18 July 2003

Mr. Levon Kasparian Site Manager Clariant Corporation 500 Washington Street Coventry, RI 02816

Dear Mr. Kasparian:

The Department of Environmental Management, Office of Air Resources has reviewed and approved your application for modifications to an existing air pollution control device, the A-scrubber (Approval No. 341). The modification consists of the addition of an acid mist eliminator in series with the A-scrubber.

Enclosed is a revised minor source permit for this air pollution control system issued pursuant to our review of your application (Approval No. 1759).

As I discussed with Mia DeCelles, we are issuing three separate permit documents for the A-scrubber/mist eliminator system (Approval Nos. 341 & 1759, the B-scrubber system (Approval No. 1309) and the Red BX process (Approval No. 1589).

If you should have any questions, I may be reached at 222-2808, extension 7011.

Sincerely,

Douglas L. McVay Associate Supervising Engineer Office of Air Resources

cc: Mia DeCelles - Clariant Coventry Building Official

### **MINOR SOURCE PERMIT**

### CLARIANT CORPORATION

# APPROVAL NOs. 341 & 1759

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

Clariant Corporation

#### For the following:

Installation of a two stage mist eliminator (Approval No. 1759) in series with the existing

scrubber system. The first stage of the mist eliminator utilizes an ACS Style 8P 4" pad

and the second stage utilizes Monsanto Type HE-2473/P135 filter elements.

Located at: 500 Washington Street, Coventry

This permit shall be effective from the date of its issuance and shall remain in effect until revoked by or surrendered to the Department. This permit does not relieve *Clariant Corporation* 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.

Stephen Majkut, Chief Office of Air Resources Date of issuance

# Permit Conditions and Emission Limitations

### **Clariant Corporation**

# APPROVAL NOs. 341 & 1759

### A. Operating Requirements

- 1. Water shall be used as the scrubbing liquid to the first stage of the Ascrubber and shall be supplied at a rate no less than 160 gallons per minute
- 2. Caustic solution shall be used as the scrubbing liquid to the second stage of the A-scrubber and shall be supplied at a rate no less than 40 gallons per minute.
- 3. The water make-up rate of the A-scrubber, for the first stage, shall be maintained at or above 5 gallons per minute.
- 4. At all times, including periods of startup, shutdown and malfunction, the owner/operator shall, to the extent practicable, maintain and operate this air pollution control system in a manner consistent with good air pollution control practice for minimizing emissions. 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.
- B. Monitoring Requirements
  - 1. The flow rate of water, make-up water and caustic solution in the Ascrubber shall be measured continuously and recorded once per day when the building is conducting operations.
  - 2. The caustic solution shall be sampled once per day when the building is conducting operations and the caustic strength and salt concentration shall be determined.
  - 3. The pressure drop across the packed tower stage of the A-scrubber, the acid mist eliminator prefilter and the acid mist eliminator shall be

measured continuously and recorded once per day when the building is conducting operations.

- C. Recordkeeping and Reporting
  - 1. The owner/operator shall maintain records of the following measurements (as required in Section C):
    - a. The flow rate of water, make-up water and caustic solution in the A-scrubber.
    - b. The caustic strength and salt concentration of the caustic solution.
    - c. The pressure drop across the packed tower stage of the A-scrubber, the acid mist eliminator prefilter and the acid mist eliminator.
  - 2. 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.
  - 3. The owner/operator shall notify the Office of Air Resources in writing of any planned physical or operational change to any equipment that would:
    - a. Change the representation of the facility in the permit 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 the 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 change, which may result in an increased emission rate of any air contaminant, shall be subject to the approval of the Director.

4. 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.
- 5. All records required as a condition of this approval must be made available to the Office of Air Resources or its representative upon request. These records must be maintained for a minimum of five years after the date of each record.

# D. Malfunctions

- 1. In the case of a malfunction of the air pollution control system, all reasonable measures shall be taken to assure resumption of the designed control efficiency as soon as possible. In the event that the malfunction of an air pollution control system is expected or may reasonably be expected to continue for longer than 24 hours and if the owner or operator wishes to operate the source on which it is installed at any time beyond that period, the Director shall be petitioned for a variance under Section 23-23-15 of the General Laws of Rhode Island, as amended. Such petition shall include, but is not limited to, the following:
  - a. Identification of the specific air pollution control system and source on which it is installed;
  - b. The expected period of time that the air pollution control system will be malfunctioning or out of service;
  - c. The nature and quantity of air contaminants likely to be emitted during said period;

- d. Measures that will be taken to minimize the length of said period;
- e. The reasons that it would be impossible or impractical to cease the source operation during said period.
- 2. The owner/operator may seek to establish that a malfunction of the 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 necessary to bring the air pollution control system back to operating at its design control efficiency 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. Any parts or material needed should be shipped overnight where possible or practical.
  - 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:
    - 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 any Calculated Acceptable Ambient Levels; 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.

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.

- E. Other Permit Conditions
  - 1. To the extent consistent with the requirements of this approval and applicable Federal and State laws, the facility shall be designed, constructed and operated in accordance with the representation of the facility in the permit application.
  - 2. There shall be no bypassing of the air pollution control system at any time. The B-scrubber (Approval No. 1309) shall be used as a back-up to the Ascrubber during scrubber regeneration.
  - 3. 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.

### **MINOR SOURCE PERMIT**

#### CLARIANT CORPORATION

#### APPROVAL NO. 1309

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

Clariant Corporation

#### For the following:

An administrative amendment to issue a separate permit document for the B-scrubber.

Located at: 500 Washington Street, Coventry

This permit shall be effective from the date of its issuance and shall remain in effect until revoked by or surrendered to the Department. This permit does not relieve *Clariant Corporation* 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.

Stephen Majkut, Chief Office of Air Resources Date of issuance

### Permit Conditions and Emission Limitations

# **Clariant Corporation**

# APPROVAL NO. 1309

### A. Operating Requirements

- 1. Water shall be used as the scrubbing liquid to the first stage of the Bscrubber and shall be supplied at a rate no less than 80 gallons per minute
- 2. The water make-up rate of the B-scrubber, for the first stage, shall be maintained at or above 5 gallons per minute.
- 3. Caustic solution shall be used as the scrubbing liquid to the second stage of the B-scrubber and shall be supplied at a rate no less than 60 gallons per minute.
- 4. At all times, including periods of startup, shutdown and malfunction, the owner/operator shall, to the extent practicable, maintain and operate this air pollution control system in a manner consistent with good air pollution control practice for minimizing emissions. 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.
- B. Monitoring Requirements
  - 1. The flow rate of water, make-up water and caustic solution in the Bscrubber shall be measured continuously and recorded once per day when the building is conducting operations.
  - 2. The caustic solution shall be sampled once per day when the building is conducting operations and the caustic strength and salt concentration shall be determined.
  - 3. The pressure drop across each stage of the B-scrubber shall be measured continuously and recorded once per day when the building is conducting operations.

- C. Recordkeeping and Reporting
  - 1. The owner/operator shall maintain records of the following measurements (as required in Section C):
    - a. The flow rate of water, make-up water and caustic solution in the B-scrubber.
    - b. The caustic strength and salt concentration of the caustic solution.
    - c. The pressure drop across each stage of the B-scrubber.
  - 2. 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.
  - 3. The owner/operator shall notify the Office of Air Resources in writing of any planned physical or operational change to any equipment that would:
    - a. Change the representation of the facility in the permit 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 the 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 change, which may result in an increased emission rate of any air contaminant, shall be subject to the approval of the Director.

4. 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.
- 5. All records required as a condition of this approval must be made available to the Office of Air Resources or its representative upon request. These records must be maintained for a minimum of five years after the date of each record.
- D. Malfunctions
  - 1. In the case of a malfunction of the air pollution control system, all reasonable measures shall be taken to assure resumption of the designed control efficiency as soon as possible. In the event that the malfunction of an air pollution control system is expected or may reasonably be expected to continue for longer than 24 hours and if the owner or operator wishes to operate the source on which it is installed at any time beyond that period, the Director shall be petitioned for a variance under Section 23-23-15 of the General Laws of Rhode Island, as amended. Such petition shall include, but is not limited to, the following:
    - a. Identification of the specific air pollution control system and source on which it is installed;
    - b. The expected period of time that the air pollution control system will be malfunctioning or out of service;
    - c. The nature and quantity of air contaminants likely to be emitted during said period;
    - d. Measures that will be taken to minimize the length of said period;

- e. The reasons that it would be impossible or impractical to cease the source operation during said period.
- 2. The owner/operator may seek to establish that a malfunction of the 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 necessary to bring the air pollution control system back to operating at its design control efficiency 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. Any parts or material needed should be shipped overnight where possible or practical.
  - 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:
    - 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 any Calculated Acceptable Ambient Levels; 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.

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.

- E. Other Permit Conditions
  - 1. To the extent consistent with the requirements of this approval and applicable Federal and State laws, the facility shall be designed, constructed and operated in accordance with the representation of the facility in the permit application.
  - 2. There shall be no bypassing of the air pollution control system at any time. The A-scrubber (Approval No. 341 & 1759) shall be used as a back-up to the B-scrubber during scrubber regeneration.
  - 3. 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.

# MINOR SOURCE PERMIT

### CLARIANT CORPORATION

# **APPROVAL NO. 1589**

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

Clariant Corporation

#### For the following:

<u>Revision to direct the air pollutant emissions generated from the Red BX Pigment</u>

production to the A-scrubber (Approval No. 341 & 1759) as the primary air pollution

control device.

Located at: 500 Washington Street, Coventry

This permit shall be effective from the date of its issuance and shall remain in effect until revoked by or surrendered to the Department. This permit does not relieve Clariant Corporation 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.

Stephen Majkut, Chief **Office of Air Resources**  Date of issuance

# Permit Conditions and Emission Limitations

# **Clariant Corporation**

# APPROVAL NO. 1589

- A. Emission Limitations
  - 1. Hydrogen Chloride (HCl)
    - a. HCl emissions generated from Kettle K2207 during the Red BX pigment process shall be captured, contained and routed to the A-scrubber for treatment prior to discharge to the atmosphere.
    - b. HCl emissions discharged to the atmosphere from the Red BX pigment process shall not exceed 1.0 pound per hour.
  - 2. Sulfur Dioxide (SO<sub>2</sub>)
    - a. SO<sub>2</sub> emissions generated from Kettle K2207 during the Red BX pigment process shall be captured, contained and routed to the A-scrubber for treatment prior to discharge to the atmosphere.
    - b. SO<sub>2</sub> emissions discharged to the atmosphere from the Red BX pigment process shall not exceed 5.0 pounds per hour.
  - 3. Thionyl Chloride
    - a. Thionyl chloride emissions generated from Kettle K2207 during the Red BX pigment process shall be captured, contained and routed to the A-scrubber for treatment prior to discharge to the atmosphere.
    - b. HCL and SO<sub>2</sub> emissions discharged to the atmosphere as breakdown products from thionyl chloride scrubbing shall not exceed 3.1 and 2.7 pounds per hour, respectively.

- 4. Orthodichlorobenzene
  - a. The quantity of orthodichlorobenzene discharged to the atmosphere via vents V20-18 and V20-22 from the Red BX pigment process shall not exceed 117.0 lbs/day.
- B. Operating Requirements
  - 1. All particulate emissions generated from the loading of solid raw materials into process kettles shall be captured, contained, and routed to the A-scrubber or to the B-scrubber (Approval No. 1309) for treatment prior to discharge to the atmosphere.
  - 2. The B-scrubber (Approval No. 1309) shall be used as a back-up to the Ascrubber during scrubber regeneration and the A-scrubber shall be used as a back-up to the B-scrubber during scrubber regeneration.
- C. Monitoring Requirements
  - 1. The temperature of vent gases exiting condensers C3216 and C3218 shall be measured continuously and recorded once per batch.
- D. Stack Testing
  - 1. Within 180 days of initial start-up of the Red BX pigment process, emissions testing shall be conducted to determine the control efficiency of the A-scrubber for HCl and SO<sub>2</sub>.
  - 2. A stack testing protocol shall be submitted to the Office of Air Resources for review and approval 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 performance test.
  - 3. All test procedures used for stack testing shall be approved by the Office of Air Resources prior to the performance of any stack tests.
  - 4. The owner/operator shall install any and all test ports or platforms necessary to conduct the required stack 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 purpose of determining HCl and SO<sub>2</sub> control efficiency.
  - 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 the testing.

- 7. Unless the Office of Air Resources waives this requirement, all stack testing must be observed by the Office of Air Resources or its authorized representatives to be considered acceptable.
- E. Recordkeeping and Reporting
  - 1. The owner/operator shall maintain records of the following measurements (as required in Section C):
    - a. The temperature of vent gases exiting condensers C3216 and C3218.
  - 2. The owner/operator shall maintain production records that show the total number of batches manufactured.
  - 3. The owner/operator shall notify the Office of Air Resources, in writing, of the date of actual initial start-up of the Red BX pigment process no later than fifteen days after such date.
  - 4. The owner/operator shall notify the Office of Air Resources, in writing, whenever the estimated emissions from the Red BX pigment process increase by more than 10% over the estimates provided in the permit application.
  - 5. 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.
  - 6. The owner/operator shall notify the Office of Air Resources in writing of any planned physical or operational change to any equipment that would:
    - a. Change the representation of the facility in the permit 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 the 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 change, which may result in an increased emission rate of any air contaminant, shall be subject to the approval of the Director.

- 7. 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.
- 8. All records required as a condition of this approval must be made available to the Office of Air Resources or its representative upon request. These records must be maintained for a minimum of five years after the date of each record.
- F. Malfunctions
  - 1. In the case of a malfunction of any air pollution control system, all reasonable measures shall be taken to assure resumption of the designed control efficiency as soon as possible. In the event that the malfunction of an air pollution control system is expected or may reasonably be expected to continue for longer than 24 hours and if the owner or operator wishes to operate the source on which it is installed at any time beyond that period, the Director shall be petitioned for a variance under Section 23-23-15 of the General Laws of Rhode Island, as amended. Such petition shall include, but is not limited to, the following:

- a. Identification of the specific air pollution control system and source on which it is installed;
- b. The expected period of time that the air pollution control system will be malfunctioning or out of service;
- c. The nature and quantity of air contaminants likely to be emitted during said period;
- d. Measures that will be taken to minimize the length of said period;
- e. The reasons that it would be impossible or impractical to cease the source operation during said period.
- 2. 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 necessary to bring the air pollution control system back to operating at its design control efficiency 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. Any parts or material needed should be shipped overnight where possible or practical.
  - 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:
    - 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 any Calculated Acceptable Ambient Levels; 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.

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.

- G. Other Permit Conditions
  - 1. To the extent consistent with the requirements of this approval and applicable Federal and State laws, the facility shall be designed, constructed and operated in accordance with the representation of the facility in the permit application.
  - 2. There shall be no bypassing of the air pollution control equipment at any time.
  - 3. As the condensers C3216 and C3218 are considered process equipment, the Red BX pigment process shall not be operated without these condensers in operation. The owner/operator may replace C3216 or C3218 with equally or more efficient solvent recovery equipment without prior notice to the Office of Air Resources.
  - 4. 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.
  - 5. At all times, including periods of startup, shutdown and malfunction, the owner/operator shall, to the extent practicable, maintain and operate this equipment in a manner consistent with good air pollution control practice for minimizing emissions. 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.

6. The emission characteristics of vents 20-18 and 20-22 shall be consistent with the parameters used in the air quality modeling to determine the air quality impact of air pollutants generated from the Red BX pigment process. The Office of Air Resources may reopen this permit if it is determined that these emission characteristics have changed significantly and that this permit must be revised to ensure compliance with applicable air quality standards.

The parameters used in the air quality modeling for vent 20-18 were that emissions are discharged through a stack with a height equal to 65 feet above grade, an exit diameter equal to 26 inches, a flow rate equal to 3500 acfm and an exit temperature of 104°F.

The parameters used in the air quality modeling for vent 20-22 were that emissions are discharged through a stack with a height equal to 67 feet above grade, an exit diameter equal to 4 inches, a flow rate equal to 16 acfm and an exit temperature of 86°F.