

Director's Order

Environmental Protection Act, R.S.O. 1990, c. E.19 (EPA)

Order No. 8363-BPMJK6

Main Document Reference No. 3074-BPMJ69

Incident Report No. 5815-BPMHSW

To: Continental Imperial Exploration Ltd.

279 Castlefield Ave.

Waterloo, Ontario N2L 3M4

Canada

And To: Mr. Andrew Spylo

245 Victoria Street North Kitchener, Ontario N2H 5C9

Canada

Site: 152/153 Shanley Street

Kitchener, Ontario N2H 5P5

Canada

Part 1: Definitions

For the purpose of this Order, the following capitalized terms shall have the meanings described below:

"Consultant(s)" means a licensed member of the Professional Engineers of Ontario, as required by the Professional Engineers Act and/or the Association of Professional Geoscientists of Ontario, as required by the Professional Geoscientists Act, and must have obtained appropriate education and training and demonstrated experience in the areas of work required to be carried out in this Order

"Contaminant" means any solid, liquid gas, odour, heat, sound, vibration, radiation or combination of any of them resulting directly or indirectly from human activities that may cause an adverse effect.

"Continental" means Continental Imperial Exploration Ltd., one of the Orderees.

"Director" means Amy SHAW, the District Manager of the Guelph District Office of the Ministry.

"DNAPL" means free-phase dense non-aqueous phase liquid consisting of approximately 98% trichlorethylene.

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

"Laboratory" means a laboratory (ies) that is accredited by a Ministry approved accreditation body and compliant with the International Standard ISO/IEC 17025. The Laboratory's accreditation must include accreditation for the VOCs that are to be assessed under this Order.

"Ministry" means the Ministry of the Environment, Conservation and Parks.

"Off-Site" means the area immediately around the Site; hydrogeologically or otherwise downgradient from the Site to the extent that DNAPL and or Volatile Organic Compounds (VOCs) are detectable in groundwater, soil, air or vapour above applicable analytical detection limits and hydrogeologically or otherwise connected to the Site.

"Orderees" means Mr. Andrew J. Spylo and Continental.

"Site" means the property municipally known as 152/153 Shanley Street, Kitchener, Ontario N2H 5P5 and legally described as LT 447-448 PL 376 KITCHENER; PT LT 446 PL 376 KITCHENER PT 1 WDR150; KITCHENER, being all of PIN: 22326-0146 (LT).

"Volatile Organic Compounds" and "VOCs" means the following chemical compounds found at the Site; toluene, ethylbenzene, tetrachloroethylene, trichloroethylene, trichloroethane and any breakdown products.

Part 2: Legal Authority

This Order is being made under the authority of section 18 and 196 of the EPA.

Part 3: Background and Reasons for the Order

3.1 Site Location and Surrounding Area

The Site is approximately 0.25 ha (0.6 acres) in size and is known as municipal address 152/153 Shanley Street. It is located at the northeast corner of Shanley Street and Duke Street in the City of Kitchener, Ontario (Site). The adjacent land uses include light commercial/industrial and residential. (See Schedule A attached).

VOC impacted groundwater has been identified to extend Off-Site.

3.2 Orderees

Continental (Corp Number 848835) was incorporated on August 3, 1989 under the laws of Ontario. Continental is included as an Orderee because it was the owner of the Site from February 1998 to November 2019 and there were Contaminants in, on or under the Site during that period of time.

Andrew J. Spylo is included as an Orderee because he has been a director and the President of Continental since January 28, 2000 and as such has been in management and control of Continental and the Site.

3.3 Ownership and Use of Site Details

The Site is currently owned by 2701098 Ontario Inc. having purchased it from Continental on November 12, 2019. Continental purchased the Site from 465055 Ontario Ltd. on February 27, 1998. 465055 Ontario Ltd. who has owned the Site since December 29, 1980 dissolved on January 17, 2005.

The Site was originally used for warehousing from 1928 to 1939 at which time its use was changed to furniture manufacturing. Furniture manufacturing occurred at the Site from about 1939 to 1982. Beginning in 1982, the Site was leased and used by Art Rite Advertising Ltd. for the graphic design and painting of commercial vehicles. Based on historical information, it is believed that Art Rite Advertising Ltd. disposed of waste paints and solvents into municipal sewers until approximately 1987. In 1990, Art Rite Advertising Ltd. declared bankruptcy, leaving a vacant four-story industrial/commercial building and an adjoining structure at the Site. The Site remained vacant and unmaintained between 1990 and 2019.

3.4 Summary of Events Leading up to the Order

Due to historic operations at the Site, soil and groundwater on the property has elevated levels of metals, petroleum hydrocarbons and volatile organic compounds. The primary contaminant of concern Off-Site is TCE. Based on available information, soil and groundwater contamination issues were first identified at the site around 1992, including approximately one metre of free phase dense non-aqueous phase liquid consisting of approximately 98% trichloroethylene (DNAPL).

In 1998, the Orderees in partnership with the University of Waterloo, completed environmental investigations at the Site to further delineate contamination. This work identified that contamination extended off the Site. An environmental consulting company was retained to remediate the existing contamination on-site; however, this work was never completed. Due to the lack of remedial efforts being undertaken at the Site, in May of 2006 the Ministry requested a work plan to fully delineate on and Off-Site contamination and to assess the potential for adverse effects as a result of trichloroethylene (TCE) vapour intrusion in nearby homes. The Ministry did not receive a response to this request.

On April 16, 2007, Provincial Officer's Order No. 0518-6SRRSZ was issued to Continental, 465055 Ontario Limited, and Art Rite Advertising Ltd. requiring them to retain a consultant and laboratory, assess both the on and off site contamination; assess the potential for or likelihood of an adverse effect due to the contamination; develop a remedial action plan to address the contamination along with a proposed implementation schedule; provide reports on all work completed in compliance with the Order; and to register a certificate of requirement on title to the Site.

By January of 2008, compliance with the order had not been achieved. As a result, on January 9, 2008 the Ministry issued a "Notice of Intention to Cause Work to be Done by Ministry".

On March 11, 2008 the Ministry completed indoor air monitoring at two of the adjacent residential homes to determine if there were any immediate issues related to indoor vapour migration. The review of the indoor air monitoring data indicated that VOC levels within the residences were within normal ranges.

On May 1, 2009 the Ministry hired a consultant to complete an environmental assessment on and in the vicinity of the Site. The work was completed over a 12-month period.

In February 2010, the Ministry received the final report outlining the work that had been completed, including: collection of groundwater and soil vapour samples, review of historical data, completion of a data gap analysis and recommendations for further work.

As a result of the work completed on behalf of the Ministry, indoor air sampling at seven adjacent residences to the Site was conducted by the Ministry in March 2011.

In January 2014, the Ministry issued an order to pay for costs incurred by the Ministry for work completed at and in the vicinity of the Site. No reimbursement was received and as a result, the Ministry issued instructions to the City of Kitchener to collect costs in April 2014.

Between September 2016 and February 2017, the Ministry completed confirmatory indoor air sampling at residential homes in the vicinity of the Site. Results showed indoor air concentrations were within applicable health-based action levels.

In March 2017, the City of Kitchener advertised the abandoned Site for sale. The tax sale was unsuccessful.

In January 2019, the City of Kitchener once again advertised the Site for sale. In March 2019, Continental paid the back taxes that were owing to the City by the set deadline, thereby cancelling the tax sale.

Due to safety concerns with the abandoned building, the City of Kitchener's Chief Building Inspector issued an Order to Remedy Unsafe Building and an Order Prohibiting Occupancy on May 7, 2019. The City fenced the Site off to restrict access and protect the general public.

The Orderees put the Site up for sale in March of 2019 and in November 2019, the Site was sold to 2701098 Ontario Inc. It is currently being developed by Shannondale Developments which is affiliated with 2701098 Ontario Inc. The Ministry is not aware of any association or business ties between Shannondale Developments and the current Orderees.

3.5 Director's Opinion

I am of the opinion, based on reasonable and probable grounds, that the requirements specified in this Order are necessary or advisable so as to prevent, decrease or eliminate an adverse effect that may result from the presence or discharge of a Contaminant in, on or under the Site.

Part 4: Work Ordered

Pursuant to my authority under sections 18 and 196 of the EPA, I order you, the Orderees, jointly and severally, to do the following:

Item No. 1

By August 4, 2020, the Orderees shall retain a competent and qualified Consultant(s) to prepare and complete the work specified in Items No. 3 to 11 of this Order. The Consultant(s) shall possess hydrogeological expertise and have expertise in the assessment and remediation of soil and groundwater contamination, in particular with remediation of VOCs and DNAPL, satisfactory to the undersigned Director. See the Definitions section for further details on the qualifications of the Consultant(s)

Item No. 2

By August 4, 2020, submit to the undersigned Director written confirmation from the Consultant (s) that the they have (1) received a copy of this Order; (2) been retained pursuant to Item No. 1; (3) possess the experience and qualifications to carry out the work required and (4) the name of the Laboratory the Consultant (s) has retained to carry out the testing required in Items No 3 to 11 of this Order.

Item No. 3

By the 5th day of September 2020 and on the 5th day of each month thereafter, submit to the undersigned Director a written status report from the Consultant regarding the work that has been carried out during the previous month.

Item No. 4.

By October 2, 2020, the Consultant will evaluate the existing Off-Site groundwater monitoring well network(s) and soil vapour probes to determine; the condition of all groundwater monitoring wells and soil vapour probes and prepare a plan, including a rationale for each monitor/probe, to upgrade, replace and/or abandon the monitors/probes as necessary, all in accordance with Ontario Regulation 903 as may be required.

Item No.5

By October 30, 2020, have the Consultant submit to the undersigned Director one electronic copy and one hard copy report of the results of the work as specified and required in Item No. 4. The report shall include, for review and acceptance by the undersigned Director:

- i. a detailed workplan, including timelines, to upgrade, replace, abandon monitors/ soil vapour probes as required;
- ii. a detailed groundwater monitoring program and soil vapour monitoring program, including timelines, that includes all available Off-Site groundwater monitoring wells and soil vapour probes, along with any new proposed groundwater monitoring wells and or soil vapour probes and is to include: the semi-annual measurement of groundwater elevations relative to mean sea level, the measurement of the presence of DNAPL and the collection of groundwater samples and soil vapour samples from each location. The samples shall be sent to the Laboratory chosen as required by Item No. 1 and analyzed for the VOCs defined above;
- iii. a copy of the Consultant's Standard Operating Procedures for the measurement of groundwater elevations, the measurement of DNAPL, the collection of groundwater samples and the collection of soil vapour samples; and, a detailed discussion of the Consultant's QA/QC protocol for both the collection of groundwater and soil vapour samples including but not limited to the collection of field duplicates/trip blanks and leak testing as may be required.

Item No. 6

Upon receipt of notice of acceptance from the undersigned Director, have the Consultant implement the work as per above for a minimum of one year and until written notice to discontinue the monitoring program by the undersigned Director is received by the Orderees.

Item No. 7

By September 5, 2020, have the Consultant submit to the undersigned Director, a proposed indoor air monitoring program to be completed within the residential community located Off-Site and within the estimated extent of the groundwater contamination plume for review and acceptance. The indoor air monitoring program shall be completed once every 2 years (during the winter months) and pending a review of the results by the undersigned Director, until written notice to decrease the frequency of or discontinue the indoor air monitoring program is received by the Parties from the undersigned Director. This work shall be done in general accordance with the Ministry's "Draft Technical Guidance: Soil Vapour Intrusion Assessment September 2013" and include but not be limited to:

- i. a door to door survey to evaluate the conditions of the basements of the residential properties to determine if there are any potential vapour pathways present, i.e. cracks, sumps, etc.;
- ii. sampling and analysis of indoor air to evaluate the concentration of the VOCs within the residential buildings;
- iii. sampling and analysis of the existing soil vapour probes; and,
- iv. appropriate QA/QC protocol including but not limited to the collection of field duplicates.

Item No. 8

Upon receipt of acceptance from the undersigned Director, have the Consultant implement the work as per Item No. 7, until written notice to discontinue the indoor air monitoring program by the undersigned Director is received by the Orderees.

Item No.9

Within 30 days of completion of the indoor air monitoring program in the first year, and every two years thereafter, as detailed in Item No. 7 of this Order, have the Consultant submit to the undersigned Director a detailed indoor air monitoring report that shall include, but not be limited to:

- i. laboratory results and laboratory certificates of analysis;
- ii. field logs, leak testing (as necessary) and documentation of QA/QC;
- iii. discussion and interpretation of the results; and,
- iv. conclusions and recommendations with respect to the need for additional and/or continued monitoring as may be warranted.

Item No. 10

Within 30 days of the completion of the last groundwater monitoring event as detailed in Item No. 5, have the Consultant submit to the undersigned Director a detailed monitoring report that includes:

- a complete summary of all work completed to date including an evaluation and interpretation of the analytical data for soil, groundwater and soil vapour, including all field and analytical data and laboratory certificates of analysis, collected as required by this Order; and,
- ii. delineation of the full vertical and lateral extent of contamination of Off-Site VOCs and DNAPL in both soil and groundwater based upon the updated information collected;
- iii. details of the work completed to sample and analyze the vapour concentrations in any accessible Off-Site services and soil vapour probes for the purpose of identifying potential vapour migration and contamination into building(s), confined spaces and any buried utility services, including all field and analytical data and laboratory certificates of analysis, as required by this Order;
- iv. details of the work completed to sample and analyze the indoor air vapour concentrations, including all field and analytical data and laboratory certificates of analysis, as required by this Order;
- v. plan view map(s) clearly indicating the Site boundary, adjacent land uses, all historic, existing and new test pits, boreholes, monitors and gas probes, municipal wells, private water wells, the results of the door to door survey, catch basins, manholes and all underground utility services, all within the delineated contaminant plume. All maps shall contain an appropriate scale, legend and north arrow;
- vi. soil contamination delineation map(s) showing isopleths for each contaminant delineated to the applicable criterion as per Table 2 "Full Depth Generic Site Condition Standards in a Potable Groundwater Condition" as per the "Soil, Groundwater and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act" dated April 15, 2011, for the VOCs. The map(s) shall:
 - a. show all soil analytical results obtained in accordance with this Order;
 - b. show in plan view all below grade utility services; and
 - c. highlight all exceedances of the applicable Ministry standard.
- vii. groundwater contamination delineation map(s) showing isopleths for each contaminant delineated to the applicable criterion as per Table 2 "Full Depth Generic Site Condition Standards in a Potable Groundwater Condition" as per the "Soil, Groundwater and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act" dated April 15, 2011 for the VOCs. The map(s) shall:
 - a. show all groundwater analytical results obtained in accordance with this Order;
 - b. show in plan view all below grade utility services;

- c. highlight all exceedances of the applicable Ministry standard; and
- d. show all monitoring wells where DNAPL contamination was detected including thickness of the DNAPL contamination.
- viii. a map in plan view showing the results of the indoor air monitoring program, shallow soil vapour and buried services vapour concentration measurements and all below grade services;
- ix. results of measurement of groundwater elevations surveyed relative to mean sea level and accurately located for display in plan view in drawings or maps in all existing groundwater monitoring wells located Off-Site, and in any and all groundwater monitoring wells constructed to comply with this Order;
- x. a map in plan view showing the groundwater elevation contours and interpreted groundwater flow direction Off-Site including all groundwater elevations used for the creation of the groundwater elevation contours. Groundwater flow directions shall be clearly indicated with arrows. Groundwater elevations shall be relative to Average Mean Sea Level;
- xi. all the borehole stratigraphic logs and groundwater monitoring well construction details in accordance with standard industry practices for any and all new boreholes and groundwater monitoring wells constructed for the purpose of complying with this Order;
- xii. accurate and representative geologic cross-section drawings in both the direction of groundwater flow and transverse to the direction of groundwater flow. Each cross-section shall identify well screen elevation details and water level elevation data including:
 - a. the location and construction details of all test pits, boreholes, vapour probes and monitoring wells that are located along or near the cross-section;
 - b. the subsurface soil stratigraphy and the location of DNAPL, if DNAPL is found, from locations that are along or near the cross-section;
 - c. all available analytical results for the VOCs, from locations that are along or near the cross-section, and showing any exceedances of the applicable standard, including the depth/elevation and individual stratigraphic level from which the sample was taken or screened;
 - d. all available groundwater elevations from locations that are along or near the cross-section; and
 - e. the inverts, sizes and locations of all buried services including water mains, storm and sanitary sewers, or other underground structures that are located along or near the cross-section.
- xiii. characterization of the interaction between the groundwater flow, the contamination distribution and all buried services;
- xiv. Water Well Record(s), in accordance with Ontario Regulation 903, prepared by the licensed well contractor for any groundwater well(s) constructed by a licensed well contractor in accordance with this Order;
- xv. an evaluation and interpretation of the hydrogeology Off -Site, which shall include a description of the groundwater elevation contours, groundwater flow direction, groundwater flow velocity, and horizontal and vertical hydraulic gradient;
- XVI. an evaluation and interpretation of the contaminant fate and transport Off-Site;
- xvii. an evaluation and interpretation of the indoor air monitoring results;
- XVIII. an assessment of the QA/QC protocols/procedures for the work completed under this Order;

- xix. an evaluation and interpretation of all the work completed under this Order to assess the likelihood of an adverse effect (as defined in the EPA) arising from the contamination that has migrated off the Site; and
- xx. signed by either a licensed member of the Professional Engineers of Ontario, as required by the *Professional Engineers Act*, R.S.O. 1990 and its regulations and/or the Association of Professional Geoscientists of Ontario, as required by the *Professional Geoscientists Act*, S.O. 2000, c. 13 and its regulations.

Item No. 11

Within 60 days of the submission of the monitoring report specified in Item No. 9, have the Consultant submit to the undersigned Director a remedial action plan (RAP), based upon the data collected as a result of this Order for review and approval. The RAP must address and/or manage both the free-phase DNAPL, VOCs, as well as any other contaminants as may deemed necessary by the Consultant in soil, groundwater and or soil vapour. The RAP must take into consideration Ontario Regulation 153/04 and be prepared in accordance with acceptable geoscientific practices, and shall include but not necessarily be limited to:

- i. an assessment of remedial options and presentation of recommendations, with rationale, to remediate the DNAPL which is located Off-Site;
- ii. an assessment of remedial options and presentation of recommendations, with rationale, to mitigate or remediate any contamination that has been identified Off-Site; and
- iii. a proposed implementation schedule.

Part 5: General Requirements

- 5.1 The requirements of this Order are minimum requirements only and does not relieve any person to whom this Order is issued from complying with the following:
 - a) any applicable federal legislation;
 - b) any applicable provincial requirements that are not addressed in this Order; and
 - c) any applicable municipal law.
- 5.2 Any request to change a requirement in this Order must be made in writing to the Director with reason(s) for the request, prior to any compliance date for that requirement
- 5.3 Notwithstanding the issuance of this Order, further or other orders may be issued in accordance with the EPA or other legislation administered by the Ministry as circumstances require. In particular, the Director shall issue an order where the acceptance of the Director is required in respect of a matter under this Order and,
 - a) the Director does not grant acceptance; or,
 - b) the Director grants acceptance, but with changes that have not been agreed to by the Orderees.
- 5.4 The requirements set out in this Order are severable. If any requirement of this Order or the application of any requirement to any circumstance is held to be invalid, such finding does not invalidate or render unenforceable the requirement in other circumstances nor does it invalidate or render unenforceable other requirements of the Order.

- 5.5 Subsection 19(1) of the EPA provides that an order of the Director is binding upon the successor or assignee of the person to whom it is directed.
- 5.6 Subsection 186(2) of the EPA provides that failure to comply with the requirements of this Order constitutes an offence.
- 5.7 Unless stayed by application under section 143 of the EPA, this Order is effective upon its being served upon the Orderees and its terms and conditions shall be in force until such time as they are amended or revoked by the Director.
- 5.8 In the event that any Orderee is, in the opinion of the Director, rendered unable to perform or comply with any obligations herein because of:
- i. natural phenomena of an exceptional, inevitable or irresistable nature, or insurrections; or
- ii. strikes, lockouts or other labour disturbances; or
- iii. inability to obtain materials or equipment for reasons beyond the control of the company; or
- iv. any other cause whether similar to or different from the foregoing beyond the reasonable control of the parties,

the obligations hereof, as they are affected by the above shall be adjusted in a manner defined by the Director. To obtain such an adjustment, the Orderee must notify the Director immediately of any of the above occurrences, providing details that demonstrate that no practical alternatives are feasible in order to meet the compliance dates in question.

- 5.9 Failure to comply with a requirement of this Order by the date specified does not relieve any Orderee from compliance with the requirement. The obligation to complete the requirement shall continue each day thereafter.
- 5.10 All documentation submitted to the Director pursuant to the requirements of this Order must be submitted to:

Director
Amy Shaw
Guelph District Office
Ministry of the Environment, Conservation and Parks
1 Stone Road West, 4th Floor
Guelph, Ontario
N1G 4Y2
Fax (519) 826-4286

Email: amy.shaw@ontario.ca

Part 6: Request for Hearing

- 6.1 You may require a hearing before the Environmental Review Tribunal (Tribunal), if, within fifteen (15) calendar days from the date of service of the Order, you serve written notice of your appeal on the Tribunal and the Director. Your notice must state:
 - a) the portion(s) of the Order in respect of which a hearing is required; and,
 - b) the grounds on which you intend to rely at the hearing.
- 6.2 Except with leave of the Tribunal, you are not entitled to appeal a portion of the Order or to rely on a ground that is not stated in the notice requiring the hearing. Unless stayed by the Tribunal, the Order remains in effect from the date of service.

6.3 Written notice requiring a hearing must be served upon:

The Secretary

Environmental Review Tribunal

655 Bay Street, Suite 1500

Toronto, ON -and-

M5G 1E5

Fax: (416) 326-5370

Email: erttribunalsecretary@ontario.ca

Director

Ministry of the Environment, Conservation

and Parks

1 Stone Road West, Floor 4SW

Guelph, ON N1G 4Y2

Fax: (519) 826-4286

Email: amy.shaw@ontario.ca

Further information on the Tribunal and requirements for an appeal can be obtained directly from the Tribunal by:

Tel: (416) 212-6349 or (866) 448-2248 Fax: (416) 326-5370 or (877) 849-2066 TTY (800) 855-1155 via Bell Relay Web: http://elto.gov.on.ca/ert

- 6.4 Service of the documentation referred to above can be made personally, by mail, by fax, by commercial courier or by email in accordance with the legislation under which the Order is made and any corresponding Service Regulation. Further information can be obtained from e- Laws at www.e-laws.gov.on.ca. Please note that choosing service by mail does not extend any of the above-mentioned timelines.
- 6.5 If you commence an appeal before the Tribunal, under Section 47 of the *Environmental Bill of Rights,* 1993 (EBR), you must give notice to the public in the Environmental Registry of Ontario (ERO). The notice must include a brief description of this Order (sufficient to identify it) and a brief description of the grounds of appeal. The notice must be delivered to the Minister of the Environment, Conservation and Parks, who will place it on the ERO. The notice must be delivered to the Minister of the Environment, Conservation and Parks at 777 Bay Street, Floor 5, Toronto, Ontario M7A 2J3 by the earlier of:
 - a) two (2) days of commencing the appeal before the Tribunal; and,
 - b) fifteen (15) days after the service of this Order.

- 6.6 Pursuant to subsection 47(7) of the EBR, the Tribunal may permit any person to participate in the appeal, as a party or otherwise, in order to provide fair and adequate representation of the private and public interests, including governmental interests, involved in the appeal.
- 6.7 For your information, under section 38 of the EBR, any person resident in Ontario with an interest in this Order may seek leave to appeal the Order. Under section 40 of the EBR, the application for leave to appeal must be made to the Tribunal by the earlier of:
 - a) fifteen (15) days after the day on which notice of the issuance of this Order is given in the ERO; and
 - b) If you appeal, fifteen (15) days after the day on which your notice of appeal is given in the ERO.

To find out if any person has made application for leave to appeal this Order, you may wish to check the ERO a few days after the period mentioned above. The ERO is available at www.ero.ontario.ca.

6.8 The procedures and other information provided above are intended as a guide. The legislation and/or regulations should be consulted for additional details and accurate reference.

ISSUED at Guelph this xx day of xx, 2020

Amy Shaw Director

Ministry of the Environment, Conservation and Parks

Schedule A



