Ontario

Ministry of the Environment
Ministère de l'Environnement

AMENDMENT TO CERTIFICATE OF APPROVAL
AIR
NUMBER 7043-8A7KNZ
Notice No. 1
Issue Date: November 26, 2010

PLASCO Trail Road Inc.
1145 Innovation Drive, Suite 400
Kanata, Ontario
K2K 3G8

Site Location: Nepean Landfill Site (Closed)
Part of Lot 9, Concession 4, Rideau Front
Ottawa City, Ontario

You are hereby notified that I have amended Certificate of Approval No. 7043-8A7KNZ issued on October 27, 2010 for one (1) Energy-From-Waste Demonstration Facility , as follows:

The following description in the amended Certificate of Approval (Air) number 7043-8A7KNZ issued on October 27, 2010 has been removed:

"- one (1) Power Plant, consisting of five (5) internal combustion reciprocating engines, firing on the cooled and cleaned Syngas exiting the storage tank after the GQCS above, each engine having a power rating of 704 kilowatts. The power generated in the Power Plant is fed to the grid. Exhausts of the engines are treated before discharge into the atmosphere as follows:

- Each of Engines 1, 2, 4 and 5 is equipped with its own selective catalytic reduction and oxidation equipment complete with urea dosing for treatment of its exhaust. The treated exhaust of each engine is either routed to the enclosed flare described above for further treatment or discharged into the atmosphere through a stack, having an exit diameter of 0.25 metre, at a maximum volumetric flow rate of 1.33 actual cubic metres per second at an approximate temperature of 515 degrees Celsius, extending 12.1 metres above grade;

- Engine 3 exhaust is either re-routed to the enclosed flare described above for further combustion of the exhaust gas, discharging into the atmosphere in that case through the stack of the flare, or discharged optionally through a catalytic converter before exhausting into the atmosphere at a maximum volumetric flow rate of 1.33 actual cubic metres per second at an approximate temperature of 515 degrees Celsius, through a stack having an exit diameter of 0.25 metre and extending 10 metres above grade;"

and replaced by the following description:

"- one (1) Power Plant, consisting of five (5) internal combustion reciprocating engines, firing on the cooled and cleaned Syngas exiting the storage tank after the GQCS above, each engine having a power rating of 704 kilowatts. The power generated in the Power Plant is fed to the grid. Exhausts of the engines are treated as follows:

- Each of Engines 1, 2, 4 and 5 is equipped with its own selective catalytic oxidation and reduction equipment (SCO/SCR) complete with urea dosing for treatment of its exhaust. The treated exhaust of Engine 1 is routed to the enclosed flare described above for further treatment before discharge into the atmosphere through the enclosed flare stack. The treated exhausts of Engines 2, 4 and 5, when they are operated, would be further treated (flared) before discharge into the atmosphere;

- Engine 3 is equipped with a catalytic converter for treatment of its exhaust. The treated exhaust is then routed to the enclosed flare described above for further treatment before discharge into the atmosphere through the enclosed flare stack;"

all in accordance with the Application for Approval (Air & Noise), dated November 19, 2010 and signed by John O'Sullivan, PLASCO Trail Road Inc., and all documentation associated with the application including additional information provided by SENES Consultants Limited on behalf of PLASCO Trail Road Inc., contained in an email sent from Richard Urbanski on November 19, 2010.

All terms and conditions in the amended Certificate of Approval (Air) number 7043-8A7KNZ issued on October 27, 2010 remain unchanged with the exception described below.

The following terms and conditions in the amended Certificate of Approval (Air) number 7043-8A7KNZ issued on October 27, 2010 have been removed:

"6(4) The *Company* shall perform *Source Testing* to determine the rates of emission of carbon monoxide, oxygen, nitrogen oxides, hydrogen chloride, sulphur dioxide, organic matter and the *Test Contaminants* from the reciprocating engine stacks and the flare stack. The *Source Testing* shall be conducted at maximum rating or at the maximum load achievable at the time of testing. Each test set shall consist of three (3) separate tests for each contaminant to be tested. The *Source Testing* shall be conducted under different operating scenarios of the *Facility* as follows:

(a) Scenario 1: the feed to the Converter is all *Municipal Waste:*

(b) Scenario 2: the feed to the Converter is majority *Municipal Waste* with about 3 - 5% by weight of the feed *High Carbon Waste* consisting primarily of recycled plastic rejects."

and replaced by the following terms and conditions:

"6(4) The *Company* shall perform *Source Testing* to determine the rates of emission of carbon monoxide, oxygen, nitrogen oxides, hydrogen chloride, sulphur dioxide, organic matter, ammonia and the *Test Contaminants* from the flare stack and a representative location in the ductwork after the SCO/SCR of Engine 1. The *Source Testing* shall be conducted at maximum rating or at the maximum load achievable at the time of testing. Each test set shall consist of three (3) separate tests for each contaminant to be tested. The *Source Testing* shall be conducted under different operating scenarios of the *Facility* as follows:

(a) Scenario1: when the feed to the Converter is all *Municipal Waste:*

(i) at the flare stack when the flare is combusting on syngas and assist gas (propane) only,

(ii) at a representative location in the vertical exhaust ductwork after the SCO/SCR of Engine 1, when Engine 1 is at the maximum load achievable at the time of testing but not less than 350 kW, and

(iii) at the flare stack when the flare is combusting on syngas and assist gas (propane), and the exhaust of Engine 1 is routed to the flare when Engine 1 is at the maximum load achievable at the time of testing but not less than 350 kW;

(b) Scenario 2: when the feed to the Converter is majority *Municipal Waste* with about 3 - 5% by weight of the feed *High Carbon Waste* consisting primarily of recycled plastic rejects:

(i) at the flare stack when the flare is combusting on syngas and assist gas (propane) only,

(ii) at a representative location in the vertical exhaust ductwork after the SCO/SCR of Engine 1, when Engine 1 is at the vertical exhaust stack, at the maximum load achievable at the time of testing but not less than 350 kW, and

(iii) at the flare stack when the flare is combusting on syngas and assist gas (propane), and the exhaust of Engine 1 is routed to the flare when Engine 1 is at the maximum load achievable at the time of testing but not less than 350 kW."

The *Company* may require the construction of a temporary secondary by-pass for routing the exhaust of Engine 1 after the SCO/SCR from the vertical exhaust ductwork to the enclosed flare in order to conduct the *Source Testing* at the stack of Engine 1 after the SCO/SCR, and shall ensure that any existing connections from any other equipment or vessels at the site, such as other engines, are capped in such a manner that there is no infiltration of any gases through such connections and that the only gas streams entering the enclosed flare are the syngas and the Engine 1 exhaust, at the time of the *Source Testing.* "

This Notice shall constitute part of the approval issued under Certificate of Approval No. 7043-8A7KNZ dated October 27, 2010.

In accordance with Section 139 of the Environmental Protection Act, R.S.O. 1990, Chapter E-19, as amended, you may by written notice served upon me and the Environmental Review Tribunal within 15 days

after receipt of this Notice, require a hearing by the Tribunal. Section 142 of the Environmental Protection Act, provides that the Notice requiring the hearing shall state:

1. The portions of the approval or each term or condition in the 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 Certificate of Approval number;
6. The date of the Certificate of Approval;
7. The name of the Director;
8. The municipality within which the works are located;

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, 15th Floor
Toronto, Ontario
M5G 1E5

AND

The Director
Section 9, *Environmental Protection Act*
Ministry of the Environment
2 St. Clair Avenue West, Floor 12A
Toronto, Ontario
M4V 1L5

*** Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 314-4600, Fax: (416) 314-4506 or www.ert.gov.on.ca**

The above noted works are approved under Section 9 of the Environmental Protection Act.

DATED AT TORONTO this 26th day of November, 2010

Ian Parrott, P.Eng.
Director
Section 9, *Environmental Protection Act*

RW/

c: District Manager, MOE Ottawa District Office
Richard Urbanski, SENES Consultants Limited