

ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 1951-BHHMWV

Issue Date: February 28, 2020

York Environmental Solutions Ltd. as general partner for and on behalf of York Environmental Solutions, LP.
125 Villarboit Crescent
Vaughan, Ontario
L4K 4K2

Site Location: 195 Bethridge Road
City of Toronto

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:

a soil processing facility, for the receipt and treatment of non-hazardous Contaminated Soil impacted with volatile organic compounds, comprising of the following processes and associated equipment:

- sorting, screening, blending, bulking and loading of soil;
- soil storage piles;
- bioremediation treatment utilizing Biocells;
- one (1) screener powered by a diesel engine rated at 90 kilowatts, exhausting into the air through a stack, having an exit diameter of 0.15 metre and extending 4 metres above grade; and
- one (1) stacker powered by a diesel engine rated at 94 kilowatts, exhausting into the air through a stack, having an exit diameter of 0.15 metre and extending 0.3 metre above grade;

all in accordance with the Environmental Compliance Approval Application submitted by York Environmental Solutions Ltd., as general partner for and on behalf of York Environmental Solutions, LP, dated April 29, 2019 and signed by George Kirchmair, Vice President; the supporting information, including the Emission Summary and Dispersion Modelling Report, submitted by O2E Inc., dated January 28, 2020, and signed by Jeff Campbell; and emails dated November 1, 2019 and January 31, 2020 from Jeff Campbell of O2E Inc.

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

1. "*Approval*" means this Environmental Compliance Approval, including the application and supporting documentation listed above;
2. "*Best Management Practices Plan*" means the document titled "Fugitive Dust: Best Management Practices Plan (Version 1.1)", dated January 28, 2020 and prepared by O2E Inc., which describes measures to minimize dust emissions from the *Facility* and/or *Equipment*;
3. "*Bioaugmentation Compound*" means non-pathogenic, non-toxic, specialized microbes used to enhance bioremediation. In this *Approval*, it means the compound(s) described in the *Company's* application, this *Approval*, and in the supporting documentation submitted with the application;
4. "*Biocell*" means a treatment cell for *Contaminated Soil* undergoing biological treatment and covered by an impermeable covering;
5. "*Biostimulation Compound*" means any chemical amendment, nutrient amendment or pH adjustment chemical, other than a *Bioaugmentation Compound* used in the *Process* to enhance bioremediation. In this *Approval*, it means the compound(s) described in the *Company's* application, this *Approval* and in the supporting documentation submitted with the application;
6. "*Company*" means York Environmental Solutions Ltd. as general partner for and on behalf of York Environmental Solutions, LP., that is responsible for the construction or operation of the *Facility* and includes any successors and assigns;
7. "*Contaminated Soil*" means the incoming soil impacted by Volatile Organic Compounds which is received at the site for processing;
8. "*District Manager*" means the District Manager of the appropriate local district office of the *Ministry* where the *Facility* is geographically located;
9. "*EPA*" means the Environmental Protection Act, R.S.O. 1990, c.E.19, as amended ;
10. "*Equipment*" means the equipment associated with the *Process* 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. "*ESDM Report*" means the Emission Summary and Dispersion Modelling Report which was prepared in accordance with section 26 of *O. Reg. 419/05* and the *Procedure Document* by O2E Inc., dated January 28, 2020 and signed by Jeff Campbell, submitted in support of the application, and includes any changes to the report made up to the date of issuance of this *Approval*;
12. "*Facility*" means the entire operation located on the property where the *Equipment* is located;
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. "*O. Reg. 419/05*" means Ontario Regulation 419/05, Air Pollution – Local Air Quality, as amended;
16. "*Procedure Document*" means *Ministry* guidance document titled "Procedure for Preparing an Emission Summary and Dispersion Modelling Report" dated March 2018, as amended;
17. "*Process*" means the bioremediation treatment process and the soil handling operations as described in the *Company's* application, this *Approval*, and in the supporting documentation submitted with the application, to the extent approved by this *Approval*;
18. "*Processed Soil*" means the *Contaminated Soil* processed at the site, where processing is limited to screening and bioremediation of the incoming *Contaminated Soil*, and bulking, mixing or blending of similar soils;
19. "*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;
20. "*Schedule*" means the schedules attached to, and forming part of, this *Approval*, namely:
 - Schedule "A" - Contaminant Concentration Threshold;
21. "*Source Site*" means the location of origin of the non-hazardous *Contaminated Soil* which is received at the site for treatment.

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. OPERATION AND MAINTENANCE

1. The *Company* shall ensure that the *Equipment* is properly operated and maintained at all times. The *Company* shall:
 - a. prepare, 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 *Facility*, including:
 - i. routine operating and maintenance procedures in accordance with

good engineering practices and as recommended by the *Equipment* suppliers;

- ii. frequency of inspections and scheduled preventative maintenance of the *Equipment* and *Process*;
 - iii. procedures to record the operation of the *Process* including the quantity of *Contaminated Soil* received and treated in the *Facility*, the quantity of *Contaminated Soil* in each *Biocell*, and the total quantity of soil at the *Facility*;
 - iv. procedures to verify and record the degree of contamination of the *Contaminated Soil* delivered to the *Facility*;
 - v. procedures to verify and record the degree of contamination of the *Contaminated Soil* in each *Biocell*;
 - vi. procedures to verify and record the degree of contamination in the *Processed Soil*;
 - vii. procedures to maintain the moisture and oxygen content of the *Biocells*;
 - viii. procedures to prevent and/or minimize, monitor and record odour from the *Facility* and measures to address odour complaints resulting from the operation of the *Facility*;
 - ix. procedures to prevent and/or minimize noise and fugitive dust emissions from all potential sources;
 - x. contingency measures to address upset conditions; and
 - xi. procedures to record and respond to environmental complaints;
- b. implement the recommendations of the *Manual*.

2. The *Company* shall process no more than 4,000 tonnes a day of *Contaminated Soil* having contaminant concentrations less than or equal to the contaminant concentration thresholds listed in Table 1 of Schedule "A".
3. The *Company* shall process no more than 500 tonnes a day of *Contaminated Soil* having contaminant concentrations less than or equal to the contaminant concentration thresholds listed in Table 2 of Schedule "A".
4. The *Company* shall, upon receiving *Contaminated Soil* at the *Facility* with contaminant concentrations which exceeds the contaminant concentrations listed in Table 1 of Schedule "A", as measured at the *Source Site*, will immediately apply an initial dose of *Biostimulation Compound* and/or *Bioaugmentation Compound* to such contaminated soil and immediately place it into a *Biocell*.

5. The *Company* shall ensure that the *Processand Equipment* at the site is configured in accordance with the *ESDM Report*.
6. The *Company* shall ensure that no soil handling activities, including screening, transfer to storage piles or into vehicles, are carried out during windy conditions that could result in adverse off-site airborne impacts.

2. FUGITIVE DUST CONTROL

1. The *Company* shall,
 - a. within thirty (30) days after the date of this *Approval*, implement the *Best Management Practices Plan* for the control of fugitive dust emissions resulting from the operation of the *Facility*;
 - b. review and update the *Best Management Practices Plan* annually or at the direction of the *District Manager*;
 - c. record the result of each review, and update the *Best Management Practices Plan* accordingly within thirty (30) days of the completion of the review;
 - d. maintain the updated *Best Management Practices Plan* at the *Facility* and provide a copy to the *District Manager* within forty-five (45) days of the update; and
 - e. implement, at all times, the most recent version of the *Best Management Practices Plan*.
2. The *Company* shall record, either electronically or in a log book, each time a specific preventative and control measure described in the *Best Management Practices Plan* is implemented. The *Company* shall record, as a minimum:
 - a. the date when each emission control measure is installed, including a description of the control measure;
 - b. the date when each new preventative measure or operating procedure to minimize emissions is implemented, including a description of the preventative measure or operating procedure; and
 - c. the date, time of commencement, and time of completion of each periodic activity conducted to minimize emissions, including a description of the preventative measure/procedure and the name of the individual performing the periodic activity.

3. RECORD RETENTION

1. 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:

- a. all records on the operation, maintenance, repair and inspection of the *Process and associated Equipment*;
- b. all records on the operation of the *Process*, including the quantity of *Contaminated Soil* received at the site, the concentration of the contaminants listed in *Schedule "B"* as measured in the *Contaminated Soil* at the *Source Site*, the quantity of soil in each storage pile, the quantity of *Processed Soil*, and the total quantity of soil at the *Facility*;
- c. the log book which contains all records on the preventative and control measures implemented for each source of fugitive dust and odour emission identified in the *Best Management Practices Plan*; and
- d. all records of any environmental complaints, including:
 - i. a description, time and date of each incident to which the complaint relates;
 - ii. wind direction at the time of the incident to which the complaint relates;
 - iii. the cause of the incident; and
 - iv. 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.

4. NOTIFICATION OF COMPLAINTS

1. 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:
 - a. this *Approval* number;
 - b. a description of the nature of the complaint;
 - c. the time and date of the incident to which the complaint relates;
 - d. the wind direction at the time of the incident to which the complaint relates; and
 - e. 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.

5. NOISE

1. The *Company* shall, at all times, ensure that the noise emissions from the

Facility comply with the limits set out in *Ministry Publication NPC-300*.

SCHEDULE "A"

Table 1: Contaminant Concentrations Threshold

Contaminant	Chemical Abstract Service Number	Concentration Threshold (micrograms per gram of soil)
Acetone	67-64-1	454
Benzene	71-43-2	0.043
Bromodichloromethane	75-27-4	13
Bromoform	75-25-2	2.1
Bromomethane	74-83-9	51.41
Carbon Tetrachloride	56-23-5	0.09
Chlorobenzene	108-90-7	85.1
Chloroform	67-66-3	0.038
Dibromochloromethane	124-48-1	0.0076
1,2 - dichlorobenzene	95-50-1	952
1,3 - dichlorobenzene	541-73-1	1.9
1,4 - dichlorobenzene	106-46-7	3.63
1,1 - dichloroethane	75-34-3	6.3
1,2 - dichloroethane	107-06-2	0.077
1,1-dichloroethylene	75-35-4	0.38
Cis-1,2-dichloroethylene	156-59-2	4
trans-1,2-dichloroethylene	156-60-5	4
1,2-dichloropropane	78-87-5	91.66
Ethylbenzene	100-41-4	36
Ethyl Dibromide	106-93-4	0.11
Methyl Ethyl Ketone	79-93-3	38
Methylene Chloride	75-09-2	8.4
Methyl Isobutyl Ketone	108-10-1	46
Methyl-t-butyl ether	1634-04-4	267
Styrene	100-42-5	15
1,1,1,2-tetrachloroethane	630-20-6	0.019
1,1,2,2-tetrachloroethane	79-34-5	0.0038
Toluene	108-88-3	76
Tetrachloroethylene	127-18-4	14
1,1,1 -Trichloroethane	71-55-6	4,387
1,2,2 - Trichloroethane	79-00-5	0.011

Trichlorethylene	79-01-6	0.46
Vinyl Chloride	75-01-4	0.038
Xylene	1330-20-7	28
Dichlorodifluoromethane	75-71-8	19,075
Dioxane, 1,4-	123-91-1	134
Hexane(n)	110-54-3	287
Trichlorofluoromethane	75-69-4	229.2
1,3-dichloropropane (cis+trans)	542-75-6	0.048

Table 2: Contaminant Concentrations Threshold

Contaminant	Chemical Abstract Service Number	Concentration Threshold (micrograms per gram of soil)
Acetone	67-64-1	3,631
Benzene	71-43-2	0.34
Bromodichloromethane	75-27-4	107
Bromoform	75-25-2	17
Bromomethane	74-83-9	411
Carbon Tetrachloride	56-23-5	0.73
Chlorobenzene	108-90-7	680
Chloroform	67-66-3	0.31
Dibromochloromethane	124-48-1	0.06
1,2 - dichlorobenzene	95-50-1	7,617
1,3 - dichlorobenzene	541-73-1	15
1,4 - dichlorobenzene	106-46-7	29
1,1 - dichloroethane	75-34-3	50
1,2 - dichloroethane	107-06-2	0.61
1,1-dichloroethylene	75-35-4	3.1
Cis-1,2-dichloroethylene	156-59-2	32
trans-1,2-dichloroethylene	156-60-5	32
1,2-dichloropropane	78-87-5	733
Ethylbenzene	100-41-4	287
Ethyl Dibromide	106-93-4	0.9
Methyl Ethyl Ketone	79-93-3	306
Methylene Chloride	75-09-2	67
Methyl Isobutyl Ketone	108-10-1	367
Methyl-t-butyl ether	1634-04-4	2,140

Styrene	100-42-5	122
1,1,1,2-tetrachloroethane	630-20-6	0.15
1,1,2,2-tetrachloroethane	79-34-5	0.03
Toluene	108-88-3	611
Tetrachloroethylene	127-18-4	110
1,1,1 -Trichloroethane	71-55-6	35,099
1,2,2 - Trichloroethane	79-00-5	0.092
Trichlorethylene	79-01-6	3.7
Vinyl Chloride	75-01-4	0.31
Xylene	1330-20-7	223
Dichlorodifluoromethane	75-71-8	152,603
Dioxane, 1,4-	123-91-1	1,070
Hexane(n)	110-54-3	2,292
Trichlorofluoromethane	75-69-4	1,834
1,3-dichloropropane (cis+ trans)	542-75-6	0.38

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

1. Condition Nos. 1 and 2 are 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*.
2. Condition No. 3 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.
3. Condition No. 4 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.
4. Condition No. 5 is included to provide the minimum performance requirements considered necessary to prevent an adverse effect resulting from the operation of the *Facility*.

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, the Minister of the Environment, Conservation and Parks, within 15 days after receipt of this Notice, require a hearing by the Tribunal. The Minister of the Environment, Conservation and Parks 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:

- a. 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;
- b. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

The Notice should also include:

1. The name of the appellant;
2. The address of the appellant;
3. The environmental compliance approval number;
4. The date of the environmental compliance approval;
5. The name of the Director, and;
6. 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 Minister of the Environment, Conservation and Parks 777 Bay Street, 5th Floor Toronto, Ontario M7A 2J3	AND	The Director appointed for the purposes of Part II.1 of the Environmental Protection Act Ministry of the Environment, Conservation and Parks 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 <https://ero.ontario.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 28th day of
February, 2020

Jeffrey McKerrall, P.Eng.
Director
appointed for the purposes of Part
II.1 of the *Environmental Protection
Act*

BR/

c: District Manager, MECP Toronto - District
George Kirchmair, York Environmental Solutions Ltd.