


AMENDMENT TO CERTIFICATE OF APPROVAL
AIR

NUMBER 8328-678KA4

Notice No. 1

Issue Date: August 31, 2008

Owens Corning Canada GP Inc.
 3450 McNicoll Ave
 Scarborough, Ontario
 M1V 1Z5

Site Location: Owens Corning
 3450 McNicoll Avenue, Scarborough
 Toronto City, Municipality Of Metropolitan Toronto
 M1V 1Z5

You are hereby notified that I have amended Certificate of Approval No. 8328-678KA4 issued on January 28, 2005 for a glass fiber insulation products manufacturing facility, having a furnace system operating at a combined maximum rate of 302 tonnes per day of bare molten glass, TO-1 and TO-2 lines operating at their maximum rates of 169.6 tonnes per day and 121.5 tonnes per day of glass insulation products respectively, including the recycle of fibrous glass scrap to the TO-1 furnace and TO-2 furnace at a rate of 3000 kilograms per day and 960 kilograms per day respectively, consisting of the following processes: raw material handling, glass melting furnace, glass conditioning, channels and forehearth, TO-1 insulation line, TO-2 unbonded loosefill line and one (1) regenerative thermal oxidizer, as follows:

- submit an Acoustic Audit Report, prepared by an Independent Acoustical Consultant in accordance with Publication NPC-233, to the District Manager and the Director.

all in accordance with the Application for a Certificate of Approval (Air) and all supporting documentation submitted by Owens Corning Insulating Systems Canada LP, signed by Anindia Ghosh and dated January 22, 2007; and other supporting information associated with the application.

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

1. *"Acoustic Assessment Report"* means the reports, prepared in accordance with *Publication NPC-233* and Appendix A of the *Basic Comprehensive User Guide*, by Robert Stevens/ HGC Engineering and dated November 2004, January 2007 and February 25, 2008, submitted in support of the application, that documents all sources of noise emissions and *Noise Control Measures* present at the *Facility* and includes all up-dated *Acoustic Assessment Reports* as required by the Documentation Requirements conditions of this *Certificate* to demonstrate continued compliance with the *Performance Limits* following the implementation of any *Modification*.
2. *"Acoustic Assessment Summary Table"* means a table prepared in accordance with the *Basic Comprehensive User Guide* summarising the results of the *Acoustic Assessment Report*, up-dated as required by the Documentation Requirements conditions of this *Certificate*.
3. *"Acoustic Audit"* means an investigative procedure consisting of measurements of all noise emissions due to the operation of the *Facility*, assessed in comparison to 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*;

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4. "*Acoustic Audit Report*" means a report presenting the results of an Acoustic Audit, prepared in accordance with Publication NPC-233.
5. "*Certificate*" means this entire certificate of approval document, issued in accordance with section 9 of the *EPA* and includes all the *Schedules*, and the *Supporting Documentation*.
6. "*Company*" means Owens Corning Canada GP Inc. and includes any successors and assigns.
7. "*Director*" means any person appointed in writing by the Minister of the Environment 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.
9. "*EPA*" means the Environmental Protection Act, R.S.O. 1990, c.E.19.
10. "*Equipment*" means all machinery described in the Company's application, this Certificate and in the supporting documentation submitted with the application, to the extent approved by this Certificate;
11. "*Facility*" means the entire operation where the Equipment is located;
12. "*Independent Acoustical Consultant*" means an Acoustical Consultant not representing the Company, and not involved in the noise impact assessment or the design/implementation of noise control measures for the Facility/Equipment.

The Independent Acoustical Consultant shall not be retained by the consultant involved in the noise/vibration impact assessment or the design/implementation of noise/vibration control measures for the Facility/Equipment.
13. "*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.
14. "*Modification*" means any construction, alteration, extension or replacement of any plant, structure, equipment, apparatus, mechanism or thing, or alteration of a process or rate of production at the *Facility* that may alter noise or vibration emissions from the *Facility*.
15. "*Noise Abatement Action Plan*" means the noise abatement program developed by the Company, submitted to the Director and District Manager and approved by the Director, designed to achieve compliance with the sound level limits set in Publication NPC-205, as applicable;
16. "*Noise Control Measures*" means measures to reduce the noise emissions from the Facility and/or Equipment including, but not limited to, silencers, acoustic louvres, enclosures, absorptive treatment, plenums and barriers. It also means the noise control measures detailed in Schedule B of this Certificate;
17. "*Point of Reception*" means Point of Reception as defined by *Publication NPC-205*, as applicable.
18. "*Publication NPC-103*" means Publication NPC-103, Procedures, August 1978;
19. "*Publication NPC-205*" means Publication NPC-205, Sound Level Limits for Stationary Sources in Class 1 & 2 Areas (Urban), October, 1995 as amended;
20. "*Publication NPC-233*" means Publication NPC-233, Information to be Submitted for Approval of Stationary Sources of Sound, October, 1995 as amended.
21. "*Schedules*" means the following schedules attached to the *Certificate* and forming part of the *Certificate* namely:
Schedule A - Supporting Documentation;
Schedule B - Noise Abatement Action Plan.
22. "*Supporting Documentation*" means the documents listed in Schedule A of this *Certificate* which forms part of this *Certificate*.

23. "Written Summary" means the written summary that must be submitted annually to the *Ministry* as required by the Section titled Reporting Requirements of this *Certificate*.

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

TERMS AND CONDITIONS

1. PERFORMANCE LIMITS

1.1 The Company shall:

- a) Ensure that the noise emissions from the Facility comply with the limits set in Publication NPC-205;
- b) Confirm that the noise abatement measures detailed in Schedule B, of this Certificate, as proposed at the HGC Engineering acoustic assessment report (dated February 25, 2008) are incorporated at site.

1.2 The Company shall control the number of tanker trucks unloading while at the site during the evening and night time periods (i.e. 0700 PM - 0700 AM). This would entail that only one truck shall perform unloading operation per each hour prior 0700 AM.

2. REPORTING REQUIREMENTS

2.1 The *Company* shall provide the *District Manager* and the *Director* no later than August 15 of each year, a *Written Summary* of activities undertaken in the previous calendar year that shall include the following:

- a) a signed statement that the *Facility* was in compliance with the *Performance Limits*;
- b) a summary of each *Modification* that took place in the previous calendar year and resulted in a change in the sound levels reported in the *Acoustic Assessment Summary Table* at any *Point of Reception*.

3. ACOUSTIC AUDIT

3.1 The Company shall carry out Acoustic Audit measurements on the actual noise emissions due to the operation of the Facility, in accordance with the measurement procedures in Publication NPC-103.

3.2 The Company shall submit an Acoustic Audit Report, prepared by an Independent Acoustical Consultant in accordance with Publication NPC-233, to the District Manager and the Director, not later than three (3) months after the implementation of the Noise Abatement Action Plan.

3.3 The Director may not accept the results of the acoustic audit if the requirements of Publication NPC-233 were not followed.

3.4 If the Director does not accept the results of the acoustic audit the Director may:

- a) require the Company to repeat the acoustic audit, and/or
- b) revoke this Certificate, or
- c) impose additional conditions to the Company's Certificate of Approval, or
- d) exercise other options as detailed in the Environmental Protection Act.

SCHEDULE "A"

Supporting Documentation

(a) Application dated January 22, 2007, signed by Aninda Ghosh and submitted by the *Company* for a Certificate of Approval (Air & Noise);

(b) Acoustic Assessment Report entitled Environmental Acoustic Assessment Report prepared by HGC Engineering dated November 2004, and signed by Robert Stevens.

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(c) Acoustic Assessment Report entitled Environmental Acoustic Assessment Report prepared by HGC Engineering dated January 2007, and signed by Robert Stevens. January

(d) Acoustic Assessment Report entitled Environmental Acoustic Assessment Report prepared by HGC Engineering dated February 25, 2008;

(e) Noise Abatement Action Plan prepared by Owens Corning Insulating Systems Canada LP., dated August 15, 2008 and provided by Paul Kuebler (Toronto Plant - Facility Environmental Leader).

SCHEDULE "B"
Noise Abatement Action Plan

The Noise Abatement Action Plan shall include the following:

- o Owens Corning will implement the V-notch modification on A and C zones to the TO2 forming fans. The expected attenuation shall be at least 5dBA. Estimated completion date for this stage is not later than six (6) months after the date noted on this certificate.
- o The reduction of 10 dBA is required for the TO1 stack. As a result Owens Corning will mitigate the TO1 forming fans In place of single TO1 forming fan stack (source ID008) there will be two new stacks (ID318 and ID 319) and existing four TO1 fans will discharge into these stacks (two fans into each stack). Furthermore, special outlet silencers will be installed for the proposed TO1 stacks. Table below lists the acoustical performance specifications of the silencers, in terms of sound insertion loss.

Source ID	Source name and description	Octave Band Centre Frequency [Hz]							
		63	125	250	500	1 k	2 k	4 k	8 k
318	First TO1 stack	9	21	25	20	16	14	9	8
319	Second TO1 stack	9	21	25	20	16	14	9	8

The timing for this installation is currently set for the first half 2009, scheduled with a major glass melter shutdown. Since a glass melter represents the most significant asset for this facility, if additional melter life is deemed to be available, the latest the shutdown (silencer installation) would be delayed, is September 2010.

The reason(s) for this amendment to the Certificate of Approval is (are) as follows:

1. Condition No. 1.1 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. 1.2 is included to ensure that the tanker truck unloading operation is limited during evening and night time hours. Unlimited tanker truck unloading operation during evening and night time hours, when ambient sound levels are significantly lower, may result in non-compliance with the established sound level limits.
3. Conditions Nos. 3.1 and 3.2 are included to require the Company to gather accurate information so that the environmental impact and subsequent compliance with the Act, the regulations and this Certificate can be verified.
4. Conditions Nos. 3.3 and 3.4 are included to ensure that the acoustic audit is carried out in accordance with procedures set in the Ministry's Noise Guidelines.

This Notice shall constitute part of the approval issued under Certificate of Approval No. 8328-678KA4 dated January 28, 2005.

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

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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 31st day of August, 2008

Victor Low, P.Eng.
Director
Section 9, *Environmental Protection Act*

DZ/
c: District Manager, MOE Toronto - District
Paul Kuebler, Owens Corning Canada GP Inc.