


CERTIFICATE OF APPROVAL
AIR

NUMBER 2492-7L9LBV

Issue Date: December 15, 2008

Sil-Tri Bio Fuels Inc.
 6 Glen Allen Dr
 Stoney Creek, Ontario
 L8G 3A4

Site Location: 7 Portside St
 Hamilton City

You have applied in accordance with Section 9 of the Environmental Protection Act for approval of:

a biodiesel manufacturing facility operating at a maximum production rate of 19 million litres of biodiesel fuel per year, including the following processes and equipment:

- one (1) biodiesel manufacturing process operating as a sealed and closed loop system, complete with one (1) waste vegetable oil storage tank, three (3) acid esterification vessels, three (3) biodiesel reactors, one (1) biodiesel extraction column equipped with finishing stages to remove impurities, one (1) methanol recovery column, one (1) methanol storage tank, one (1) biodiesel storage tank, and one (1) glycerin storage tank; and
- one (1) diesel fired boiler used to provide process heat for the biodiesel manufacturing process, having a maximum heat input of 2,637,640 kilojoules per hour, discharging into the atmosphere at a volumetric flow rate of 2.36 actual cubic metres per second, having an exit diameter of 0.30 metre, extending 3.66 metres above grade.

all in accordance with the Application for a Certificate of Approval (Air) submitted by Sil-Tri Bio Fuels Inc. dated January 13, 2007 and signed by Joe Silvestri, CEO, and all supporting information prepared by D.H. Lyons, including the additional information provided by Douglas Lyons by email sent October 16, 2008, October 20, 2008 and November 30, 2008.

For the purpose of this Certificate of Approval and the terms and conditions specified below, the following definitions apply:

- (1) "Act" means the *Environmental Protection Act*;
- (2) "AERMOD" means the dispersion model developed by the American Meteorological Society/U.S. Environmental Protection Agency Regulatory Model Improvement Committee (AERMIC) including the PRIME (Plume Rise Model Enhancement) algorithm, used to calculate one-hour average concentrations of a contaminant at the Point of Impingement and at the most impacted Sensitive Receptor.
- (2) "Certificate" means this Certificate of Approval, including Schedule "A", issued in accordance with Section 9 of the Act;
- (3) "Company" means Sil-Tri Bio Fuels Inc.;
- (4) "Director" means any Ministry employee appointed by the Minister pursuant to Section 5 of the Act;
- (5) "District Manager" means the District Manager, Hamilton District Office, West Central Region of the Ministry;
- (6) "Equipment" means the equipment operating in association with the biodiesel production process as described in the Company's application, this Certificate and in the supporting documentation referred to herein, to the extent approved by

this Certificate;

(7) "Facility" means the entire operation located on the property where the Equipment is located;

(8) "Fugitive Emissions Control Plan" means a document or a set of documents that provides written instructions to staff of the Company;

(9) "Manual" means a document or a set of documents that provide written instructions to staff of the Company;

(10) "Ministry" means Ontario Ministry of the Environment;

(11) "Point of Impingement" means any point in the natural environment. The point of impingement for the purposes of verifying compliance with the Act shall be chosen as the point located outside the Company's property boundaries at which the highest concentration is expected to occur, when that concentration is calculated in accordance with Schedule "A", or any other method required and/or accepted by the Director;

(12) "Publication NPC-205" means Publication NPC-205, Sound Level Limits for Stationary Sources in Class 1 & 2 Areas (Urban), October, 1995;

(13) "*Publication NPC-232*" means the *Ministry* Publication NPC-232, "Sound Level Limits for Stationary Sources in Class 3 Areas (Rural)", October, 1995;

(14) "Sensitive Receptor" means any location where routine or normal activities occurring at reasonably expected times would experience adverse effect(s) from odour discharges from the Facility, including one or a combination of:

- (a) private residences or public facilities where people sleep (eg: single and multi-unit dwellings, nursing homes, hospitals, trailer parks, camping grounds, etc.),
- (b) institutional facilities (eg: schools, churches, community centres, day care centres, recreational centres, etc.),
- (c) outdoor public recreational areas (eg: trailer parks, play grounds, picnic areas, etc.), and
- (d) commercial areas where there are continuous public activities (eg: commercial plazas and office buildings).

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

TERMS AND CONDITIONS

PERFORMANCE

Odour Limits

1. The Company shall ensure that the 10-minute average concentration of odour at the most impacted Sensitive Receptor, resulting from the operation of the Facility/Equipment, calculated in accordance with the methodology outlined in Schedule "A", shall not exceed 1 odour unit.

Noise Limits

2. The Company shall ensure that the noise emissions from the Facility comply with the limits set out in Ministry Publication NPC-205 or Publication NPC-232, as applicable.

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, and update, as necessary, a Manual outlining the operating procedures and a maintenance program for the Equipment in accordance with good engineering practice, including:

- (a) routine operating and maintenance procedures in accordance with good engineering practices and as recommended by the Equipment suppliers;

- (b) emergency procedures, including spill clean-up procedures;
 - (c) procedures for any record keeping activities relating to operation and maintenance of the Equipment;
 - (d) a Fugitive Emissions Control Plan, identifying fugitive odour emissions from the operation of the Facility and outlining the physical and procedural controls such as policies and standard operating procedures required in order to prevent or mitigate fugitive odour emissions from the operation of the Facility; and
 - (e) all appropriate measures to minimize noise and odour emissions from all potential sources, including but not limited to incoming materials unloading, product loading and storage procedures;
- (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 Certificate, 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 on the 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) a description of the nature of the complaint; and
- (2) the time and date of the incident to which the complaint relates;

SCHEDULE "A"

Procedure to calculate and record the 10-minute average concentration of odour at the Point of Impingement and at the most impacted Sensitive Receptor

1. Calculate and record one-hour average concentration of odour at the Point of Impingement and at the most impacted Sensitive Receptor, employing the AERMOD atmospheric dispersion model or with another atmospheric dispersion model acceptable to the Director that employs at least five (5) years of hourly local meteorological data and that can provide results reported as individual one-hour average odour concentrations;
2. Convert and record each of the one-hour average concentrations predicted over the five (5) years of hourly local meteorological data at the Point of Impingement and at the most impacted Sensitive Receptor to 10-minute average concentrations using the One-hour Average to 10-Minute Average Conversion described below; and
3. Record and present the 10-Minute Average concentrations predicted to occur over a five (5) year period at the Point of Impingement and at the most impacted Sensitive Receptor in a histogram. The histogram shall identify all predicted 10-minute average odour concentration occurrences in terms of frequency, identifying the number of occurrences over the entire range of predicted odour concentration in increments of not more than 1/10 of one odour unit. The maximum 10-minute average concentration of odour at the Sensitive Receptor will be considered to be the maximum odour concentration at the most impacted Sensitive Receptor that occurs and is represented in the histogram, disregarding outlying data points on the histogram as agreed to by the Director.

ONE-HOUR AVERAGE TO 10-MINUTE AVERAGE CONVERSION

4. Use the following formula to convert and record one-hour average concentrations predicted by the AERMOD atmospheric dispersion model to 10-minute average concentrations:

$$X_{10\min} = X_{60\min} * 1.65$$

where $X_{10\min}$ = 10-minute average concentration
 $X_{60\min}$ = one-hour average concentration

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

1. Conditions No. 1 and 2 are included to outline the minimum performance requirement considered necessary to prevent an adverse effect resulting from the operation of the Facility;
2. 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 Act, the regulations and this Certificate;
3. 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 Act, the Regulations and this Certificate can be verified; and
4. 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.

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, the Environmental Review Tribunal and in accordance with Section 47 of the Environmental Bill of Rights, S.O. 1993, Chapter 28, 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:

CONTENT COPY OF ORIGINAL

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 Environmental Commissioner
1075 Bay Street, 6th Floor
Suite 605
Toronto, Ontario
M5S 2B1

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**

This instrument is subject to Section 38 of the Environmental Bill of Rights, 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.ene.gov.on.ca, you can determine when the leave to appeal period ends.

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

DATED AT TORONTO this 15th day of December, 2008

Victor Low, P.Eng.
Director

RA/
c: District Manager, MOE Hamilton - District
Douglas Lyons, P.Eng., D.H. Lyons