Eastman Chemical Resins, Inc.
Jefferson Site
Installation Permit #0058-I026a

IV. SITE LEVEL TERMS AND CONDITIONS

Pages 2 through 10 have been redacted.

1. Reporting of Upset Conditions (§2103.12.k.2)

The permittee shall promptly report all deviations from permit requirements, including those attributable to upset conditions as defined in Article XXI §2108.01.e, the probable cause of such deviations, and any corrective actions or preventive measures taken.

2. Visible Emissions (§2104.01.a)

Except as provided for by Article XXI §2108.01.d pertaining to a cold start, no person shall operate, or allow to be operated, any source in such manner that the opacity of visible emissions from a flue or process fugitive emissions from such source, excluding uncombined water:

- a. Equal or exceed an opacity of 20% for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period; or,
- b. Equal or exceed an opacity of 60% at any time.

3. Odor Emissions (§2104.04) (County-only enforceable)

No person shall operate, or allow to be operated, any source in such manner that emissions of malodorous matter from such source are perceptible beyond the property line.

4. Materials Handling (§2104.05)

The permittee shall not conduct, or allow to be conducted, any materials handling operation in such manner that emissions from such operation are visible at or beyond the property line.

5. Operation and Maintenance (§2105.03)

All air pollution control equipment required by this permit or any order under Article XXI, and all equivalent compliance techniques approved by the Department, shall be properly installed, maintained, and operated consistently with good air pollution control practice.

6. Open Burning (§2105.50)

No person shall conduct, or allow to be conducted, the open burning of any material, except where the Department has issued an Open Burning Permit to such person in accordance with Article XXI §2105.50 or where the open burning is conducted solely for the purpose of non-commercial preparation of food for human consumption, recreation, light, ornament, or provision of warmth for outside workers, and in a manner which contributes a negligible amount of air contaminants.

7. Shutdown of Control Equipment (§2108.01.b)

a. In the event any air pollution control equipment is shut down for reasons other than a breakdown, the person responsible for such equipment shall report, in writing, to the Department the intent to shut down such equipment at least 24 hours prior to the planned shutdown. Notwithstanding the submission of such report, the equipment shall not be shut down until the approval of the Department is obtained; provided, however, that no such report shall be required if the source(s)

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erosion or other means;

- d. The adoption of work or other practices to minimize emissions;
- e. Enclosure of the source; and
- f. The proper hooding, venting, and collection of fugitive emissions.

Pages 12 through 17 have been redacted.

25. Episode Plans (§2106.02)

The permittee shall upon written request of the Department, submit a source curtailment plan, consistent with good industrial practice and safe operating procedures, designed to reduce emissions of air contaminants during air pollution episodes. Such plans shall meet the requirements of Article XXI §2106.02.

26. New Source Performance Standards (§2105.05)

- a. It shall be a violation of this permit giving rise to the remedies provided by §2109.02 of Article XXI for any person to operate, or allow to be operated, any source in a manner that does not comply with all requirements of any applicable NSPS now or hereafter established by the EPA, except if such person has obtained from EPA a waiver pursuant to Section 111 or Section 129 of the Clean Air Act or is otherwise lawfully temporarily relieved of the duty to comply with such requirements.
- b. Any person who operates, or allows to be operated, any source subject to any NSPS shall conduct, or cause to be conducted, such tests, measurements, monitoring and the like as is required by such standard. All notices, reports, test results and the like as are required by such standard shall be submitted to the Department in the manner and time specified by such standard. All information, data and the like which is required to be maintained by such standard shall be made available to the Department upon request for inspection and copying.

27. Miscellaneous Organic Chemical Manufacturing NESHAP (40 CFR Part 63, Subpart FFFF)

The permittee shall comply with all applicable requirements of the National Emission Standards for Hazardous Air Pollutants, 40 CFR Part 63, Subpart FFFF – the "Miscellaneous Organic Chemical Manufacturing NESHAP" or "MON". [25 PA Code §129.99; 25 PA Code §129.100]

V. EMISSION UNIT LEVEL TERMS AND CONDITIONS

A. <u>C-5 – Storage Tanks</u>

1. Restrictions:

The permittee shall continue to comply with all applicable regulatory requirements and the VOC requirements in the applicable Installation Permit(s) associated with the C5 VOC storage tanks. [§2102.04.b.5]

- a. The permittee shall do the following for all VOC storage tanks and associated equipment: [§2105.03, 25 PA Code §129.99; 25 PA Code §129.100]
 - 1) Perform regular maintenance in according with the manufacturer's or the operator's maintenance procedures;
 - 2) Keep records of any maintenance; and
 - 3) Keep a copy of either the manufacturer's or the operator's maintenance procedures.
- b. The VOC storage tanks shall be properly operated and maintained at all times according to good engineering practices, with the exception of activities to mitigate emergency conditions. [RACT Order #257, condition 1.7; §2105.03; 25 PA Code §129.99]

B. <u>C-5 Operations – Pastillating Belts #1 and #2 (S055)</u>

1. Restrictions:

The permittee shall continue to comply with all applicable regulatory requirements and the VOC requirements in the applicable Installation Permit(s) associated with Pastillating Belts #1 and #2. [2102.04.b.5]

- a. The permittee shall do the following for Pastillating Belts #1 and #2 and associated equipment: [§2105.03; 25 PA Code §129.99; 25 PA Code §129.100]
 - 1) Perform regular maintenance in accordance with the manufacturer's or the operator's maintenance procedures;
 - 2) Keep records of any maintenance; and
 - 3) Keep a copy of either the manufacturer's or the operator's maintenance procedures.
- b. The Pastillating Belts #1 and #2 shall be properly operated and maintained at all times according to good engineering practices, with the exception of activities to mitigate emergency conditions. [RACT Order #257, condition 1.7; §2105.03; 25 PA Code §129.99]

C. MP Poly Unit (S034)

1. Restrictions:

- a. The permittee shall continue to comply with all applicable regulatory requirements and the VOC requirements in the applicable Installation Permit(s) associated with the MP Poly Unit. [2102.04.b.5]
- b. The permittee shall properly maintain and operate the condensers E-500-5, E-701-5, and E-701-4 at all times when emissions are routed to them. [§2105.03; RACT Order #257, condition 1.7; 25 PA Code §129.99]
- c. The inlet coolant temperature to the condenser E-701-4 (S034) shall not exceed 10°C (50°F) over any one-hour block average when emissions are routed through the condenser with the exception of activities to mitigate emergency conditions. [§2105.06.b.3; §2102.04.e; §2103.12.a.2.B; RACT Order #257, condition 1.2.A; 25 PA Code §129.99]
- d. If measured one-hour block average exit vapor temperatures for the condenser E-701-4 (S034) exceed 35°C from the condenser, the permittee shall take the following actions: [§2105.06.b.3; §2102.04.e; §2103.12.a.2.B; RACT Order #257, condition 1.1.C; 25 PA Code §129.99]
 - a) Confirm that the glycol cooler is operating properly by reviewing current operating conditions (e.g. that the chiller system is operating and circulating coolant, and that glycol coolant is being supplied at less than 10°C). Corrective actions are required to be taken to correct loss of coolant supply or to return the coolant supply temperature to less than 10°C. Exit vapor temperature exceeding 35°C due to solely to high ambient temperatures shall be documented per paragraph b.
 - b) The following documentation will be maintained for the period when the condenser exit vapor temperature exceeds 35°C for any one-hour average during current operating conditions and when the coolant supply temperature is more than 50°F (10°C), or when the coolant supply is interrupted:
 - i) Identification of the tank and condenser.
 - ii) The nature and probable cause of the event.
 - iii) The temperature of the outlet gas and coolant supply.
 - iv) The ambient air temperature at the time of the exceedance.
 - v) The estimated quantity of VOC and total hap emitted, if any.
 - vi) Appropriate corrective actions taken.
 - c) Periods of exit vapor temperatures in excess of 35°C not due solely to high ambient temperature shall be considered a breakdown in accordance with §2108.01.

2. Monitoring Requirements:

a. The permittee shall install, operate, and maintain an inlet coolant temperature instrument on E-701-4 condenser that continuously monitors the coolant inlet temperature at all times when emissions are routed to it. The temperature probes used shall be certified by the manufacturer to be accurate to within 2% of the temperature measured in Celsius or to within 2.5°C, whichever is greater. The permittee shall record the coolant inlet temperature at least once every 15 minutes while the equipment associated with the temperature probe and transmitter is in operation. [§2102.04.b.6; §2103.12.i; RACT Order #257, condition 1.1 and 1.2; 25 PA Code §129.99]

3. Record Keeping Requirements:

a. The permittee shall keep and maintain records of condenser coolant temperature. [§2103.12.j, RACT Order #257, condition 1.5; 25 PA Code §129.100]

- a. The permittee shall do the following for MP Poly Unit (filtrate system: filtrate receiver, neutralizer, solvent wash tank, heel tank, Funda filter) and associated equipment: [§2105.03; 25 PA Code §129.99; 25 PA Code §129.100]
 - 1) Perform regular maintenance in accordance with the manufacturer's or the operator's maintenance procedures;
 - 2) Keep records of any maintenance; and
 - 3) Keep a copy of either the manufacturer's or the operator's maintenance procedures.
- b. The MP Poly Unit (filtrate system: filtrate receiver, neutralizer, solvent wash tank, heel tank, Funda filter) shall be properly operated and maintained at all times according to good engineering practices, with the exception of activities to mitigate emergency conditions. [RACT Order #257, condition 1.7; §2105.03; 25 PA Code §129.99]

D. WW Poly Unit (S013, S020, S023, S027)

1. Restrictions:

- a. The permittee shall continue to comply with all applicable regulatory requirements and the VOC requirements in the applicable Installation Permit(s) associated with the WW Poly Unit. [2102.04.b.5]
- b. Refrigerated vent condensers [E-200-7 (S013), E-900-7 (S020), E-903-3 (S023), and E-901-7 (S027)]: The condensers shall be properly maintained and operated according to good engineering practices, manufacturer's recommendations and the following conditions at all times while treating process emissions: [§2105.06.b.3; §2102.04.e; §2103.12.a.2.B; RACT Order #257, conditions 1.3 and 1.4; 25 PA Code §129.99]
 - 1) The inlet coolant temperature to each condenser shall not exceed 10°C in any one-hour block average when emissions are routed through the condenser with the exception of activities to mitigate emergency conditions;
 - 2) The exit vapor temperature of each condenser shall not exceed 35°C over any one-hour block average when emissions are being routed through them, except as specified in condition V.D.1.b.3) below;
 - 3) If measured one-hour block average exit vapor temperatures exceed 35°C from a condenser, the permittee shall take the following actions:
 - a) Confirm that the glycol cooler is operating properly by reviewing current operating conditions (e.g. that the chiller system is operating and circulating coolant, and that glycol coolant is being supplied at less than 10°C). Corrective actions are required to be taken to correct loss of coolant supply or to return the coolant supply temperature to less than 10°C. Exit vapor temperature exceeding 35°C due to solely to high ambient temperatures shall be documented per paragraph b.
 - b) The following documentation will be maintained for the period when the condenser exit vapor temperature exceeds 35°C for any one-hour average during current operating conditions and when the coolant supply temperature is more than 50°F (10°C), or when the coolant supply is interrupted:
 - i) Identification of the tank and condenser.
 - ii) The nature and probable cause of the event.
 - iii) The temperature of the outlet gas and coolant supply.
 - iv) The ambient air temperature at the time of the exceedance.
 - v) The estimated quantity of VOC and total hap emitted, if any.
 - vi) Appropriate corrective actions taken.
 - c) Periods of exit vapor temperatures in excess of 35°C not due solely to high ambient temperature shall be considered a breakdown in accordance with §2108.01.

2. Monitoring Requirements:

a. The permittee shall install, operate, and maintain an inlet coolant temperature instrument on E-200-7, E-900-7, E-901-7, and E-903-3 condensers that continuously monitor the coolant inlet temperature at all times when emissions are routed to it. The temperature probes used shall be certified by the manufacturer to be accurate to within 2% of the temperature measured in Celsius or to within 2.5°C, whichever is greater. The permittee shall record the coolant inlet temperature at least once every 15 minutes while the equipment associated with the temperature probe and

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transmitter is in operation. [§2102.04.b.6; §2103.12.i; RACT Order #257, conditions 1.1 and 1.2; 25 PA Code §129.99]

3. Record Keeping Requirements:

- a. The permittee shall keep and maintain records of condenser coolant temperature. [§2103.12.j, RACT Order #257, condition 1.5; 25 PA Code §129.100]
- b. The permittee shall keep records of operation, inspection, calibration, maintenance and/or replacement of process or control equipment. [§2103.12.j & k; RACT Order #257, condition 1.5; 25 PA Code §129.100]

- a. The permittee shall do the following for WW Poly Unit (feed dryers and regeneration, west filtrate receiver, solvent wash receiver, and east filtrate receiver) and associated equipment: [§2105.03; 25 PA Code §129.99; 25 PA Code §129.100]
 - 1) Perform regular maintenance in accordance with the manufacturer's or the operator's maintenance procedures;
 - 2) Keep records of any maintenance; and
 - 3) Keep a copy of either the manufacturer's or the operator's maintenance procedures.
- b. The WW Poly Unit (feed dryers and regeneration, west filtrate receiver, solvent wash receiver, and east filtrate receiver) shall be properly operated and maintained at all times according to good engineering practices, with the exception of activities to mitigate emergency conditions. [RACT Order #257, condition 1.7; §2105.03; 25 PA Code §129.99]

E. WW Poly Storage Tanks (S025)

1. Restrictions:

- a. The permittee shall continue to comply with all applicable regulatory requirements and the VOC requirements in the applicable Installation Permit associated with the WW Poly Storage Tanks. [2102.04.b.5]
- b. The inlet coolant temperature to the condenser E-202-1 shall not exceed 10°C (50°F) over any one-hour block average when emissions are routed through the condensers with the exception of activities to mitigate emergency conditions. [§2105.06.b.3; §2102.04.e; §2103.12.a.2.B; RACT Order #257, condition 1.4; 25 PA Code §129.99]

2. Record Keeping Requirements:

- a. The permittee shall keep and maintain records of condenser coolant temperature. [§2103.12.j, RACT Order #257, condition 1.5; 25 PA Code §129.100]
- b. The permittee shall keep records of operation, inspection, calibration, maintenance and/or replacement of process or control equipment. [§2103.12.j & k; RACT Order #257, condition 1.5; 25 PA Code §129.100]

- a. The permittee shall do the following for WW Poly storage tanks (73, 75, 76, 77) and associated equipment: [§2105.03; 25 PA Code §129.99; 25 PA Code §129.100]
 - 1) Perform regular maintenance in accordance with the manufacturer's or the operator's maintenance procedures;
 - 2) Keep records of any maintenance; and
 - 3) Keep a copy of either the manufacturer's or the operator's maintenance procedures.
- b. The WW Poly storage tanks (73, 75, 76, 77) shall be properly operated and maintained at all times according to good engineering practices, with the exception of activities to mitigate emergency conditions. [RACT Order #257, condition 1.7; §2105.03; 25 PA Code §129.99]

F. LTC Process Operations (S108, S109, S110, S111, S112, S113, S114)

1. Restrictions:

- a. The permittee shall continue to comply with all applicable regulatory requirements and the VOC requirements in the applicable Installation Permit associated with the LTC Process Operations. [2102.04.b.5]
- b. Cooling tower water chilled vent condensers [E-301B-E3 (S109); E-301-4 (S108); E-607-2 (S110); E-RK5-4 (S111); E-RK6-3 (S112); E-RK7-4 (S113)]: The condensers shall be properly operated and maintained according to good engineering practices, manufacturer's recommendations and the following conditions at all times while treating process emissions: [§2105.06.b.3; §2102.04.e; §2103.12.a.2.B; RACT Order #257, condition 1.1.H; 25 PA Code §129.99]
 - 1) The inlet coolant temperature to each condenser shall not exceed 10°F (5.6°C) above ambient air temperature over any one-hour block average when emissions are routed through the condenser with the exception of activities to mitigate emergency conditions and except that at no time will coolant temperature be required to be less than 50°F (10°C).
 - 2) The exit vapor temperature of each condenser shall not exceed 40°C over any one-hour block average when emissions are being routed through them, except as specified in paragraph 3).
 - 3) If measured one-hour block average exit vapor temperatures exceed 40°C from a condenser, the permittee shall take the following actions:
 - a) Confirm that the cooling tower is operating properly by reviewing current operating conditions (e.g. that the cooling system is operating and circulating cooling water, and that cooling water is being supplied at less than 10°F (5.6°C) above ambient (except that at no time will coolant temperature be required to less than 50°F (10 °C). Corrective actions are required to be taken to correct loss of coolant supply or to return the coolant supply temperature to less than 10°F (5.6°C) above ambient (except that at no time will coolant temperature be required to less than 50°F (10 °C)). Exit vapor temperature exceeding 40°C due to solely to high ambient temperatures shall be documented per paragraph b.
 - b) The following documentation will be maintained for the period when the condenser exit vapor temperature exceeds 40°C for any one-hour average during current operating conditions and when the coolant supply temperature is more than 10°F (5.6°C) above ambient (except that at no time will coolant temperature be required to be less than 50°F (10°C)), or when the coolant supply is interrupted:
 - i) Identification of the tank and condenser.
 - ii) The nature and probable cause of the event.
 - iii) The temperature of the outlet gas and coolant supply.
 - iv) The ambient air temperature at the time of the exceedance.
 - v) The estimated quantity of VOC and total hap emitted, if any.
 - vi) Appropriate corrective actions taken.
 - c) Periods of exit vapor temperatures in excess of 40°C not due solely to high ambient temperature shall be considered a breakdown in accordance with §2108.01.
- c. The vacuum leak rate from the #1 shall not exceed 10 lb/hr. The vacuum leak rate from #2 LTC Vacuum System shall not exceed 15 lb/hr. Compliance with this condition shall be demonstrated during regular compliance testing performed at least once every five years after the most recent stack test. [§2102.04.b.6; §2102.04.e; 25 PA Code §129.99 & §129.100]

2. Monitoring Requirements:

- a. The permittee shall monitor and record the exit vapor temperature of each of the following condensers at least once every 15 minutes when the process is in operation: S108, S109, S110, S111, S112, S113, and S124. [§2102.04.b.6, §2102.04.e., §2103.12.i; 25 PA Code §129.100]
- b. The permittee shall continuously monitor when the vacuum pump for each system is in operation. [§2102.04.b.6, §2102.04.e., §2103.12.i; 25 PA Code §129.100]

3. Record Keeping Requirements:

- a. The permittee shall keep and maintain the following data on-site for these operations [§2103.12.j & k; RACT Order #257, condition 1.5; 25 PA Code §129.100]:
 - 1) All records of monitoring required by V.F.2 above.
 - 2) Records of operation, inspection, calibration, maintenance and/or replacement of process or control equipment.
 - 3) Maximum resin (lb/min) and polymerizate (gal/min) feed rates (daily).
 - 4) Amount (lbs.) and type of resin and polymerizate (monthly, 12-month rolling total)

- a. The permittee shall do the following for LTC Process (#1 and #2 Vacuum systems and #1/#2 Pastillator Belt) and associated equipment: [§2105.03; 25 PA Code §129.99; 25 PA Code §129.100]
 - 1) Perform regular maintenance in accordance with the manufacturer's or the operator's maintenance procedures:
 - 2) Keep records of any maintenance; and
 - 3) Keep a copy of either the manufacturer's or the operator's maintenance procedures.
- b. The LTC Process (#1 and #2 Vacuum systems and #1/#2 Pastillator Belt) shall be properly operated and maintained at all times according to good engineering practices, with the exception of activities to mitigate emergency conditions. [RACT Order #257, condition 1.7; §2105.03; 25 PA Code §129.99]

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G. <u>Dresinate Production Line (S085)</u>

1. Restrictions:

The permittee shall continue to comply with all regulatory and Permit requirements. [2102.04.b.5]

- a. The permittee shall do the following for Dresinate Production Line (Double Drum Dryer) and associated equipment: [§2105.03; 25 PA Code §129.99; 25 PA Code §129.100]
 - 1) Perform regular maintenance in accordance with the manufacturer's or the operator's maintenance procedures;
 - 2) Keep records of any maintenance; and
 - 3) Keep a copy of either the manufacturer's or the operator's maintenance procedures.
- b. The Dresinate Production Line (Double Drum Dryer) shall be properly operated and maintained at all times according to good engineering practices, with the exception of activities to mitigate emergency conditions. [RACT Order #257, condition 1.7; §2105.03; 25 PA Code §129.99]

H. Hydrogenation Unit (S004, S007, S012)

1. Restrictions:

- a. The maximum production rate for Hydrogenation Unit process shall not exceed 22.5 million pounds per 12-month rolling period. [§2102.04.e; 25 PA Code §129.99]
- b. Refrigerated vent condensers E-104-2 (S012), E-201-2 (S004), E-403-2 (S007): The condensers shall be properly maintained and operated according to good engineering practices, manufacturer's recommendations and the following conditions at all times while treating process emissions: [§2105.06.b.3; §2102.04.e; §2103.12.a.2.B; RACT Order #257, conditions 1.3; 25 PA Code §129.99]
 - 1) The outlet coolant temperature shall not exceed at any time 40°F.
 - 2) Instrumentation shall be provided to continuously monitor the coolant outlet temperature of each condenser to within one (1) degree Fahrenheit at all times.

2. Record Keeping Requirements:

- a. The permittee shall keep and maintain production records and records of condenser coolant temperature. [§2103.12.j, RACT Order #257, condition 1.5; 25 PA Code §129.100]
- b. The permittee shall keep records of operation, inspection, calibration, maintenance and/or replacement of process or control equipment. [§2103.12.j & k; RACT Order #257, condition 1.5; 25 PA Code §129.100]

3. Monitoring Requirements:

a. The permittee shall monitor and record the outlet coolant temperature of each refrigerated vent condensers at least once every 15 minutes when the process is in operation. [§2102.04.b.6, §2102.04.e., §2103.12.i; 25 PA Code §129.99]

- a. The permittee shall do the following for Hydrogenation Unit (tanks 103 and 104, catalyst catch tank, Mott filter, Heel tank, Vent tanks, Autoclaves #1 and #2, Storage tanks 102, 105, 106) and associated equipment: [§2105.03; 25 PA Code §129.99; 25 PA Code §129.100]
 - 1) Perform regular maintenance in accordance with the manufacturer's or the operator's maintenance procedures;
 - 2) Keep records of any maintenance; and
 - 3) Keep a copy of either the manufacturer's or the operator's maintenance procedures.
- b. The Hydrogenation Unit (tanks 103 and 104, catalyst catch tank, Mott filter, Heel tank, Vent tanks, Autoclaves #1 and #2, Storage tanks 102, 105, 106) shall be properly operated and maintained at all times according to good engineering practices, with the exception of activities to mitigate emergency conditions. [RACT Order #257, condition 1.7; §2105.03; 25 PA Code §129.99]

I. Wastewater Treatment Plant (F027, F033, F034, F035)

1. Work Practice Standard:

- a. The permittee shall do the following for Wastewater Treatment Plant (Bioaeration tank, tanks 702A, 702B, and 702C) and associated equipment: [§2105.03; 25 PA Code §129.99; 25 PA Code §129.100]
 - 1) Perform regular maintenance in accordance with the manufacturer's or the operator's maintenance procedures;
 - 2) Keep records of any maintenance; and
 - 3) Keep a copy of either the manufacturer's or the operator's maintenance procedures.
- b. The Wastewater Treatment Plant (Bioaeration tank, tanks 702A, 702B, and 702C) shall be properly operated and maintained at all times according to good engineering practices, with the exception of activities to mitigate emergency conditions. [RACT Order #257, condition 1.7; §2105.03; 25 PA Code §129.99]

Pages 31 through 32 have been redacted.