1.

HL References 2:

HL References 3:

NAICS	SIC
221111	491
221119	491
221113	491
221112	491
221122	491
221121	491

Company Name

Ottawa Electric Power House No. 4

Year of Operation

c. 1910-1930



CITY OF OTTAWA
HLUI ID: __679GRR
AREA (Square Metres): 7646.924

Report: RPTC_OT_DEV0122

Run On: 03 Dec 2018 at: 11:33:32

Study Year
1998

PIN
042800006

Multi-NAIC
Y

Multiple Activities
Y

Activity ID: 2251 Multiple PINS: Y
PIN Certainty: 2 Previous Activity ID(s) : 1613
Related PINS: 040970088
Name: BOOTH J.R. LIMITED
Address: HEAD STREET, OTTAWA
Facility Type: Pulp and Paper Industries
Comments 1: Dealers in lumber, groundwood and sulphite, cardboard, newpring, hanging, wrapping and specialty papers
Comments 2:
Generator Number:
Storage Tanks:
HL References 1: M.1900, M.1910, M.1920, M.1930, M.1940, M.1950
HL References 2:
HL References 3:

NAICS	SIC
322130	271
322112	271
322299	273
322212	273
322121	271
322219	273
322211	273
321111	251
322111	271
321112	251
321920	251
321919	251
322122	271

Company Name

Booth J.R. Ltd.
E.B. Eddy Co. Ltd.

Year of Operation

c. 1910-1940
c. 1950



CITY OF OTTAWA
HLUI ID: __679GRR
AREA (Square Metres): 7646.924

Report: RPTC_OT_DEV0122

Run On: 03 Dec 2018 at: 11:33:32

Study Year
1998

PIN
042800006

Multi-NAIC
Y

Multiple Activities
Y

Activity ID: 2268 **Multiple PINS:** N

PIN Certainty: 1 **Previous Activity ID(s) :** 654, 2611, 3781

Related PINS: 042800004

Name: BOOTH, J.R LIMITED

Address: BOOTH STREET, OTTAWA

Facility Type: Pulp and Paper Industries

Comments 1: Booth St was originally called Division St in 1900, 1910 Also Known As E. B. Eddy Co. Ottawa in 1950

Comments 2:

Generator Number:

Storage Tanks: 5 above ground acid tanks (1948); Four AST(sulphuric acid)-FIP1922;three AST(sulphuric acid)-FIP1948/1956;one AST/storage tower(sulphuric acid)-FIP1922/1948/1956.

HL References 1: FIP1912-104-532,vol2; FIP1922-104-532,vol2; FIP1948-102A-532; FIP1956-101right-532; FIP 1901 vol1, FIP1912 vol2, FIP1922-103-533, vol2, FIP1948-102A-533 vol1, FIP1956-103-533 vol1; M 1900; M.1910, M 1912; M.1920, M.1930, M.1940, M.1948, M.1950, M. 1956.

HL References 2:

HL References 3:



CITY OF OTTAWA
HLUI ID: __679GRR
AREA (Square Metres): 7646.924

Report: RPTC_OT_DEV0122

Run On: 03 Dec 2018 at: 11:33:32

Study Year
1998

PIN
042800006

Multi-NAIC
Y

Multiple Activities
Y

NAICS	SIC
321919	251
482114	453
321111	251
416310	563
322112	271
221121	491
444110	563
221111	491
321920	251
416320	563
221119	491
444190	563
322121	271
325999	279
322122	271
221122	491
482112	453
493190	479
221113	491
322111	271
444120	563
482113	453
493120	479
493130	479
322130	271
416340	563
488210	453
221112	491
321112	251
322230	279
483116	453

Company Name

EB Eddy
E.B. Eddy Co. Cardboard Mill
Booth, J.R Ltd.
JR Booth
J.R. Booth Ltd.

Year of Operation

c. 1948-1999
c. 1948-1956

c. 1901-1948
c. 1901-1922



CITY OF OTTAWA
HLUI ID: __679GRR
AREA (Square Metres): 7646.924

Report: RPTC_OT_DEV0122

Run On: 03 Dec 2018 at: 11:33:32

Study Year
1998

PIN
042800006

Multi-NAIC
Y

Multiple Activities
Y

Activity ID: 4696 **Multiple PINS:** Y
PIN Certainty: 2 **Previous Activity ID(s) :** 2757, 2976, 2987, 3004, 3378
Related PINS: 042800004
Name: E.B. EDDY CO. LIMITED
Address: HEAD, OTTAWA
Facility Type: Sawmill, Planing Mill and Shingle Mill Products Industries
Comments 1:
Comments 2:
Generator Number:
Storage Tanks:
HL References 1: M.1900, M.1910, M.1920, M.1930, M.1940, M.1950, M.1960, M.1970, M.1980
HL References 2:
HL References 3:

NAICS	SIC
322122	271
322121	271
322111	271
322112	271
321919	251
321920	251
321111	251
321112	251
322130	271

Company Name	Year of Operation
J.R. Booth	c. 1900
J.R. Booth	c. 1910
J.R. Booth	c. 1900-1930
E.B. Eddy Co. Ltd.	c. 1960



CITY OF OTTAWA
HLUI ID: __679G26
AREA (Square Metres): 10492.309

Report: RPTC_OT_DEV0122
Run On: 03 Dec 2018 at: 11:37:06

Study Year
1998

PIN
042800004

Multi-NAIC
Y

Multiple Activities
Y

Activity ID: 2251 **Multiple PINS:** Y
PIN Certainty: 2 **Previous Activity ID(s) :** 1613
Related PINS: 040970088
Name: BOOTH J.R. LIMITED
Address: HEAD STREET, OTTAWA
Facility Type: Pulp and Paper Industries
Comments 1: Dealers in lumber, groundwood and sulphite, cardboard, newpring, hanging, wrapping and specialty papers
Comments 2:
Generator Number:
Storage Tanks:
HL References 1: M.1900, M.1910, M.1920, M.1930, M.1940, M.1950
HL References 2:
HL References 3:

NAICS	SIC
322130	271
322112	271
322299	273
322212	273
322121	271
322219	273
322211	273
321111	251
322111	271
321112	251
321920	251
321919	251
322122	271

Company Name

Booth J.R. Ltd.
E.B. Eddy Co. Ltd.

Year of Operation

c. 1910-1940
c. 1950

**CITY OF OTTAWA**

HLUI ID: __679G26

AREA (Square Metres): 10492.309

Report: RPTC_OT_DEV0122

Run On: 03 Dec 2018 at: 11:37:06

Study Year
1998**PIN**
042800004**Multi-NAIC**
Y**Multiple Activities**
Y

Activity ID: 2268 **Multiple PINS:** N

PIN Certainty: 1 **Previous Activity ID(s) :** 654, 2611, 3781

Related PINS: 042800004

Name: BOOTH, J.R LIMITED

Address: BOOTH STREET, OTTAWA

Facility Type: Pulp and Paper Industries

Comments 1: Booth St was originally called Division St in 1900, 1910 Also Known As E. B. Eddy Co. Ottawa in 1950

Comments 2:

Generator Number:

Storage Tanks: 5 above ground acid tanks (1948); Four AST(sulphuric acid)-FIP1922;three AST(sulphuric acid)-FIP1948/1956;one AST/storage tower(sulphuric acid)-FIP1922/1948/1956.

HL References 1: FIP1912-104-532,vol2; FIP1922-104-532,vol2; FIP1948-102A-532; FIP1956-101right-532; FIP 1901 vol1, FIP1912 vol2, FIP1922-103-533, vol2, FIP1948-102A-533 vol1, FIP1956-103-533 vol1; M 1900; M.1910, M 1912; M.1920, M.1930, M.1940, M.1948, M.1950, M. 1956.

HL References 2:

HL References 3:



CITY OF OTTAWA
HLUI ID: __679G26
AREA (Square Metres): 10492.309

Report: RPTC_OT_DEV0122

Run On: 03 Dec 2018 at: 11:37:06

Study Year
1998

PIN
042800004

Multi-NAIC
Y

Multiple Activities
Y

NAICS	SIC
321919	251
482114	453
321111	251
416310	563
322112	271
221121	491
444110	563
221111	491
321920	251
416320	563
221119	491
444190	563
322121	271
325999	279
322122	271
221122	491
482112	453
493190	479
221113	491
322111	271
444120	563
482113	453
493120	479
493130	479
322130	271
416340	563
488210	453
221112	491
321112	251
322230	279
483116	453

Company Name

EB Eddy
E.B. Eddy Co. Cardboard Mill
Booth, J.R Ltd.
JR Booth
J.R. Booth Ltd.

Year of Operation

c. 1948-1999
c. 1948-1956

c. 1901-1948
c. 1901-1922



CITY OF OTTAWA
HLUI ID: __679G26
AREA (Square Metres): 10492.309

Report: RPTC_OT_DEV0122

Run On: 03 Dec 2018 at: 11:37:06

Study Year
1998

PIN
042800004

Multi-NAIC
Y

Multiple Activities
Y

Activity ID: 4696 **Multiple PINS:** Y
PIN Certainty: 2 **Previous Activity ID(s) :** 2757, 2976, 2987, 3004, 3378
Related PINS: 042800004
Name: E.B. EDDY CO. LIMITED
Address: HEAD, OTTAWA
Facility Type: Sawmill, Planing Mill and Shingle Mill Products Industries
Comments 1:
Comments 2:
Generator Number:
Storage Tanks:
HL References 1: M.1900, M.1910, M.1920, M.1930, M.1940, M.1950, M.1960, M.1970, M.1980
HL References 2:
HL References 3:

NAICS	SIC
322122	271
322121	271
322111	271
322112	271
321919	251
321920	251
321111	251
321112	251
322130	271

Company Name	Year of Operation
J.R. Booth	c. 1900
J.R. Booth	c. 1910
J.R. Booth	c. 1900-1930
E.B. Eddy Co. Ltd.	c. 1960



CITY OF OTTAWA
HLUI ID: __679G26
AREA (Square Metres): 10492.309

Report: RPTC_OT_DEV0122

Run On: 03 Dec 2018 at: 11:37:06

Study Year
1998

PIN
042800004

Multi-NAIC
Y

Multiple Activities
Y

Activity ID: 8847 **Multiple PINS:** N
PIN Certainty: 2 **Previous Activity ID(s) :** 980
Related PINS: 042800004
Name: MILITIA DEPARTMENT
Address: FLEET STREET, OTTAWA
Facility Type: Other Storage and Warehousing Industries
Comments 1:
Comments 2:
Generator Number:
Storage Tanks:
HL References 1: FIP1912-47-334,vol1. FIP1922-47-334,vol1. M.1921.
HL References 2:
HL References 3:

NAICS	SIC
493190	479
493120	479
911110	811
493130	479

Company Name
Militia Department

Year of Operation
c. 1922



CITY OF OTTAWA
HLUI ID: __679G7E
AREA (Square Metres): 15757.117

Report: RPTC_OT_DEV0122
Run On: 03 Dec 2018 at: 11:14:28

Study Year
1998

PIN
040970088

Multi-NAIC
Y

Multiple Activities
Y

Activity ID: 2251 **Multiple PINS:** Y
PIN Certainty: 2 **Previous Activity ID(s) :** 1613
Related PINS: 040970088
Name: BOOTH J.R. LIMITED
Address: HEAD STREET, OTTAWA
Facility Type: Pulp and Paper Industries
Comments 1: Dealers in lumber, groundwood and sulphite, cardboard, newpring, hanging, wrapping and specialty papers
Comments 2:
Generator Number:
Storage Tanks:
HL References 1: M.1900, M.1910, M.1920, M.1930, M.1940, M.1950
HL References 2:
HL References 3:

NAICS	SIC
322130	271
322112	271
322299	273
322212	273
322121	271
322219	273
322211	273
321111	251
322111	271
321112	251
321920	251
321919	251
322122	271

Company Name

Booth J.R. Ltd.
E.B. Eddy Co. Ltd.

Year of Operation

c. 1910-1940
c. 1950



CITY OF OTTAWA
HLUI ID: __679G7E
AREA (Square Metres): 15757.117

Report: RPTC_OT_DEV0122

Run On: 03 Dec 2018 at: 11:14:28

Study Year
1998

PIN
040970088

Multi-NAIC
Y

Multiple Activities
Y

Activity ID: 3486 **Multiple PINS:** Y
PIN Certainty: 2 **Previous Activity ID(s) :** 6985
Related PINS: 040970088
Name: CHAUDIERE WATER POWER INC.
Address: , OTTAWA
Facility Type: Other Chemical Products Industries
Comments 1:
Comments 2:
Generator Number:
Storage Tanks:
HL References 1: SC98
HL References 2:
HL References 3:

NAICS	SIC
325910	379
325520	379
325920	379

Company Name

Chaudiere Water Power Inc.

Year of Operation

c. 1998



CITY OF OTTAWA
HLUI ID: __679G7E
AREA (Square Metres): 15757.117

Report: RPTC_OT_DEV0122

Run On: 03 Dec 2018 at: 11:14:28

Study Year
1998

PIN
040970088

Multi-NAIC
Y

Multiple Activities
Y

Activity ID: 4696 **Multiple PINS:** Y
PIN Certainty: 2 **Previous Activity ID(s) :** 2757, 2976, 2987, 3004, 3378
Related PINS: 042800004
Name: E.B. EDDY CO. LIMITED
Address: HEAD, OTTAWA
Facility Type: Sawmill, Planing Mill and Shingle Mill Products Industries
Comments 1:
Comments 2:
Generator Number:
Storage Tanks:
HL References 1: M.1900, M.1910, M.1920, M.1930, M.1940, M.1950, M.1960, M.1970, M.1980
HL References 2:
HL References 3:

NAICS	SIC
322122	271
322121	271
322111	271
322112	271
321919	251
321920	251
321111	251
321112	251
322130	271

Company Name	Year of Operation
J.R. Booth	c. 1900
J.R. Booth	c. 1910
J.R. Booth	c. 1900-1930
E.B. Eddy Co. Ltd.	c. 1960



CITY OF OTTAWA
HLUI ID: __679G7E
AREA (Square Metres): 15757.117

Report: RPTC_OT_DEV0122

Run On: 03 Dec 2018 at: 11:14:28

Study Year
1998

PIN
040970088

Multi-NAIC
Y

Multiple Activities
Y

Activity ID: 7167
Multiple PINS: Y
PIN Certainty: 2
Previous Activity ID(s) : 3016, 3018
Related PINS: 040970088
Name: J.R. BOOTH
Address: CHAUDIERE STREET, OTTAWA
Facility Type: Other Utility Industries n.e.c.
Comments 1:
Comments 2:
Generator Number:
Storage Tanks:
HL References 1: M.1900, M.1910, M.1920, M.1930, M.1940, M.1950
HL References 2:
HL References 3:

NAICS	SIC
221113	491
321111	251
221121	491
221122	491
221119	491
221330	499
221111	491
221320	499
321920	251
562990	499
221112	491
321112	251
562210	499
321919	251
562920	499

Company Name

J.R. Booth

Year of Operation

c. 1910



CITY OF OTTAWA
HLUI ID: __679GNB
AREA (Square Metres): 6292.951

Report: RPTC_OT_DEV0122
Run On: 03 Dec 2018 at: 11:26:40

Study Year
1998

PIN
040970092

Multi-NAIC
Y

Multiple Activities
Y

Activity ID: 12380 **Multiple PINS:** Y
PIN Certainty: 2 **Previous Activity ID(s) :** 741
Related PINS: 040970091
Name: SAW MILL
Address: BOOTH STREET WEST, OTTAWA
Facility Type: Sawmill, Planing Mill and Shingle Mill Products Industries
Comments 1: This part of Booth called Bridge St. in 1900 and 1910. E>B> Eddy Co. listed at 6 Booth in 1940 and 1950.
Comments 2:
Generator Number:
Storage Tanks:
HL References 1: M.1900, M.1910, M.1920, M.1930, M.1940, M.1950
HL References 2:
HL References 3:

NAICS	SIC
321111	251
321112	251
321920	251
321919	251

Company Name	Year of Operation
E.B. Eddy Co. Ottawa Mill	c. 1940-1950
J.R. Booth	c. 1920-1930



CITY OF OTTAWA
HLUI ID: __679GNB
AREA (Square Metres): 6292.951

Report: RPTC_OT_DEV0122

Run On: 03 Dec 2018 at: 11:26:40

Study Year
1998

PIN
040970092

Multi-NAIC
Y

Multiple Activities
Y

Activity ID: 2251 Multiple PINS: Y
PIN Certainty: 2 Previous Activity ID(s) : 1613
Related PINS: 040970088
Name: BOOTH J.R. LIMITED
Address: HEAD STREET, OTTAWA
Facility Type: Pulp and Paper Industries
Comments 1: Dealers in lumber, groundwood and sulphite, cardboard, newpring, hanging, wrapping and specialty papers
Comments 2:
Generator Number:
Storage Tanks:
HL References 1: M.1900, M.1910, M.1920, M.1930, M.1940, M.1950
HL References 2:
HL References 3:

NAICS	SIC
322130	271
322112	271
322299	273
322212	273
322121	271
322219	273
322211	273
321111	251
322111	271
321112	251
321920	251
321919	251
322122	271

Company Name

Booth J.R. Ltd.
E.B. Eddy Co. Ltd.

Year of Operation

c. 1910-1940
c. 1950



CITY OF OTTAWA
HLUI ID: __679GNB
AREA (Square Metres): 6292.951

Report: RPTC_OT_DEV0122

Run On: 03 Dec 2018 at: 11:26:40

Study Year
1998

PIN
040970092

Multi-NAIC
Y

Multiple Activities
Y

Activity ID: 3486 Multiple PINS: Y
PIN Certainty: 2 Previous Activity ID(s) : 6985
Related PINS: 040970088
Name: CHAUDIERE WATER POWER INC.
Address: , OTTAWA
Facility Type: Other Chemical Products Industries
Comments 1:
Comments 2:
Generator Number:
Storage Tanks:
HL References 1: SC98
HL References 2:
HL References 3:

NAICS	SIC
325910	379
325520	379
325920	379

Company Name

Chaudiere Water Power Inc.

Year of Operation

c. 1998



CITY OF OTTAWA
HLUI ID: __679GNB
AREA (Square Metres): 6292.951

Report: RPTC_OT_DEV0122

Run On: 03 Dec 2018 at: 11:26:40

Study Year
1998

PIN
040970092

Multi-NAIC
Y

Multiple Activities
Y

Activity ID: 4696 **Multiple PINS:** Y
PIN Certainty: 2 **Previous Activity ID(s) :** 2757, 2976, 2987, 3004, 3378
Related PINS: 042800004
Name: E.B. EDDY CO. LIMITED
Address: HEAD, OTTAWA
Facility Type: Sawmill, Planing Mill and Shingle Mill Products Industries
Comments 1:
Comments 2:
Generator Number:
Storage Tanks:
HL References 1: M.1900, M.1910, M.1920, M.1930, M.1940, M.1950, M.1960, M.1970, M.1980
HL References 2:
HL References 3:

NAICS	SIC
322122	271
322121	271
322111	271
322112	271
321919	251
321920	251
321111	251
321112	251
322130	271

Company Name	Year of Operation
J.R. Booth	c. 1900
J.R. Booth	c. 1910
J.R. Booth	c. 1900-1930
E.B. Eddy Co. Ltd.	c. 1960



CITY OF OTTAWA
HLUI ID: __679GNB
AREA (Square Metres): 6292.951

Report: RPTC_OT_DEV0122

Run On: 03 Dec 2018 at: 11:26:40

Study Year
1998

PIN
040970092

Multi-NAIC
Y

Multiple Activities
Y

Activity ID: 7167
Multiple PINS: Y
PIN Certainty: 2
Previous Activity ID(s) : 3016, 3018
Related PINS: 040970088
Name: J.R. BOOTH
Address: CHAUDIERE STREET, OTTAWA
Facility Type: Other Utility Industries n.e.c.
Comments 1:
Comments 2:
Generator Number:
Storage Tanks:
HL References 1: M.1900, M.1910, M.1920, M.1930, M.1940, M.1950
HL References 2:
HL References 3:

NAICS	SIC
221113	491
321111	251
221121	491
221122	491
221119	491
221330	499
221111	491
221320	499
321920	251
562990	499
221112	491
321112	251
562210	499
321919	251
562920	499

Company Name

J.R. Booth

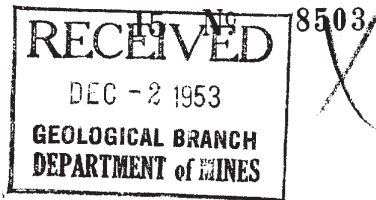
Year of Operation

c. 1910

45
UTM 118Z 414141080E
5R 51021916210N
Elev. 41R 02170
Basin 2-5



The Well Drillers Act
Department of Mines, Province of Ontario



Water Well Record

[Redacted] Village, Town or City Ottawa
[Redacted] Town or City Mill St
[Redacted] 2 Mill St
Date Completed 13 Nov 1953 Cost of Well (excluding pump) 422.00
(day) (month) (year)

Pipe and Casing Record		Pumping Test	
Casing diameter(s) <u>6"</u>	Date <u>13 Nov 1953</u>	Static level <u>40'</u>	
Length(s) of casing(s) <u>8'</u>		Pumping level <u>60'</u>	
Type of screen <u>nil</u>		Pumping rate <u>800 G.P.M.</u>	
Length of screen		Duration of test <u>1 HOUR</u>	
Distance from top of screen to ground level		Distance from cylinder or bowls to ground level <u>Barber Test</u>	
Is well a gravel-wall type? <u>no</u>			

Water Record			
Kind (fresh or mineral) <u>fresh</u>	Depth(s) to Water Horizon(s)	Kind of Water	No. of Feet Water Rises
Quality (hard, soft, contains iron, sulphur, etc.) <u>hard</u>			
Appearance (clear, cloudy, coloured) <u>clear</u>	<u>100</u>	<u>clear</u>	<u>40'</u>
For what purpose(s) is the water to be used? <u>Industrial</u>	<u>140</u>		<u>100'</u>
<u>Manufacture of Acetylene Gas (Water + Carbide)</u>			
How far is well from possible source of contamination? <u>None known</u>			
What is the source of contamination?			
Enclose a copy of any mineral analysis that has been made of water <u>nil</u>			

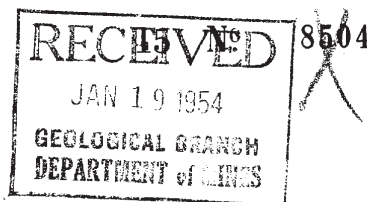
Well Log			Location of Well
Overburden and Bedrock Record	From	To	
<u>overburden clay</u>	0 ft.	4 ft.	In diagram below show distances of well from road and lot line. Indicate north by arrow.
<u>limestone</u>	4	140	

Situation: Is well on upland, in valley, or on hillside? Upland
Drilling Firm B. L. Phillips
Address 614 Somerset St Ottawa
Name of Driller B. L. Phillips Address
Date 13 Nov 1953 Licence Number 190
B. L. Phillips
Signature of Licensee

1-2 1.8 444080
[S]R [5] [0] [2] [9] [6] [2] [0] N
Elev. [4] R [0] [2] [7] [0]
Basin [2] [5] [] [] [] []



The Well Drillers Act
Department of Mines, Province of Ontario



Water Well Record

Village, Town or City... *Ottawa*
Town or City... *Mill St.*
Date Completed... *15 Jan 1954* Cost of Well (excluding pump)... *1286.00*
(day) (month) (year) including *revisions 140*

Pipe and Casing Record

Pumping Test

Casing diameter(s)...	<i>6"</i>	Date...	<i>15 Jan 1954</i>
Length(s) of casing(s)...	<i>8'</i>	Static level...	<i>42'</i>
Type of screen...	<i>hil</i>	Pumping level...	<i>88'</i>
Length of screen...		Pumping rate...	<i>480 G.P.H.</i>
Distance from top of screen to ground level...		Duration of test...	<i>3 HOURS</i>
Is well a gravel-wall type?	<i>No</i>	Distance from cylinder or bowls to ground level...	<i>Barber 1st</i>

Water Record

Kind (fresh or mineral)...	Depth(s) to Water Horizon(s)	Kind of Water	No. of Feet Water Rises
<i>fresh</i>			
Quality (hard, soft, contains iron, sulphur, etc.)...			
<i>hard</i>			
Appearance (clear, cloudy, coloured)...			
<i>clear</i>			
For what purpose(s) is the water to be used?			
<i>industrial</i>			
<i>Mfg. Acetylene gas (Carbide + H₂O)</i>			
How far is well from possible source of contamination?			
<i>None</i>			
What is the source of contamination?			
<i>Not known</i>			
Enclose a copy of any mineral analysis that has been made of water...			
<i>hil</i>			

Well Log

Overburden and Bedrock Record	From	To
	0 ft.	4 ft.
<i>clay</i>	4'	347'
<i>dark flint like limestone with white streaks</i>	347'	365'
<i>limestone</i>	365'	452'
13 Nov/53 ← Previously drilled -	0	140
limestone	145	347
Dark flint like limestone	347	365
with white streaks	365	452
limestone		

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.

see previous diagram submitted 13 Nov 1953 well # 45. This well was deepened as it was not supplying sufficient gallonage.

Filed under Mill St. 13 Nov/53

Situation: Is well on upland, in valley, or on hillside?

Drilling Firm...

Address...

Name of Driller...

Date...

Upland

Blair & Phillips

614

Gilmours St - Ottawa

Address...

Licence Number...

Signature of Licensee

**Ontario**Ministry of
the Environment

Well Tag Number (

A 019068

Well Record

Regulation 903 Ontario Water Resources Act

page 1 of 1

Instructions for Completing Form

- For use in the **Province of Ontario** only. This document is a permanent **legal** document. Please retain for future reference.
- All Sections **must** be completed in full to avoid delays in processing. Further instructions and explanations are available on the back of this form.
- Questions regarding completing this application can be directed to the Water Well Management Coordinator at 416-235-6203.
- All metre measurements shall be reported to 1/10th of a metre.**
- Please print clearly in blue or black ink only.

Ministry Use Only

Well Owner Information and Location of Well Information

Address of Well Location (County/District/Municipality)		Township		Lot		Concession	
OTTAWA CARLETON		NEPEAN		PART OF 40		A	
RR#/Street Number/Name		City/Town/Village		Site/Compartment/Block/Tract etc.			
3.4 & 6 BOOTH STREET		OTTAWA					
GPS Reading	NAD	Zone	Easting	Northing	Unit Make/Model	Mode of Operation: <input checked="" type="checkbox"/> Undifferentiated <input type="checkbox"/> Averaged <input type="checkbox"/> Differentiated, specify	
8.3	18	443.835	502.9733	GARMIN			

Log of Overburden and Bedrock Materials (see instructions)

General Colour	Most common material	Other Materials	General Description	Depth From	Metres To
BLACK	ASPHALT			0	0.1
GREY	SAND	GRAVEL		0.1	0.5
GREY	LIMESTONE			0.5	6.0

Hole Diameter			Construction Record				Test of Well Yield				
Depth From	Metres To	Diameter Centimetres	Inside diam centimetres	Material	Wall thickness centimetres	Depth From	Metres To	Pumping test method	Draw Down Time min	Recovery Water Level Time min	Water Level Metres
0	6.0	20									
			Casing								
			5.2	<input type="checkbox"/> Steel <input type="checkbox"/> Fibreglass <input type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized	0.4	0	2.9	Pump intake set at - (metres)	Static Level		
				<input type="checkbox"/> Steel <input type="checkbox"/> Fibreglass <input type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized			Pumping rate - (litres/min)	1		1	
				<input type="checkbox"/> Steel <input type="checkbox"/> Fibreglass <input type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized			Duration of pumping	2		2	
				<input type="checkbox"/> Steel <input type="checkbox"/> Fibreglass <input type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized			Final water level end of pumping	3		3	
				<input type="checkbox"/> Steel <input type="checkbox"/> Fibreglass <input type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized			Recommended pump type	4		4	
				<input type="checkbox"/> Steel <input type="checkbox"/> Fibreglass <input type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized			Recommended pump depth	5		5	
				<input type="checkbox"/> Steel <input type="checkbox"/> Fibreglass <input type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized			Recommended pump rate	10		10	
				<input type="checkbox"/> Steel <input type="checkbox"/> Fibreglass <input type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized			If flowing give rate - (litres/min)	15		15	
				<input type="checkbox"/> Steel <input type="checkbox"/> Fibreglass <input type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized			If pumping discontinued, give reason.	20		20	
				<input type="checkbox"/> Steel <input type="checkbox"/> Fibreglass <input type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized				25		25	
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Measurements recorded in: ☐ Metric ☐ Imperial

Well Owner's Information

First Name OTTAWA		Last Name / Organization HYDRO		E-mail Address		<input type="checkbox"/> Well Constructed by Well Owner	
Mailing Address (Street Number/Name) 1070 MERIVALE RD				Municipality OTTAWA	Province ONT	Postal Code K2L 6A9	Telephone No. (inc. area code) 613 738 5499

Well Location

Address of Well Location (Street Number/Name) 156 MIDDALE ST			Township OTTAWA		Lot		Concession	
County/District/Municipality			City/Town/Village OTTAWA		Province Ontario		Postal Code K1Z 2G7	
UTM Coordinates			Zone		Easting		Northing	
NAD 83			18		44408050		29890	
Municipal Plan and Sublot Number					Other			

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

[illegible]

Annular Space

Depth Set at (m/ft) From To	Type of Sealant Used (Material and Type)	Volume Placed (m ³ /ft ³)
45' 0	Bentonite	3 m ³

Results of Well Yield Testing

Results of Well Pump Testing				
After test of well yield, water was: <input type="checkbox"/> Clear and sand free <input type="checkbox"/> Other, specify _____	Draw Down		Recovery	
	Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:	Static Level			
	1		1	
Pump intake set at (m/ft)	2		2	
Pumping rate (l/min / GPM)	3		3	
	4		4	
Duration of pumping ____ hrs + ____ min	5		5	
Final water level end of pumping (m/ft)	10		10	
	15		15	
If flowing give rate (l/min / GPM)	20		20	
Recommended pump depth (m/ft)	25		25	
	30		30	
Recommended pump rate (l/min / GPM)	40		40	
Well production (l/min / GPM)	50		50	
	60		60	
Disinfected? <input type="checkbox"/> Yes <input type="checkbox"/> No				

Method of Construction

<input type="checkbox"/> Cable Tool	<input type="checkbox"/> Diamond
<input type="checkbox"/> Rotary (Conventional)	<input type="checkbox"/> Jetting
<input type="checkbox"/> Rotary (Reverse)	<input type="checkbox"/> Driving
<input type="checkbox"/> Boring	<input type="checkbox"/> Digging
<input type="checkbox"/> Air percussion	
<input type="checkbox"/> Other, <i>specify</i>	

Well Use

☐ Public ☐ Commercial ☐ Not used
☐ Domestic ☐ Municipal ☐ Dewatering
☐ Livestock ☐ Test Hole ☐ Monitoring
☐ Irrigation ☐ Cooling & Air Conditioning
☐ Industrial
☐ Other, *specify*

Construction Record - Casing

[illegible]

Status of Well

☐ Water Supply
☐ Replacement Well
☐ Test Hole
☐ Recharge Well
☐ Dewatering Well
☐ Observation and/or Monitoring Hole
☐ Alteration (Construction)
☒ Abandoned, Insufficient Supply
☒ Abandoned, Poor Water Quality
☐ Abandoned, other, *specify*
☐ Other, *specify*

Construction Record - Screen

[illegible]

Water Details

Water found at Depth (m/ft)	Kind of Water: <input type="checkbox"/> Fresh <input type="checkbox"/> Untested <input type="checkbox"/> Gas <input type="checkbox"/> Other, <i>specify</i> _____
Water found at Depth (m/ft)	Kind of Water: <input type="checkbox"/> Fresh <input type="checkbox"/> Untested <input type="checkbox"/> Gas <input type="checkbox"/> Other, <i>specify</i> _____
Water found at Depth (m/ft)	Kind of Water: <input type="checkbox"/> Fresh <input type="checkbox"/> Untested <input type="checkbox"/> Gas <input type="checkbox"/> Other, <i>specify</i> _____

Hole Diameter

Depth (m/ft)		Diameter (cm/ft)
From	To	

Well Contractor and Well Technician Information

Business Name of Well Contractor PLUMBING VILLAGE		Well Contractor's Licence No. 6 5 7 4	
Business Address (Street Number/Name) Box 329		Municipality CARP	
Province ONT.	Postal Code	Business E-mail Address	

OWT	HOA1LO
Bus. Telephone No. (inc. area code)	Name of Well Technician (Last Name, First Name)

6138395550	Well Technician's Licence No.	Signature of Technician and/or Contractor	Date Submitted
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Comments:

Well own
informatio
package

☐ Yes

Date Package Delivered

Date Work Completed _____

20140626

Ministry Use Only

Audit No. **Z184231**

JUN 30 2014

APPENDIX 3

QUALIFICATIONS OF ASSESSORS

Geotechnical
Engineering

POSITION

Environmental Assessor

Environmental
Engineering

EDUCATION

McGill University, B.Sc. 2010
Biology and English Literature

Hydrogeology

Queen's University, M.E.S. 2012
Environmental Studies

Geological
Engineering

EXPERIENCE

2014 to Present

Paterson Group Inc.

Consulting Engineers
Environmental Assessor

Materials Testing

Building Science

2013 to 2014

Civica Infrastructure Inc.

Municipal Water Resources Engineering - Vaughan
Project Support Coordinator, Project Proposal Writer

Archaeological
Services

PROJECTS

Environmental Impact Statements – various, Ottawa
Phase I Environmental Site Assessments – various, Ottawa
Flood Mapping Project Coordination – Credit Valley Conservation Authority
Manhole Survey Tool Design and Data Processing – City of Markham
Proposal Preparation – Utilities Kingston Inflow and Infiltration Study, City of
Peterborough Drainage Study

Geotechnical
Engineering

Environmental
Engineering

Hydrogeology

Geological
Engineering

Materials Testing

Building Science

Archaeological
Services

POSITION

Associate and Supervisor of the Environmental Division
Senior Environmental/Geotechnical Engineer

EDUCATION

Queen's University, B.A.Sc.Eng, 1991
Geotechnical / Geological Engineering

MEMBERSHIPS

Ottawa Geotechnical Group
Professional Engineers of Ontario

EXPERIENCE

1991 to Present

Paterson Group Inc.

Associate and Senior Environmental/Geotechnical Engineer
Environmental and Geotechnical Division
Supervisor of the Environmental Division

SELECT LIST OF PROJECTS

Mary River Exploration Mine Site - Northern Baffin Island
Agricultural Supply Facilities - Eastern Ontario
Laboratory Facility – Edmonton (Alberta)
Ottawa International Airport - Contaminant Migration Study - Ottawa
Richmond Road Reconstruction - Ottawa
Billings Hurdman Interconnect - Ottawa
Bank Street Reconstruction - Ottawa
Environmental Review – Various Laboratories across Canada - CFIA
Dwyer Hill Training Centre – Ottawa
Nortel Networks Environmental Monitoring - Carling Campus – Ottawa
Remediation Program - Block D Lands – Kingston
Investigation of former landfill sites – City of Ottawa
Record of Site Condition for Railway Lands – North Bay
Commercial Properties – Guelph and Brampton
Brownfields Remediation – Alcan Site - Kingston
Montreal Road Reconstruction - Ottawa
Appleford Street Residential Development - Ottawa
Remediation Program - Ottawa Train Yards
Remediation Program - Bayshore and Heron Gate
Gladstone Avenue Reconstruction – Ottawa
Somerset Avenue West Reconstruction - Ottawa