20 February 2015

Kevin Schmidt Vice President, Operations Aspen Aerogels Rhode Island, LLC 3 Dexter Road East Providence, RI 02915

Dear Mr. Schmidt:

The Department of Environmental Management, Office of Air Resources has reviewed and approved your request for the installation of process and air pollution control equipment at your facility located at 3 Dexter Road, East Providence, RI.

Enclosed is a revised minor source permit issued pursuant to our review of your application (Approval Nos. 1890, 1893, 2111-2113, 2149, 2277 and 2278).

This permit requires that emissions testing be conducted for several air contaminants including hexamethyldisiloxane (HMDS) and hexamethyldisilizane (HMDZ). In 2006 a permit was issued to Aspen Aerogels by this office that included emissions testing for HMDS and HMDZ. Aspen responded that there were no current EPA approved test methods that addressed the quantification of those compounds at that time. The Office of Air Resources responded that Aspen must annually research the availability of an approved test method became available the required stack test must be conducted. The annual research for test methods was to be documented and made available to the Office of Air Resources upon request. The Office of Air Resources is requesting a copy of the documents confirming the annual research efforts and results.

If there are any questions regarding this permit, please contact me at 401-222-2808, extension 7415 or by email at stephen.stamand@dem.ri.gov.

Sincerely,

Stephen St.Amand Air Quality Specialist Office of Air Resources

cc: East Providence Building Official Thomas Graham – Aspen Aerogels Rhode Island, LLC

# STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR RESOURCES

## MINOR SOURCE PERMIT

# ASPEN AEROGELS RHODE ISLAND, LLC

# APPROVAL NOs. 1890, 1893, 2111-2113, 2149, 2277 & 2278

Pursuant to the provisions of Air Pollution Control Regulation No. 9, this minor source permit is issued to:

Aspen Aerogels Rhode Island, LLC

### For the following:

Installation of process equipment to increase production capacity to 6,540 blankets per month.

(Approval No. 2277) Installation of air pollution control equipment consisting of a new

baghouse discharging to a Chemical Systems Services wet scrubber (Approval No. 2278)

discharging to the existing MEGTEC Systems, Inc. Cleanswitch CS-250-95 regenerative thermal

oxidizer (Approval No. 2149) for the control of process emissions from the manufacturing of

aerogel insulating blankets.

**Located at:** *3 Dexter Road, East Providence* 

This permit shall be effective from the date the air pollution control system is installed and is operational and shall remain in effect until revoked by or surrendered to the Department. This permit does not relieve *Aspen Aerogels Rhode Island, LLC* from compliance with applicable state and federal air pollution control rules and regulations. The design, construction and operation of this equipment shall be subject to the attached permit conditions and emission limitations.

Douglas L. McVay, Chief Office of Air Resources **Date of issuance** 

# STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR RESOURCES

Permit Conditions and Emission Limitations

## ASPEN AEROGELS RHODE ISLAND, LLC

#### APPROVAL NOS. 1890, 1893, 2111-2113, 2149, 2277 & 2278 (Entrugry 2015 rapision)

(February 2015 revision)

#### A. Emission Limitations

The following emission limitations are applicable to the process and ancillary equipment operated for the production of aerogel insulation materials.

1. Raw Material Storage Tanks

The following requirements are applicable to the storage and/or transfer of VOCs:

- a. All storage tanks that store VOC shall have a vapor balance system that is designed and operated to route VOCs displaced from loading of the storage tank to the tank truck or railcar from which the storage tank is filled.
- b. Tank trucks and railcars must have a current certification in accordance with the U.S. Department of Transportation (DOT) pressure test requirements of 49 CFR 180 for tank trucks and 49 CFR 173.31 for railcars.
- c. VOCs must only be unloaded from tank trucks or railcars when vapor balance systems are connected to the storage tank's vapor balance system.
- d. No pressure relief device on the storage tank, railcar or tank truck shall open during loading or as a result of temperature changes (breathing losses).
- e. The pressure relief devices on all storage tanks that store VOC shall be set to no less than 1.25 psig at all times to minimize breathing losses.
- 2. Process Vessels (Solution Preparation, Aging, Extraction, Alcohol Recovery)
  - a. All process vessels shall be either totally closed vessels or equipped with tightly fitted covers that are vented to an air pollution control system.
  - b. All VOC emissions generated from any process vessel shall be captured and discharged to an air pollution control system consisting of a wet scrubber followed by a thermal oxidizer.

# 3. Casting Tables

All VOC and ammonia emissions generated at the three casting tables and roll windup areas shall be captured and discharged to an air pollution control system consisting of a wet scrubber followed by a thermal oxidizer.

4. Heat Treatment Ovens

All VOC, ammonia and particulate matter emissions generated from within the heat treatment ovens shall be captured and discharged to an air pollution control system consisting of a baghouse followed by a water spray quench tower followed by a wet scrubber followed by a thermal oxidizer.

Fugitive particulate matter emissions generated from the material handling of the aerogel blankets in the heat treatment lines, including unwind, splicing, winding and floor sweeps, shall be captured and discharged to a dust collections system.

5. Emergency Generator

The following emission limitations are applicable to the engine/generator set.

a. Sulfur Dioxide

All diesel fuel burned in the engine/generator set shall contain no more than 15 ppm sulfur by weight.

b. Opacity

Visible emissions from the engine/generator set shall not exceed 10% opacity except for a period or periods aggregating no more than three minutes in any one hour. This visible emission limitation shall not apply during startup of the engine. Engine startup shall be defined as the first ten minutes of firing following the initiation of firing.

- 6. Volatile Organic Compounds (VOC)
  - a. The total quantity of VOC emissions discharged to the atmosphere from the entire facility shall not exceed 8,167 pounds of VOC per calendar month based upon a 12-month rolling average.
  - b. The total quantity of volatile organic compound emissions discharged to the atmosphere from the two wet scrubber and thermal oxidizer air pollution control systems combined shall not exceed 5.41 pounds per hour.
  - c. The overall VOC control efficiency of each of the two wet scrubber and thermal oxidizer air pollution control systems shall be at least 98%.

- 7. Nitrogen Oxides (NOx)
  - a. The total quantity of NOx emissions discharged to the atmosphere from the entire facility shall not exceed 98,000 pounds in any consecutive 12-month period.
  - b. The total quantity of NOx emissions discharged to the atmosphere from RTO-1 (Approval No. 2113) shall not exceed 3.6 pounds per hour.
  - c. The total quantity of NOx emissions discharged to the atmosphere from RTO-2 (Approval No. 2149) shall not exceed 4.6 pounds per hour.
  - d. The total NOx emissions from the combustion of natural gas shall not exceed 40,000 pounds in any consecutive 12-month period.
- 8. Listed Toxic Air Contaminants
  - a. Isopropanol

The total quantity of isopropanol emissions discharged to the atmosphere from the two wet scrubber and thermal oxidizer air pollution control systems combined shall not exceed 5.41 pounds per hour.

- b. Ammonia
  - (1) The ammonia control efficiency of each wet scrubber shall be at least 95%.
  - (2) The total quantity of ammonia emissions discharged to the atmosphere from each of the two wet scrubber and thermal oxidizer air pollution control systems shall not exceed:
    - (a) 1.81 pounds per hour; and,
    - (b) 43.44 pounds per day; and,
    - (c) 15,856 pounds in any consecutive 12-month period
  - (3) The total quantity of ammonia emissions discharged to the atmosphere from the entire facility shall not exceed:
    - (a) 6.94 pounds per hour; and,
    - (b) 166.45 pounds per day; and,
    - (c) 60,753 pounds in any consecutive 12-month period
- c. The total quantity of emissions discharged to the atmosphere from the entire facility of any listed toxic air contaminant, with the exception of ammonia (NH3) and isopropanol (IPA) shall not exceed the minimum quantity for that

contaminant as specified in Appendix A of Air Pollution Control Regulation No. 9, during any 12-month period. Emissions from activities exempted from the provisions of APC Regulation No. 22 in subsection 22.2.2 are not included in this limitation.

- 9. Other Air Contaminants
  - a. The total quantity of hexamethyldisiloxane (HMDS) emissions discharged to the atmosphere from the two wet scrubber and thermal oxidizer air pollution control systems combined shall not exceed 473 pounds in any consecutive 12-month period.
  - b. The total combined quantity of hexamethyldisilizane (HMDZ) emissions discharged to the atmosphere from the two wet scrubber and thermal oxidizer air pollution control systems combined shall not exceed:
    - (1) 0.054 pounds per hour; and,
    - (2) 473 pounds in any consecutive 12-month period
- 10. Odors

Any air contaminant or combination of air contaminants discharged to the atmosphere from the facility shall not create an objectionable odor beyond the property line of this facility. Odor evaluations shall be conducted according to the provisions of Air Pollution Control Regulation No. 17.

11. Opacity

Visible emissions discharged into the atmosphere from the production of aerogel insulation materials shall not exceed 10% opacity (six-minute average).

#### B. Operating Requirements

- 1. The owner/operator shall not produce more than 6,540 aerogel blankets per month. One aerogel blanket is defined as a roll of insulating material that is at least 5 feet wide and 36 inches in diameter.
- 2. Natural gas usage for all combustion equipment shall not exceed 400 million cubic feet per any consecutive 12-month period.
- 3. Casting Table Enclosure
  - a. To ensure 100 percent capture of the VOC and ammonia generated, the three casting tables and associated roll windup areas must be located within a total enclosure. This total enclosure must meet criteria for a permanent total enclosure in 40 CFR 51, Appendix M, Method 204 "Criteria For and Verification of a Permanent or Temporary Total Enclosure".

- b. All access doors and windows in the total enclosures for the casting tables and associated roll windup areas shall be closed during routine operation. Brief, occasional openings of doors to allow for access and inspection are acceptable.
- c. Air passing through any natural draft opening in the total enclosures for the casting tables and associated roll windup areas shall flow into the enclosures continuously.
- 4. The operating temperature of each thermal oxidizer's combustion chamber shall be maintained at or above 1500°F whenever VOC and/or ammonia are being discharged to the oxidizer, or at a lower temperature that has been demonstrated in the most recent compliance test to achieve the required control efficiency.

The temperature in each thermal oxidizer's combustion chamber is to be measured by two thermocouples located at each end of the chamber. The operating temperature of each thermal oxidizer's combustion chamber shall be the average of the two temperature readings.

- 5. The wet scrubber and thermal oxidizer air pollution control systems shall each be operated according to their design specifications whenever the emission points vented to the control system are emitting air contaminants. Each thermal oxidizer must operate at any time that air contaminants are being emitted to the associated wet scrubber.
- 6. Engine/Generator Set
  - a. The maximum firing rate of the engine/generator set shall not exceed 44.5 gallons per hour.
  - b. The engine/generator set shall not operate more than 500 hours in any consecutive 12-month period.
  - c. The emergency generator shall be used only during emergencies or for maintenance or testing purposes. Emergency means an electric power outage due to a failure of the electrical grid, on-site disaster, local equipment failure, or public service emergencies such as flood, fire, or natural disaster. Emergency shall also mean periods during which ISO New England, or any successor Regional Transmission Organization, directs the implementation of operating procedures for voltage reductions, voluntary load curtailments by customers or automatic or manual load shedding within Rhode Island in response to unusually low frequency, equipment overload, capacity or energy deficiency, unacceptable voltage levels or other such emergency conditions.
  - d. The emergency generator shall not be operated in conjunction with any voluntary demand-reduction program or any other interruptible power supply arrangement with a utility, other market participant or system operator unless such program is implemented at the same time as ISO New England, or any successor Regional Transmission Organization,

directs the implementation of operating procedures for voltage reductions, voluntary load curtailments by customers or automatic or manual load shedding within Rhode Island in response to unusually low frequency, equipment overload, capacity or energy deficiency, unacceptable voltage levels or other such emergency conditions.

# C. Monitoring

- 1. The operating temperature of each thermal oxidizer's combustion chamber shall be continuously monitored and recorded. The temperature monitoring device shall be calibrated annually. The device must be capable of monitoring temperature with an accuracy of  $\pm 1$  percent of the temperature being monitored in °C or  $\pm 1$ °C, whichever is greater.
- 2. The pH and pressure drop of each wet scrubber shall be monitored and indicated continuously. The owner/operator shall record the wet scrubber pH and pressure drops a minimum of once per day. The date, time and measurement shall be recorded.
- 3. The engine/generator set shall be equipped with a non-resettable elapsed time meter to indicate, in cumulative hours, the elapsed engine operating time.
- 4. The owner/operator shall perform an annual leak inspection of all equipment in VOC service. For this inspection, detection methods incorporating sight, sound, and smell are acceptable. Each piece of equipment that is in VOC service shall be inspected when in service.
- 5. The permanent total enclosures for each casting table shall be inspected semiannually and should include all the items required to demonstrate that the permanent total enclosure criteria as established in 40 CFR 51, Appendix M, and Method 204 "Criteria for Verification of a Permanent or Temporary Total Enclosure" are maintained.
- D. Stack Testing
  - 1. Within 180 days of the startup of the Chemical Systems Services wet scrubber and the MEGTEC Systems Cleanswitch RTO, emissions testing shall be conducted to demonstrate compliance with the following emissions limitations: A.6.b, A.6.c, A.7.b, A.7.c, and A.8.b(1), A.8.b(2)(a) and A.9.b(1).
  - 2. A stack testing protocol shall be submitted to the Office of Air Resources for review at least 60 days prior to the performance of any stack tests. The owner/operator shall provide the Office of Air Resources at least 60 days prior notice of any stack test.
  - 3. All test procedures used for emissions testing shall be conducted in accordance with Appendix A of 40 CFR 60 or another method approved by the Office of Air Resources and U.S. Environmental Protection Agency (EPA) prior to the performance of any emissions tests.

- 4. The owner/operator shall install any and all test ports or platforms necessary to conduct the required testing, provide safe access to any platforms and provide the necessary utilities for sampling and testing equipment.
- 5. All testing shall be conducted under operating conditions deemed acceptable and representative for the purposes of assessing compliance with the applicable emissions limitations.
- 6. A final report of the results of stack testing shall be submitted to the Office of Air Resources no later than 60 days following completion of testing.
- 7. All stack testing must be observed by a representative of the Office of Air Resources to be considered acceptable, unless the Office of Air Resources provides prior written authorization to the owner/operator to conduct the testing without an observer present.
- E. Fuel Oil Testing
  - 1. Compliance with the diesel fuel sulfur limits may be determined based on a certification from the fuel supplier. Fuel supplier certifications shall include the following information:
    - a. The name of the fuel supplier;
    - b. The sulfur content of the fuel from which the shipment came or the shipment itself;
    - c. The location of the fuel when the sample was drawn for analysis to determine the sulfur content of the fuel, specifically including whether the fuel was sampled as delivered to Aspen Aerogels Rhode Island, LLC. or whether the sample was drawn from fuel in storage at the fuel supplier's facility or another location;
    - d. The method used to determine the sulfur content of the fuel.
  - 2. As an alternative to fuel supplier certification, the owner/operator may elect to sample the fuel prior to combustion. Sampling and analysis shall be conducted for the fuel in the initial tank(s) of fuel to be fired in the engine and after each new shipment of fuel is received. Samples shall be collected from the fuel tank immediately after the fuel tank is filled and before any fuel is combusted.
- F. Recordkeeping and Reporting
  - 1. The owner/operator shall maintain the following records:
    - a. The number of blankets of aerogel insulation produced each month.
    - b. The operating temperature of each thermal oxidizer's combustion chamber.

- c. The pH and pressure drop of each wet scrubber used to comply with the requirements of this permit.
- d. A maintenance log for the capture systems, control devices, and monitoring equipment detailing all routine and non-routine maintenance performed including dates and duration of any outages.
- e. An operating log for each heat treatment ovens including the dates(s) and time(s) each oven is in operation.
- f. Natural gas usage for all combustion equipment.
- 2. The owner/operator shall, on a monthly basis, no later than 5 business days after the first of the month, determine the total quantity of aerogel blankets produced during the previous month. The owner/operator shall keep records of this determination and provide such records to the Office of Air Resources upon request.
- 3. The owner/operator shall notify the Office of Air Resources in writing within 15 days of determining that the total quantity of aerogel blankets produced from the entire facility exceeds 6,540 for the previous month.
- 4. The owner/operator shall, on a monthly basis, no later than 5 business days after the first of the month, determine the total quantity of VOCs discharged to the atmosphere from the entire facility. The owner/operator shall keep records of this determination and provide such records to the Office of Air Resources upon request.
- 5. The owner/operator shall notify the Office of Air Resources in writing within 15 days of determining that the total quantity of VOC discharged to the atmosphere from the entire facility exceeds 8,167 pounds per calendar month based upon a 12-month rolling average.
- 6. The owner/operator shall, on a monthly basis, no later than 5 business days after the first of the month, determine the total quantity of nitrogen oxides (NOx) discharged to the atmosphere from the entire facility and from the combustion of natural gas. The owner/operator shall keep records of this determination and provide such records to the Office of Air Resources upon request.
- 7. The owner/operator shall notify the Office of Air Resources in writing, within 15 days of determining that the total quantity of NOx discharged to the atmosphere from the facility exceeds 98,000 pounds in any consecutive 12-month period.
- 8. The owner/operator shall notify the Office of Air Resources in writing, within 15 days of determining that the total quantity of nitrogen oxides (NOx) discharged to the atmosphere from the combustion of natural gas exceeds 40,000 pounds in any consecutive 12-month period.
- 9. The owner/operator shall, on a monthly basis, no later than 5 business days after the first of the month, determine the total quantity of natural gas combusted from

all natural gas fired combustion equipment. The owner/operator shall keep records of this determination and provide such records to the Office of Air Resources upon request.

- 10. The owner/operator shall notify the Office of Air resources, in writing, within 15 days of determining that the total quantity of natural gas usage for all natural gas fired combustion equipment exceeds 400 million cubic feet for the previous 12-month period.
- 11. The owner/operation shall, on a monthly basis, no later than 5 business days after the first of the month, determine the total quantity of ammonia, isopropanol, hexamethyldisilizane and hexamethyldisiloxane discharged to the atmosphere. The owner/operator shall keep records of this determination and provide such records to the Office of Air Resources upon request.
- 12. The owner/operator shall notify the Office of Air Resources in writing, within 15 days of determining that the total quantity of ammonia, isopropanol, hexamethyldisiloxane or hexamethyldisilizane discharged to the atmosphere exceeds any of the following limitations:
  - a. Isopropanol: 5.41 pounds per hour from the two wet scrubber and thermal oxidizer air pollution control systems combined.
  - b. Ammonia: 1.81 pounds per hour from either of the two wet scrubber and thermal oxidizer air pollution control systems or 6.94 pounds per hour from the entire facility.
  - c. Ammonia: 43.44 pounds per day from either of the two wet scrubber and thermal oxidizer air pollution control systems or 166.45 pounds per day from the entire facility.
  - d. Ammonia: 15,856 pounds in any consecutive 12-month period from either of the two wet scrubber and thermal oxidizer air pollution control systems or 60,753 pounds in any consecutive 12-month period from the entire facility.
  - e. Hexamethyldisiloxane (HDMS): 473 pounds in any consecutive 12-month period from both of the two wet scrubber and thermal oxidizer air pollution control systems combined.
  - f. Hexamethyldisilizane (HMDZ): 0.054 pounds per hour from both of the two wet scrubber and thermal oxidizer air pollution control systems combined.
  - g. Hexamethyldisilizane (HMDZ): 473 pounds in any consecutive 12-month period from both of the two wet scrubber and thermal oxidizer air pollution control systems combined.
- 13. The owner/operator shall, on a monthly basis, no later than 5 business days after the first of the month, determine the total quantity of each listed toxic air contaminant in

Appendix A of Air Pollution Control Regulation No. 9, with the exception of ammonia (NH3) and isopropanol (IPA) discharged to the atmosphere from the entire facility. Monthly and 12-month rolling averages shall be calculated. The 12-month rolling average shall be used for comparison with emission limitations. The owner/operator shall keep records of this determination and provide such records to the Office of Air Resources upon request.

- 14. The owner/operator shall notify the Office of Air Resources in writing, within 15 days of determining that the total emissions discharged to the atmosphere from the entire facility, of any listed toxic air contaminant, with the exception of ammonia (NH3) and isopropanol (IPA) exceeds the minimum quantity for that contaminant as specified in Appendix A of Air Pollution Control Regulation No. 9.
- 15. The owner/operator shall, on a monthly basis, no later than 5 days after the first of each month, determine and record the hours of operation and fuel use for the engine/generator set for the previous 12-month period.
- 16. The owner/operator shall notify the Office of Air Resources, in writing, whenever the hours of operation in any 12-month period exceed 500 hours for the engine/generator set.
- 17. For any leak detected pursuant to condition C.4, the owner/operator shall record the following information:
  - a. The name of the leaking equipment;
  - b. The date and time the leak is detected;
  - c. The action taken to repair the leak;
  - d. The date and time the leak is repaired.
- 18. For any leak inspection conducted pursuant to condition C.4 during which no leaks are detected, the owner/operator shall record the following information:
  - a. A record that the inspection was performed; and,
  - b. The date and time of the inspection; and,
  - c. A statement that no leaks were detected.
- 19. The owner/operator shall notify the Office of Air Resources of any anticipated noncompliance with the terms of this permit or any other applicable air pollution control rules and regulations.
- 20. The owner/operator shall notify the Office of Air Resources, in writing, of the anticipated date of the initial start-up of the air pollution control equipment covered by this permit not more than 60 days nor less than 30 days of the anticipated date.

- 21. The owner/operator shall notify the Office of Air Resources, in writing, of the date of actual start-up of the air pollution control equipment covered by this permit no later than 15 days after such date.
- 22. The owner/operator shall maintain copies of all fuel supplier certifications or fuel analyses and these copies shall be made accessible for review by the Office of Air Resources or its authorized representative and EPA. These records shall include a certified statement, signed by the owner/operator of the facility, that the records represent all of the fuel combusted at the facility.
- 23. The owner/operator shall record the date of the inspection of the permanent total enclosures for each casting table and maintain the check list that is used to verify PTE configuration and maintenance status and exhaust system conditions.
- 24. The owner/operator shall notify the Office of Air Resources, in writing, of any noncompliance with the terms of this permit within 30 calendar days of becoming aware of such occurrence and supply the Director with the following information:
  - a. The name and location of the facility;
  - b. The subject source(s) that caused the noncompliance with the permit term;
  - c. The time and date of first observation of the incident of noncompliance;
  - d. The cause and expected duration of the incident of noncompliance;
  - e. The estimated rate of emissions (expressed in lbs/hr or lbs/day) during the incident and the operating data and calculations used in estimating the emission rate.
  - f. The proposed corrective actions and schedule to correct the conditions causing the incidence of noncompliance.
- 25. The owner/operator shall notify the Office of Air Resources in writing of any planned physical or operational change to any equipment covered under this approval that would:
  - a. Change the representation of the facility in the application.
  - b. Alter the applicability of any state or federal air pollution rules or regulations.
  - c. Result in the violation of any terms or conditions of this permit.
  - d. Qualify as a modification under APC Regulation No. 9.

Such notification shall include:

• Information describing the nature of the change.

- Information describing the effect of the change on the emission of any air contaminant.
- The scheduled completion date of the planned change.

Any such change shall be consistent with the appropriate regulation and have the prior approval of the Director.

- 26. All records required in this permit shall be maintained for a minimum of five years after the date of each record and shall be made available to representatives of the Office of Air Resources upon request.
- G. Malfunctions
  - 1. The owner/operator may seek to establish that a malfunction of any air pollution control system that would result in noncompliance with any of the terms of this permit or any other applicable air pollution control rules and regulations was due to unavoidable increases in emissions attributable to the malfunction. To do so, the owner/operator must demonstrate to the Office of Air Resources that:
    - a. The malfunction was not attributable to improperly designed air pollution control equipment, lack of preventative maintenance, careless or improper operation, or operator error;
    - b. The malfunction was not part of a recurring pattern indicative of inadequate design, operation, or maintenance;
    - c. Repairs were performed in an expeditious fashion. Off-shift labor and overtime should be utilized, to the extent practicable, to ensure that such repairs were completed as expeditiously as practicable.
    - d. All possible steps were taken to minimize emissions during the period of time that the repairs were performed.
    - e. Emissions during the period of time that the repairs were performed will not:
      - (1) Cause an increase in the ground level ambient concentration at or beyond the property line in excess of that allowed by Air Pollution Control Regulation No. 22; and
      - (2) Cause or contribute to air pollution in violation of any applicable state or national ambient air quality standard.
    - f. The reasons that it would be impossible or impractical to cease the source operation during said period.
    - g. The owner/operator's action in response to the excess emissions were documented by properly signed, contemporaneous operating logs or other relevant evidence.

This demonstration must be provided to the Office of Air Resources, in writing, within two working days of the time when the malfunction occurred and contain a description of the malfunction, any steps taken to minimize emissions and corrective actions taken.

The owner/operator shall have the burden of proof in seeking to establish that noncompliance was due to unavoidable increases in emissions attributable to the malfunction.

- H. Other Permit Conditions
  - 1. To the extent consistent with the requirements of this permit and applicable federal, state, and local laws, the facility shall be designed, constructed, and operated in accordance with the representation of the facility in the most recent permit application.
  - 2. Employees of the Office of Air Resources and its authorized representatives shall be allowed to enter the facility at all times for the purpose of inspecting any air pollution source, investigating any condition it believes may be causing air pollution or examining any records required to be maintained by the Office of Air Resources.
  - 3. At all times, including periods of startup, shutdown and malfunction, the owner/operator shall, to the extent practicable, maintain and operate the facility in a manner consistent with good air pollution control practice for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this permit have been achieved. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Office of Air Resources which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures and inspection of the source.
  - 4. The emission and dispersion characteristics of all sources of listed toxic air contaminants at the facility shall be consistent with the parameters used in the air quality modeling to demonstrate that the emissions of each listed toxic air contaminant does not cause an impact, at or beyond the property line of the facility, which exceeds the Acceptable Ambient Level for that substance. The Office of Air Resources, in its sole discretion, may reopen this minor source permit if it determines that the emission and dispersion characteristics have changed significantly and that emission limitations must be revised and/or added to this permit to ensure compliance with Air Pollution Control Regulation No. 22.
  - 5. The owner/operator is subject to the requirements of 40 CFR 63, Subpart A (General Provisions) and Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). Compliance with all applicable provisions therein is required.