



AIR QUALITY PROGRAM

836 Fulton Street
Pittsburgh, PA 15233-2124

Minor Source/Minor Modification INSTALLATION PERMIT

Issued To: Neville Chemical Company
2800 Neville Road
Pittsburgh, PA 15225-1496

ACHD Permit#: 0060-I010a

Date of Issuance: August 3, 2016
Date Amended:

Expiration Date: (See Section III.12)

Issued By: _____
JoAnn Truchan, P.E.
Section Chief, Engineering

Prepared By: _____
Helen O. Gurvich
Air Quality Engineer

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AMENDMENTS:

DATE	SECTION(S)
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01/29/24	Cover Page & Section I: Update of Department address. Conditions V.A.1.a-b, e-f; V.A.4.a-c, f; V.A.5.a; and V.A.6.b: Incorporation of RACT III citations.
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I. CONTACT INFORMATION

All inquiries concerning this permit should be directed to:

Facility Location: **Neville Chemical Company**
2800 Neville Road
Neville Township, PA 15225-1496

Permittee/Owner: **Neville Chemical Company**
2800 Neville Road
Neville Township, PA 15225-1496

Permittee/Operator: **same as owner**
(if not Owner)

Responsible Official: **Daniel D. Kokoski**
Title: Vice-President - Manufacturing
Company: Neville Chemical Company
Address: 2800 Neville Road
Neville Township, PA 15225-1496
Telephone Number: (412) 777-4201
Fax Number: (412) 777-6729

Facility Contact: **Jeffrey Milhoan**
Title: Environmental Manager
Telephone Number: (412) 777-4265
Fax Number: (412) 771-6729
E-mail Address: jmilhoan@nevchem.com

AGENCY ADDRESSES:

ACHD Contact: **Chief Engineer**
Allegheny County Health Department
Air Quality Program
836 Fulton Street
Pittsburgh, PA 15233-2124

II. FACILITY AND INSTALLATION DESCRIPTION

FACILITY DESCRIPTION

Neville Chemical Company, located at 2800 Neville Road, Pittsburgh (Neville Township), manufactures synthetic hydrocarbon resins, plasticizers, and plasticizing oils. The facility also operates a groundwater remediation system and wastewater treatment system. Also located at the facility are three (3) resin flaking and packaging centers, a 49.4 MMBtu/hr and a 29.5 MMBtu/hr natural gas-fired boiler. The facility is a major source of volatile organic compounds (VOCs); and a minor source of particulate matter (PM), particulate matter <10 µm in diameter (PM₁₀), particulate matter <2.5 µm in diameter (PM_{2.5}), nitrogen oxides (NO_x), sulfur oxides (SO_x), and hazardous air pollutants (HAPs), as defined in §2102.20 of Article XXI. The facility is also a minor source of greenhouse gas emissions (CO_{2e}) as defined in the U.S. EPA Greenhouse Gas Tailoring Rule.

INSTALLATION DESCRIPTION

This permit is for the integration of Unit 20 (P006) and Unit 21 (P007) into one process, Unit 20/21. This modification involves the shutting down of the Unit 21 reactor and maintaining the option to use the Unit 20 reactor with the existing Unit 20 or Unit 21 soaking and neutralization equipment. There are four (4) possible equipment arrangement scenarios, depending on the material being produced.

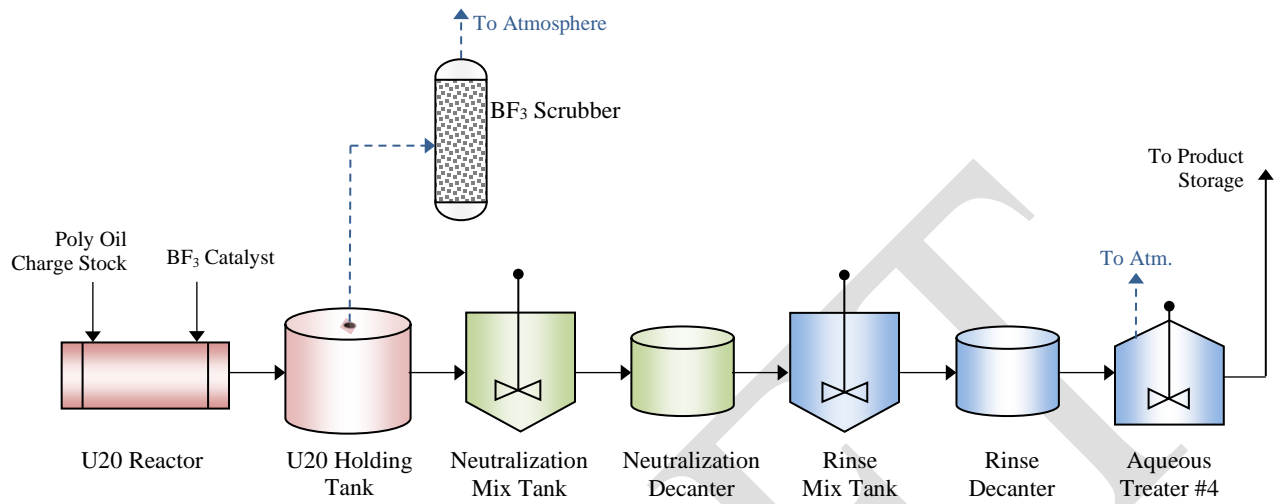
Installation Emission Unit Summary:

I.D.	Source Description	Control Device(s)	Maximum Capacity	Raw Material	Stack I.D.
P006	Unit 20/21 – Scenario #1				
	U20 Reactor	packed bed scrubber	66,600,000 lb/yr	ethylene-cracking products, resin-forming feedstock, additives	S020, S021
	U20 Holding Tank	packed bed scrubber			
	Neutralization Mix Tank	none			
	Neutralization Decanter	none			
	Rinse Mix Tank	none			
	Rinse Decanter	none			
	#4 Aqueous Treater	none			S025a
P006	Unit 20/21 – Scenario #2				
	U20 Reactor	packed bed scrubber	66,600,000 lb/yr	ethylene-cracking products, resin-forming feedstock, additives	S020, S021
	U20 Holding Tank	packed bed scrubber			
	#10 & #11 Aqueous Treaters	none			S025b, c

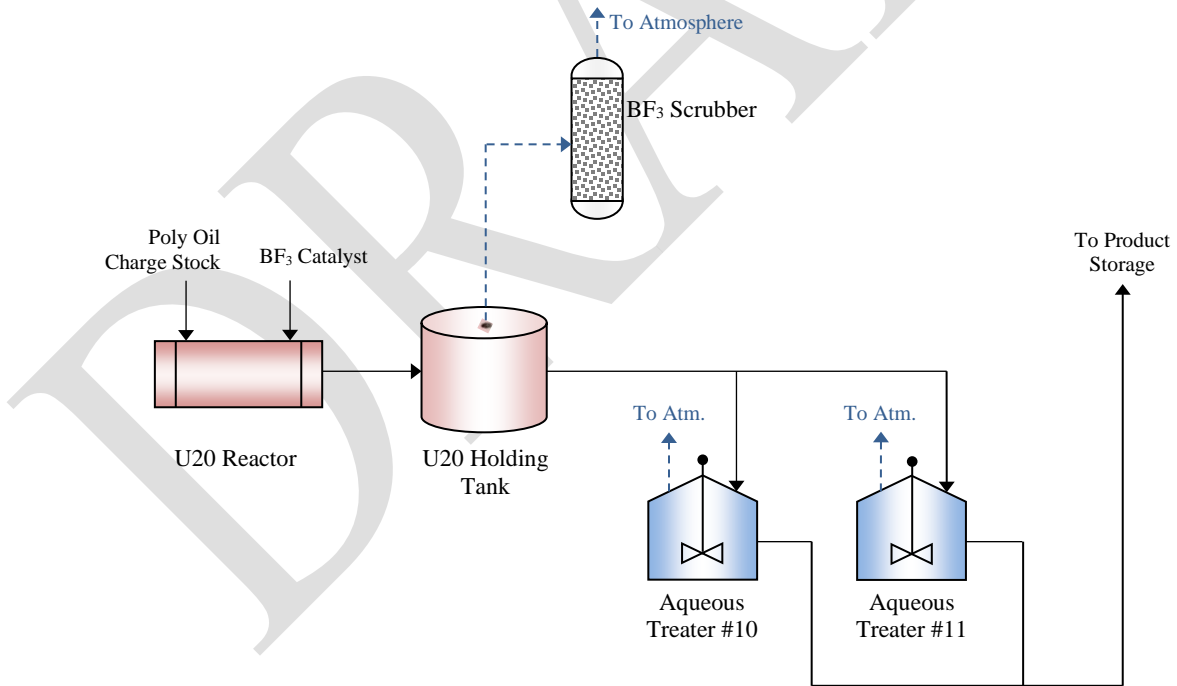
P006	Unit 20/21 – Scenario #3				
	U20 Reactor	packed bed scrubber	66,600,000 lb/yr	ethylene-cracking products, resin-forming feedstock, additives	S020, S021
	Holding Tanks #1 & #2	none			
	Final Holding Tank #171	none			
	Neutralization Mix Tank	none			
	Neutralization Decanter	none			
	Rinse Mix Tank	none			
	Rinse Decanter	none			
	#4 Aqueous Treater	none			S025a
P006	Unit 20/21 – Scenario #4				
	U20 Reactor	packed bed scrubber	66,600,000 lb/yr	ethylene-cracking products, resin-forming feedstock, additives	S020, S021
	Holding Tanks #1 & #2	none			
	Final Holding Tank #171	none			
	#10 & #11 Aqueous Treaters	none			S025b, c

Process Flow Diagrams

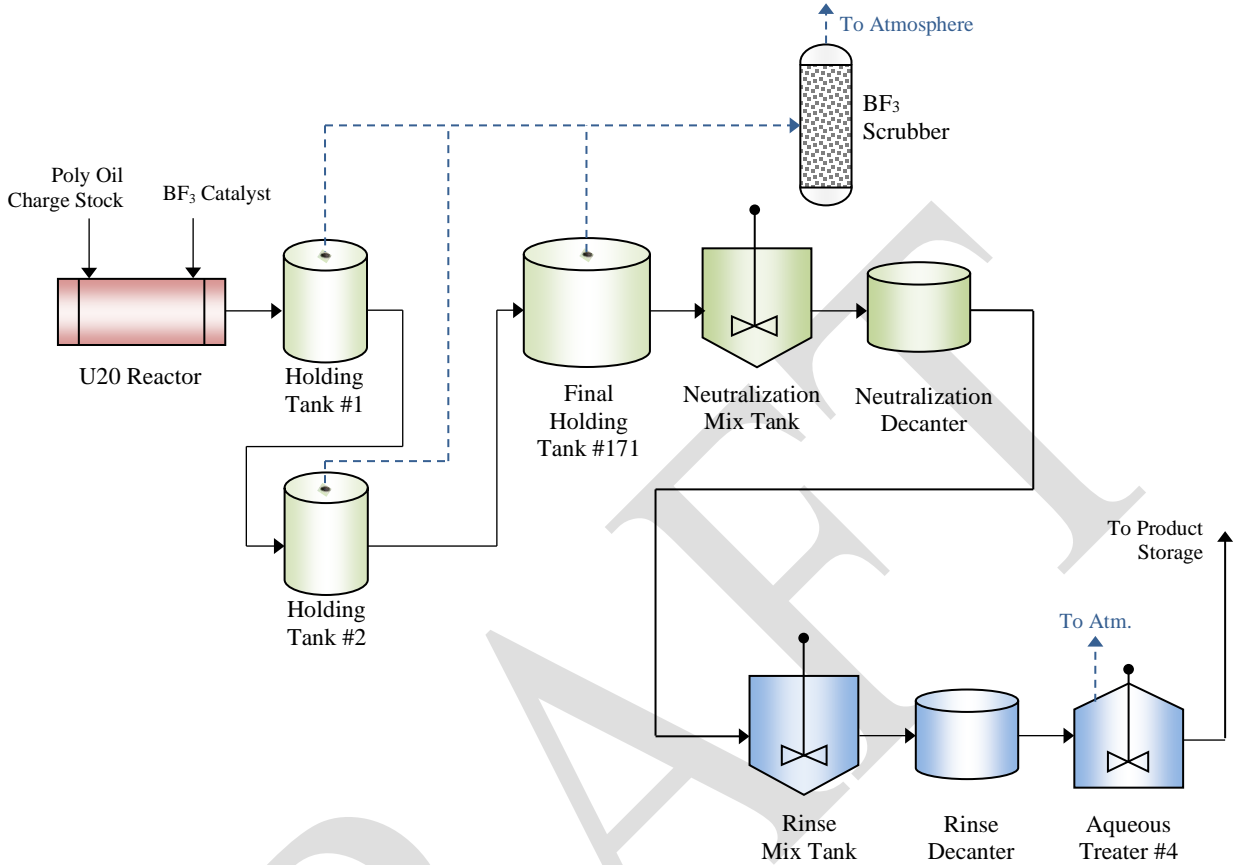
Scenario #1: Continuous, through U20 Holding Tank



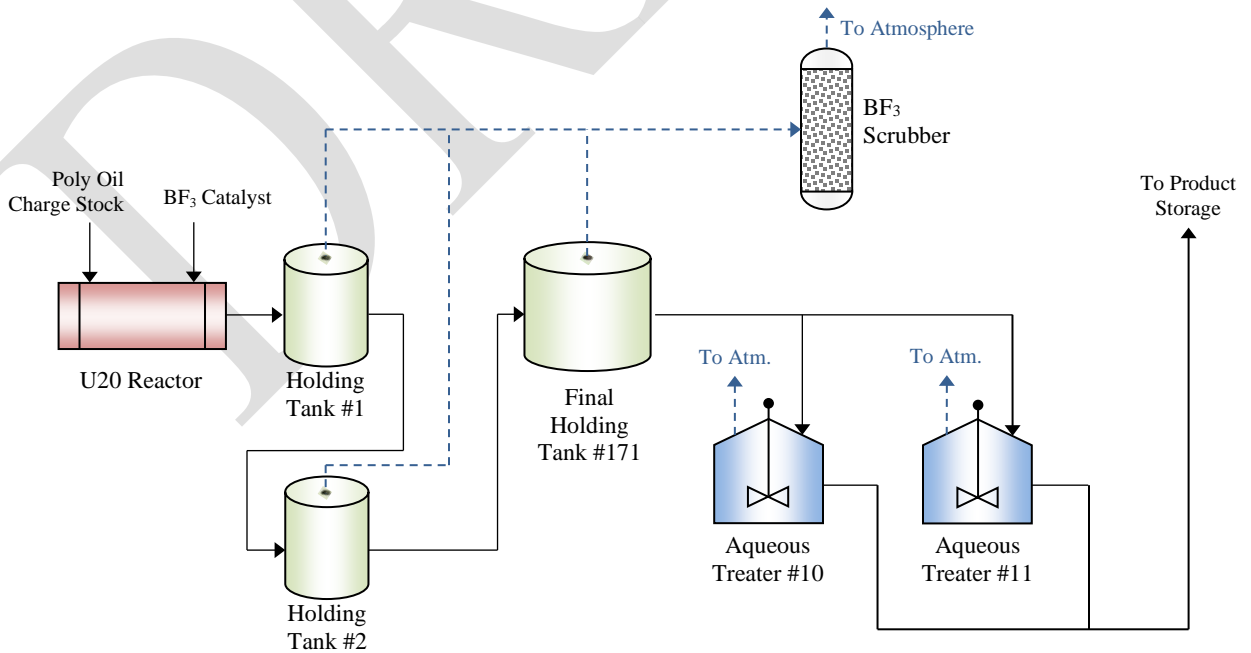
Scenario #2: Batch, through U20 Holding Tank



Scenario #3: Continuous, through Holding Tanks #1 and #2



Scenario #4: Batch, through Holding Tanks #1 and #2



DECLARATION OF POLICY

Pollution prevention is recognized as the preferred strategy (over pollution control) for reducing risk to air resources. Accordingly, pollution prevention measures should be integrated into air pollution control programs wherever possible, and the adoption by sources of cost-effective compliance strategies, incorporating pollution prevention, is encouraged. The Department will give expedited consideration to any permit modification request based on pollution prevention principles.

The permittee is subject to the terms and conditions set forth below. These terms and conditions constitute provisions of *Allegheny County Health Department Rules and Regulations, Article XXI Air Pollution Control*. The subject equipment has been conditionally approved for installation. The equipment shall be installed and operated in conformity with the plans, specifications, conditions, and instructions that are part of your application, and may be periodically inspected for compliance by the Department. In the event that the terms and conditions of this permit or the applicable provisions of Article XXI conflict with the application for this permit, these terms and conditions and the applicable provisions of Article XXI shall prevail. Additionally, nothing in this permit relieves the permittee from the obligation to comply with all applicable federal, State and local laws and regulations.

III. GENERAL CONDITIONS

1. Prohibition of Air Pollution (§2101.11)

It shall be a violation of this permit to fail to comply with, or to cause or assist in the violation of, any requirement of this permit or Article XXI, or any order or permit issued pursuant to authority granted by Article XXI. The permittee shall not willfully, negligently, or through the failure to provide and operate necessary control equipment or to take necessary precautions, operate any source of air contaminants in such manner that emissions from such source:

- a. Exceed the amounts permitted by this permit or by any order or permit issued pursuant to Article XXI;
- b. Cause an exceedance of the ambient air quality standards established by §2101.10 of Article XXI; or
- c. May reasonably be anticipated to endanger the public health, safety, or welfare.

2. Nuisances (§2101.13)

Any violation of any requirement of this Permit shall constitute a nuisance.

3. Definitions (§2101.20)

- a. Except as specifically provided in this permit, terms used retain the meaning accorded them under the applicable provisions and requirements of Article XXI or the applicable federal or state regulation. Whenever used in this permit, or in any action taken pursuant to this permit, the words and phrases shall have the meanings stated, unless the context clearly indicates otherwise.
- b. Unless specified otherwise in this permit or an applicable regulation, a “year” shall be defined as any twelve (12) consecutive months.

4. Certification (§2102.01)

Any report or compliance certification submitted under this permit shall contain written certification by a responsible official as to truth, accuracy, and completeness. This certification and any other certification required under this permit shall be signed by a responsible official of the source, and shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

5. Operation and Maintenance (§2105.03)

All air pollution control equipment required by this permit or Article XXI, and all equivalent compliance techniques that have been approved by the Department, shall be properly installed, maintained, and operated consistent with good air pollution control practice.

6. Conditions (§2102.03.c)

It shall be a violation of this permit giving rise to the remedies provided by Article XXI §2109.02 for any person to fail to comply with any terms or conditions set forth in this permit.

7. Transfers (§2102.03.e)

This permit shall not be transferable from one person to another, except in accordance with Article XXI §2102.03.e and in cases of change-in-ownership which are documented to the satisfaction of the Department, and shall be valid only for the specific sources and equipment for which this permit was issued. The transfer of permits in the case of change-in-ownership may be made consistent with the administrative permit amendment procedure of Article XXI §2103.14.b.

8. Effect (§2102.03.g)

Issuance of this permit shall not in any manner relieve any person of the duty to fully comply with the requirements of Article XXI or any other provision of law, nor shall it in any manner preclude or affect the right of the Department to initiate any enforcement action whatsoever for violations of Article XXI or this Permit, whether occurring before or after the issuance of such permit. Further, the issuance of this permit shall not be a defense to any nuisance action, nor shall such permit be construed as a certificate of compliance with the requirements of Article XXI or this Permit.

9. General Requirements (§2102.04.a)

It shall be a violation of this Permit giving rise to the remedies set forth in Article XXI §2109 for any person to install, modify, replace, reconstruct, or reactivate any source or air pollution control equipment to which this Permit applies unless either:

- a. The Department has first issued an Installation Permit for such source or equipment; or
- b. Such action is solely a reactivation of a source with a current Operating Permit, which is approved under §2103.13 of Article XXI.

10. Conditions (§2102.04.e)

Further, the initiation of installation, modification, replacement, reconstruction, or reactivation under this Installation Permit and any reactivation plan shall be deemed acceptance by the source of all terms and conditions specified by the Department in this permit and plan.

11. Revocation (§2102.04.f)

- a. The Department may, at any time, revoke this Installation Permit if it finds that:
 - 1) Any statement made in the permit application is not true, or that material information has not been disclosed in the application;
 - 2) The source is not being installed, modified, replaced, reconstructed, or reactivated in the manner indicated by this permit or applicable reactivation plan;
 - 3) Air contaminants will not be controlled to the degree indicated by this permit;
 - 4) Any term or condition of this permit has not been complied with;
 - 5) The Department has been denied lawful access to the premises or records, charts, instruments and the like as authorized by this Permit; or
- b. Prior to the date on which construction of the proposed source has commenced the Department may, revoke this Installation Permit if a significantly better air pollution control technology has become available for such source, a more stringent regulation applicable to such source has been adopted, or any other change has occurred which requires a more stringent degree of control of air contaminants.

12. Term (§2102.04.g)

This Installation Permit shall expire in 18 months if construction has not commenced within such period or shall expire one (1) year after such construction has been suspended, if construction is not resumed within such period. In any event, this Installation Permit shall expire upon completion of construction, except that this Installation Permit shall authorize temporary operation to facilitate shakedown of sources and air cleaning devices, to permit operations pending issuance of a related subsequent Operating Permit, or to permit the evaluation of the air contamination aspects of the source. Such temporary operation period shall be valid for a limited time, not to exceed 180 days, but may be extended for additional limited periods, each not to exceed 120 days, except that no temporary operation shall be authorized or extended which may circumvent the requirements of this Permit.

13. Annual Installation Permit Administrative Fee (§2102.10.c & e)

No later than 30 days after the date of issuance of this Installation Permit and on or before the last day of the month in which this permit was issued in each year thereafter, during the term of this permit until a subsequent corresponding Operating Permit or amended Operating Permit is properly applied for, the owner or operator of such source shall pay to the Department, in addition to all other applicable emission and administration fees, an Annual Installation Permit Administration Fee in an amount of \$750.

14. Severability Requirement (§2103.12.l)

The provisions of this permit are severable, and if any provision of this permit is determined to by a court of competent jurisdiction to be invalid or unenforceable, such a determination will not affect the remaining provisions of this permit.

15. Reporting Requirements (§2103.12.k)

- a. The permittee shall submit reports of any required monitoring at least every six (6) months. All instances of deviations from permit requirements must be clearly identified in such reports. All required reports must be certified by the Responsible Official.
- b. Prompt reporting of deviations from permit requirements is required, including those attributable to upset conditions as defined in this permit and Article XXI §2108.01.c, the probable cause of such deviations, and any corrective actions or preventive measures taken.
- c. All reports submitted to the Department shall comply with the certification requirements of General Condition III.4 above.
- d. Semiannual reports required by this permit shall be submitted to the Department as follows:
 - 1) One semiannual report is due by July 31 of each year for the time period beginning January 1 and ending June 30.
 - 2) One semiannual report is due by January 31 of each year for the time period beginning July 1 and ending December 31.
 - 3) The first semiannual report shall be due January 31, 2017 for the time period beginning on the issuance date of this permit through December 31, 2016.
- e. Reports may be emailed to the Department at aqreports@achd.net in lieu of mailing a hard copy.

16. Record Keeping Requirements (§2103.12.j.1)

- a. The permittee shall maintain records of required monitoring information that include the following:
 - 1) The date, place as defined in the permit, and time of sampling or measurements;
 - 2) The date(s) analyses were performed;
 - 3) The company or entity that performed the analyses;
 - 4) The analytical techniques or methods used;
 - 5) The results of such analyses; and
 - 6) The operating parameters existing at the time of sampling or measurement.
- b. The permittee shall maintain and make available to the Department, upon request, records including computerized records that may be necessary to comply with the reporting and emission statements in Article XXI §2108.01.e. Such records may include records of production, fuel usage, maintenance of production or pollution control equipment or other information determined by the Department to be necessary for identification and quantification of potential and actual air contaminant emissions.

17. Retention of Records (§2103.12.j.2)

The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.

18. Minor Installation Permit Modifications (§2102.10.d)

Modifications to this Installation Permit may be applied for but only upon submission of an application with a fee in the amount of \$300 and where:

- a. No reassessment of any control technology determination is required; and
- b. No reassessment of any ambient air quality impact is required.

19. Violations (§2104.06)

The violation of any emission standard established by this Permit shall be a violation of this Permit giving rise to the remedies provided by Article §2109.02.

20. Other Requirements Not Affected (§2105.02)

Compliance with the requirements of this permit shall not in any manner relieve any person from the duty to fully comply with any other applicable federal, state, or county statute, rule, regulation, or the like, including, but not limited to, any applicable NSPSs, NESHAPs, MACTs, or Generally Achievable Control Technology standards now or hereafter established by the EPA, and any applicable requirement of BACT or LAER as provided by Article XXI, any condition contained in this Installation Permit and/or any additional or more stringent requirements contained in an order issued to such person pursuant to Part I of Article XXI.

21. Other Rights and Remedies Preserved (§2109.02.b)

Nothing in this permit shall be construed as impairing any right or remedy now existing or hereafter created in equity, common law or statutory law with respect to air pollution, nor shall any court be deprived of such jurisdiction for the reason that such air pollution constitutes a violation of this permit.

22. Penalties, Fines, and Interest (§2109.07.a)

A source that fails to pay any fee required under this Permit or article XXI when due shall pay a civil penalty of 50% of the fee amount, plus interest on the fee amount computed in accordance with of Article XXI §2109.06.a.4 from the date the fee was required to be paid. In addition, the source may have its permit revoked.

23. Appeals (§2109.10)

In accordance with State Law and County regulations and ordinances, any person aggrieved by an order or other final action of the Department issued pursuant to Article XXI shall have the right to appeal the action to the Director in accordance with the applicable County regulations and ordinances.

IV. SITE LEVEL TERMS AND CONDITIONS

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.c, 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)

served by such air pollution control equipment is also shut down at all times that such equipment is shut down.

- b. The Department shall act on all requested shutdowns as promptly as possible. If the Department does not take action on such requests within ten (10) calendar days of receipt of the notice, the request shall be deemed denied, and upon request, the owner or operator of the affected source shall have a right to appeal in accordance with the provisions of Article XI.
- c. The prior report required by Site Level Condition IV.7.a above shall include:
 - 1) Identification of the specific equipment to be shut down, its location and permit number (if permitted), together with an identification of the source(s) affected;
 - 2) The reasons for the shutdown;
 - 3) The expected length of time that the equipment will be out of service;
 - 4) Identification of the nature and quantity of emissions likely to occur during the shutdown;
 - 5) Measures, including extra labor and equipment, which will be taken to minimize the length of the shutdown, the amount of air contaminants emitted, or the ambient effects of the emissions;
 - 6) Measures which will be taken to shut down or curtail the affected source(s) or the reasons why it is impossible or impracticable to shut down or curtail the affected source(s) during the shutdown; and
 - 7) Such other information as may be required by the Department.

8. Breakdowns (§2108.01.c)

- a. In the event that any air pollution control equipment, process equipment, or other source of air contaminants breaks down in such manner as to have a substantial likelihood of causing the emission of air contaminants in violation of this permit, or of causing the emission into the open air of potentially toxic or hazardous materials, the person responsible for such equipment or source shall immediately, but in no event later than sixty (60) minutes after the commencement of the breakdown, notify the Department of such breakdown and shall, as expeditiously as possible but in no event later than seven (7) days after the original notification, provide written notice to the Department.
- b. To the maximum extent possible, all oral and written notices required shall include all pertinent facts, including:
 - 1) Identification of the specific equipment which has broken down, its location and permit number (if permitted), together with an identification of all related devices, equipment, and other sources which will be affected.
 - 2) The nature and probable cause of the breakdown.
 - 3) The expected length of time that the equipment will be inoperable or that the emissions will continue.
 - 4) Identification of the specific material(s) which are being, or are likely to be emitted, together with a statement concerning its toxic qualities, including its qualities as an irritant, and its potential for causing illness, disability, or mortality.
 - 5) The estimated quantity of each material being or likely to be emitted.
 - 6) Measures, including extra labor and equipment, taken or to be taken to minimize the length of the breakdown, the amount of air contaminants emitted, or the ambient effects of the emissions, together with an implementation schedule.

- 7) Measures being taken to shut down or curtail the affected source(s) or the reasons why it is impossible or impractical to shut down the source(s), or any part thereof, during the breakdown.
- c. Notices required shall be updated, in writing, as needed to advise the Department of changes in the information contained therein. In addition, any changes concerning potentially toxic or hazardous emissions shall be reported immediately. All additional information requested by the Department shall be submitted as expeditiously as practicable.
- d. Unless otherwise directed by the Department, the Department shall be notified whenever the condition causing the breakdown is corrected or the equipment or other source is placed back in operation by no later than 9:00 AM on the next County business day. Within seven (7) days thereafter, written notice shall be submitted pursuant to Paragraphs a and b above.
- e. Breakdown reporting shall not apply to breakdowns of air pollution control equipment which occur during the initial startup of said equipment, provided that emissions resulting from the breakdown are of the same nature and quantity as the emissions occurring prior to startup of the air pollution control equipment.
- f. In no case shall the reporting of a breakdown prevent prosecution for any violation of this permit or Article XXI.

9. Cold Start (§2108.01.d)

In the event of a cold start on any fuel-burning or combustion equipment, except stationary internal combustion engines and combustion turbines used by utilities to meet peak load demands, the person responsible for such equipment shall report in writing to the Department the intent to perform such cold start at least 24 hours prior to the planned cold start. Such report shall identify the equipment and fuel(s) involved and shall include the expected time and duration of the startup. Upon written application from the person responsible for fuel-burning or combustion equipment which is routinely used to meet peak load demands and which is shown by experience not to be excessively emissive during a cold start, the Department may waive these requirements and may instead require periodic reports listing all cold starts which occurred during the report period. The Department shall make such waiver in writing, specifying such terms and conditions as are appropriate to achieve the purposes of Article XXI. Such waiver may be terminated by the Department at any time by written notice to the applicant.

10. Monitoring of Malodorous Matter Beyond Facility Boundaries (§2104.04)

The permittee shall take all reasonable action as may be necessary to prevent malodorous matter from becoming perceptible beyond facility boundaries. Further, the permittee shall perform such observations as may be deemed necessary along facility boundaries to insure that malodorous matter beyond the facility boundary in accordance with Article XXI §2107.13 is not perceptible and record all findings and corrective action measures taken.

11. Emissions Inventory Statements (§2108.01.e & g)

- a. Emissions inventory statements in accordance with §2108.01.e shall be submitted to the Department by March 15 of each year for the preceding calendar year. The Department may require more frequent submittals if the Department determines that more frequent submissions are required by the EPA or that analysis of the data on a more frequent basis is necessary to implement the requirements of Article XXI or the Clean Air Act.

- b. The failure to submit any report or update within the time specified, the knowing submission of false information, or the willful failure to submit a complete report shall be a violation of this permit giving rise to the remedies provided by Article XXI §2109.02.

12. Orders (§2108.01.f)

In addition to meeting the requirements Site Level Conditions IV.7 through IV.11, inclusive, the person responsible for any source shall, upon order by the Department, report to the Department such information as the Department may require in order to assess the actual and potential contribution of the source to air quality. The order shall specify a reasonable time in which to make such a report.

13. Violations (§2108.01.g)

The failure to submit any report or update thereof required by Site Level Conditions IV.7 through IV.12 above, inclusive, within the time specified, the knowing submission of false information, or the willful failure to submit a complete report shall be a violation of this permit giving rise to the remedies provided by Article XXI §2109.02.

14. Emissions Testing (§2108.02)

- a. **Orders:** No later than 60 days after achieving full production or 120 days after startup, whichever is earlier, the permittee shall conduct, or cause to be conducted, such emissions tests as are specified by the Department to demonstrate compliance with the applicable requirements of this permit and shall submit the results of such tests to the Department in writing. Upon written application setting forth all information necessary to evaluate the application, the Department may, for good cause shown, extend the time for conducting such tests beyond 120 days after startup but shall not extend the time beyond 60 days after achieving full production. Emissions testing shall comply with all applicable requirements of Article XXI, §2108.02.e.
- b. **Tests by the Department:** Notwithstanding any tests conducted pursuant to this permit, the Department or another entity designated by the Department may conduct emissions testing on any source or air pollution control equipment. At the request of the Department, the permittee shall provide adequate sampling ports, safe sampling platforms and adequate utilities for the performance of such tests.
- c. **Testing Requirements.** No later than 45 days prior to conducting any tests required by this permit, the person responsible for the affected source shall submit for the Department's approval a written test protocol explaining the intended testing plan, including any deviations from standard testing procedures, the proposed operating conditions of the source during the test, calibration data for specific test equipment and a demonstration that the tests will be conducted under the direct supervision of persons qualified by training and experience satisfactory to the Department to conduct such tests. In addition, at least 30 days prior to conducting such tests, the person responsible shall notify the Department in writing of the time(s) and date(s) on which the tests will be conducted and shall allow Department personnel to observe such tests, record data, provide pre-weighed filters, analyze samples in a County laboratory and to take samples for independent analysis. Test results shall be comprehensively and accurately reported in the units of measurement specified by the applicable emission limitations of this permit.

- d. Test methods and procedures shall conform to the applicable reference method set forth in this permit or Article XXI Part G, or where those methods are not applicable, to an alternative sampling and testing procedure approved by the Department consistent with Article XXI §2108.02.e.2.
- e. **Violations:** The failure to perform tests as required by this permit or an order of the Department, the failure to submit test results within the time specified, the knowing submission of false information, the willful failure to submit complete results, or the refusal to allow the Department, upon presentation of a search warrant, to conduct tests, shall be a violation of this permit giving rise to the remedies provided by Article XXI §2109.02.

15. Abrasive Blasting (§2105.51)

- a. Except where such blasting is a part of a process requiring an operating permit, no person shall conduct or allow to be conducted, abrasive blasting or power tool cleaning of any surface, structure, or part thereof, which has a total area greater than 1,000 square feet unless such abrasive blasting complies with all applicable requirements of Article XXI §2105.51.
- b. In addition to complying with all applicable provisions of §2105.51, no person shall conduct, or allow to be conducted, abrasive blasting of any surface unless such abrasive blasting also complies with all other applicable requirements of Article XXI unless such requirements are specifically addressed by §2105.51.

16. Asbestos Abatement (§2105.62, §2105.63)

In the event of removal, encasement, or encapsulation of Asbestos-Containing Material (ACM) at a facility or in the event of the demolition of any facility, the permittee shall comply with all applicable provisions of Article XXI §2105.62 and §2105.63.

17. Volatile Organic Compound Storage Tanks (§2105.12.a)

No person shall place or store, or allow to be placed or stored, a volatile organic compound having a vapor pressure of 1.5 psia or greater under actual storage conditions in any aboveground stationary storage tank having a capacity equal to or greater than 2,000 gallons but less than or equal to 40,000 gallons, unless there is in operation on such tank pressure relief valves which are set to release at the higher of 0.7 psig of pressure or 0.3 psig of vacuum or at the highest possible pressure and vacuum in accordance with State or local fire codes, National Fire Prevention Association guidelines, or other national consensus standard approved in writing by the Department. Petroleum liquid storage vessels that are used to store produced crude oil and condensate prior to lease custody transfer are exempt from these requirements.

18. Permit Source Premises (§2105.40)

- a. **General.** No person shall operate, or allow to be operated, any source for which a permit is required by Article XXI Part C in such manner that emissions from any open land, roadway, haul road, yard, or other premises located upon the source or from any material being transported within such source or from any source-owned access road, haul road, or parking lot over five (5) parking spaces:
 - 1) Are visible at or beyond the property line of such source;
 - 2) Have an opacity of 20% or more for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period; or

3) Have an opacity of 60% or more at any time.

- b. **Deposition on Other Premises.** Visible emissions from any solid or liquid material that has been deposited by any means from a source onto any other premises shall be considered emissions from such source within the meaning of Site Level Condition IV.18.a above.

19. Parking Lots and Roadways (§2105.42)

- a. The permittee shall not maintain for use, or allow to be used, any parking lot over 50 parking spaces or used by more than 50 vehicles in any day or any other roadway carrying more than 100 vehicles in any day or 15 vehicles in any hour in such manner that emissions from such parking lot or roadway:
- 1) Are visible at or beyond the property line;
 - 2) Have an opacity of 20% or more for a period or periods aggregating more than three (3) minutes in any 60 minute period; or
 - 3) Have an opacity of 60% or more at any time.
- b. Visible emissions from any solid or liquid material that has been deposited by any means from a parking lot or roadway onto any other premises shall be considered emissions from such parking lot or roadway.
- c. Site Level Condition IV.19.a above shall apply during any repairs or maintenance done to such parking lot or roadway.
- d. Notwithstanding any other provision of this permit, the prohibitions of Site Level Condition IV.19 may be enforced by any municipal or local government unit having jurisdiction over the place where such parking lots or roadways are located. Such enforcement shall be in accordance with the laws governing such municipal or local government unit. In addition, the Department may pursue the remedies provided by Article XXI §2109.02 for any violations of Site Level Condition IV.19.

20. Permit Source Transport (§2105.43)

- a. No person shall transport, or allow to be transported, any solid or liquid material outside the boundary line of any source for which a permit is required by Article XXI Part C in such manner that there is any visible emission, leak, spill, or other escape of such material during transport.
- b. Notwithstanding any other provision of this permit, the prohibitions of Site Level Condition IV.20 may be enforced by any municipal or local government unit having jurisdiction over the place where such visible emission, leak, spill, or other escape of material during transport occurs. Such enforcement shall be in accordance with the laws governing such municipal or local government unit. In addition, the Department may pursue the remedies provided by Article XXI §2109.02 for any violation of Site Level Condition IV.20.

21. Construction and Land Clearing (§2105.45)

- a. No person shall conduct, or allow to be conducted, any construction or land clearing activities in such manner that the opacity of emissions from such activities:
 - 1) Equal or exceed 20% for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period; or
 - 2) Equal or exceed 60% at any time.
- b. Notwithstanding any other provision of this permit, the prohibitions of Site Level Condition IV.21 may be enforced by any municipal or local government unit having jurisdiction over the place where such construction or land clearing activities occur. Such enforcement shall be in accordance with the laws governing such municipal or local government unit. In addition, the Department may pursue the remedies provided by Article XXI §2109.02 for any violations of Site Level Condition IV.21.

22. Mining (§2105.46)

No person shall conduct, or allow to be conducted, any mining activities in such manner that emissions from such activities:

- a. Are visible at or beyond the property line;
- b. Have an opacity of 20% or more for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period; or,
- c. Have an opacity of 60% or more at any time.

23. Demolition (§2105.47)

- a. No person shall conduct, or allow to be conducted, any demolition activities in such manner that the opacity of the emissions from such activities equal or exceed 20% for a period or periods aggregating more than three (3) minutes in any 60 minute period.
- b. Notwithstanding any other provisions of this permit, the prohibitions of Site Level Condition IV.23 may be enforced by any municipal or local government unit having jurisdiction over the place where such demolition activities occur. Such enforcement shall be in accordance with the laws governing such municipal or local government unit. In addition, the Department may pursue the remedies provided by Article XXI §2109.02 for any violations of Site Level Condition IV.23.

24. Fugitive Emissions (§2105.49)

The person responsible for a source of fugitive emissions, in addition to complying with all other applicable provisions of this permit shall take all reasonable actions to prevent fugitive air contaminants from becoming airborne. Such actions may include, but are not limited to:

- a. The use of asphalt, oil, water, or suitable chemicals for dust control;
- b. The paving and maintenance of roadways, parking lots and the like;
- c. The prompt removal of earth or other material which has been deposited by leaks from transport, 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.

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. Leak Detection and Repair (LDAR) Program (§2105.06, Plan Approval Order and Agreement Upon Consent Number 230, dated December 13, 1996)

- a. The permittee shall conduct a Leak Detection and Repair (LDAR) program at the facility at all times when facility operations may result in fugitive emissions of VOCs. Such LDAR program shall consist of the following: [RACT Order #230, 1.8]
 - 1) Components applicable to the LDAR program shall be all accessible valves, pumps, and safety pressure relief valves in light oil service.
 - 2) The subject components shall be monitored visually and with a VOC analyzer, and shall be tagged or labeled using Neville's component identification system.
- b. Initially, each non difficult/unsafe subject component shall be monitored on a monthly basis. Any component for which a leak is not detected for two successive months shall be monitored on a quarterly basis. Any component for which a leak is not detected for two successive quarters shall then be monitored on an annual basis. Difficult/unsafe components shall be monitored annually.
 - 1) Visual leaks are determined if the component is visually leaking or dripping product from the component. Leaks determined using the analytical test method are an instrument reading exceeding 10,000 parts per million by volume.
 - 2) If a component is designated as leaking by either the visual or analytical method, the component will not be designated as a "leaker". Instead:

- a) A first attempt of repair of the component will be performed for the purposes of stopping or reducing leakage, using best available practices, until the component can achieve non-leaking status.
 - b) Should this attempt fail, the component will be repaired or replaced and the monitoring will revert to the previous inspection schedule. Two successful monitoring events will allow the new or repaired component to again move up the progression of monthly, quarterly, and annual inspection frequency.
 - 3) Recordkeeping of labeled or tagged monitoring components will be maintained, and include the type of component with available specifications, dates of monitoring, instrument readings, and location of the component.
- c. The permittee shall maintain all appropriate records to demonstrate compliance with the requirements of both §2105.06 of Article XXI and RACT Order #230. Such records shall provide sufficient data to clearly demonstrate that all requirements of both §2105.06 of Article XXI and RACT Order #230 are being met. [RACT Order #230, 1.9]
- d. The facility shall retain all records required by both §2105.06 of Article XXI and RACT Order #230 for at least 2 years, and shall make the same available to the Department upon request. [RACT Order #230, 1.10]

28. HAP LDAR Implementation (§2103.20.b.4)

- a. Upon issuance of this permit the permittee shall continue to implement a Hazardous Air Pollutant Leak Detection and Repair (HAP LDAR) program to monitor equipment in HAP service throughout the facility. Such HAP LDAR program shall consist of the following:
 - 1) The permittee shall maintain an electronic registry to identify all components in HAP service.
 - 2) Monitoring shall be conducted on a different set of one-third of all components every 12-month period, in accordance with condition IV.28.b below.
 - 3) If, for each component type where the average percent leaking value is greater than or equal to 2%, the facility shall increase the monitoring frequency for that component type to once every 12-month period for all components of that type. This monitoring frequency shall be maintained until the leak rate for that component type is demonstrated to be less than 2% over a 24-month period, at which time the permittee may return to the monitoring schedule in condition IV.28.a.2) above.
 - 4) For each type of component, a leak is defined as follows:
 - a) valves: 500 ppm_v
 - b) pump seals: 1,000 ppm_v
 - c) pressure relief valves: 500 ppm_v
 - d) agitator seals: 10,000 ppm_v
 - e) flanges: 500 ppm_v
 - f) screw connectors: 500 ppm_v
 - g) manways: 500 ppm_v
 - h) gauge hatches: 500 ppm_v
 - i) instruments: 500 ppm_v
 - j) open-ended lines: 500 ppm_v
- b. Monitoring of all components shall be conducted in accordance with Method 21 of 40 CFR Part 60, Appendix A.
 - 1) The detection instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21;

- 2) Monitoring shall be performed when the applicable equipment is in HAP material service.
- c. When a leak is detected, the permittee shall attach a weatherproof and readily visible identification to the leaking component. The identification may be removed after the component has been repaired and the component is demonstrated as having no leak.
 - d. The permittee shall repair each leak detected as soon as practical, but not later than 15 calendar days after it is detected, except as provided in condition IV.28.e below. A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.
 - e. The permittee may delay repair of leaking components under the following conditions:
 - 1) It is technically infeasible to repair the leak without a process unit or facility shutdown, in which case the leak shall be repaired during the next shutdown;
 - 2) The equipment is isolated from the process and does not remain in regulated material service;
 - 3) The permittee determines that emissions of purged material resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair;
 - 4) The component is designated unsafe-to-repair.
 - f. Mass emissions of HAP shall be calculated using the *Correlation Approach* methods in the US EPA document "Protocol for Equipment Leak Emissions Estimates", EPA-453/R-95-017, November 1995, with an applied calculated HAP content (as a percent of total VOC), or other method approved by the Department.
 - g. For each leak detected, the following information shall be recorded:
 - 1) The date of first attempt to repair the leak.
 - 2) The date of successful repair of the leak.
 - 3) Maximum instrument reading measured by Method 21 of 40 CFR part 60, appendix A at the time the leak is successfully repaired or determined to be nonrepairable.
 - 4) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak as specified in conditions a) and b) below:
 - a) The permittee may develop a written procedure that identifies the conditions that justify a delay of repair as outlined in condition IV.28.e above.
 - b) If delay of repair was caused by depletion of stocked parts, there must be documentation that the spare parts were sufficiently stocked on-site before depletion and the reason for depletion.
 - 5) Dates of shutdowns that occur while the equipment is unrepaired.
 - h. The permittee shall keep records of the number and types of components subject to the HAP LDAR program.
 - i. The permittee shall report the following HAP LDAR information for any monitoring event conducted during the applicable period in the semiannual report required under General Condition III.15 above:
 - 1) For each type of equipment listed under condition IV.28.a.4) above, report in a summary format by equipment type, the number of components for which leaks were detected and for valves, pumps and connectors show the percent leakers, and the total number of components monitored. Also include the number of leaking components that were not repaired as required by condition IV.28.d above, and for valves and connectors, identify the number of components that are determined to be nonrepairable.

- 2) Where any delay of repair is utilized pursuant to condition IV.28.e above, report that delay of repair has occurred and report the number of instances of delay of repair.
- 3) The estimated fugitive HAP emissions as determined under condition IV.28.f above.

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V. EMISSION UNIT LEVEL TERMS AND CONDITIONS

A. Process P006: Unit 20/21

Process Description: Catalytic Resin & Polyoil Neutralization
Facility ID: Unit 20/21
Raw Materials: ethylene-cracking products, resin-forming feedstock, additives
Control Device: packed bed scrubber (for BF₃ removal)

1. Restrictions:

- a. The permittee shall not operate or allow to be operated Unit 20/21 in any configuration other than one of the four scenarios outlined in Section II: Facility and Installation Description. [§2103.12.a.2.D; 25 Pa. Code, §129.114(c)]
- b. The permittee shall not operate or allow to be operated Unit 20/21 unless the reactor is vented to a holding tank. Each holding tank shall be equipped with a conservation vent set at a minimum of 1.3 inches of water column. [§2103.12.a.2.D; §129.114(c)]
- c. The permittee shall not operate or allow to be operated Unit 20/21 unless the Aqueous Treaters are equipped with conservation vents. Each conservation vent shall have a set point above the maximum vapor pressure of the material being processed. [§2103.12.a.2.D]
- d. Total throughput through Unit 20/21 shall not exceed 66,600,000 pounds of poly oil in any 12-month period, and the number of product changes shall not exceed 78 in any 12-month period. [§2103.12.a.2.D]
- e. Emissions from the Unit 20 process shall not exceed the emissions limitations in Tables V-A-1 through V-A-2 below: [§2103.12.a.2.D; §129.114(c)]

TABLE V-A-1: Unit 20/21 Emissions Limitations – Scenario #1

Pollutant	Scenario #1 Total (for all process phases)	
	lb/product change ¹	tpy ²
Volatile Organic Compounds (VOC)	70.053	3.054
Hazardous Air Pollutants (HAP)	14.201	0.554

TABLE V-A-2: Unit 20/21 Emissions Limitations – Scenario #2

Pollutant	Scenario #2 Total (for all process phases)	
	lb/product change ¹	tpy ²
Volatile Organic Compounds (VOC)	52.797	9.457
Hazardous Air Pollutants (HAP)	26.772	4.852

TABLE V-A-3: Unit 20/21 Emissions Limitations – Scenario #3

Pollutant	Scenario #3 Total (for all process phases)	
	lb/product change ¹	tpy ²
Volatile Organic Compounds (VOC)	76.463	3.304
Hazardous Air Pollutants (HAP)	17.324	0.676

TABLE V-A-4: Unit 20/21 Emissions Limitations – Scenario #4

Pollutant	Scenario Total (for all process phases)	
	lb/product change ¹	tpy ²
Volatile Organic Compounds (VOC)	75.261	9.707
Hazardous Air Pollutants (HAP)	29.895	4.973

1. Short-term emissions are based on the initial vessel fill-time during each product change, not the entire batch cycle time after the vessels are filled.
2. A year is defined as any consecutive 12-month period.

- f. The permittee shall not use boron trifluoride (BF₃) as a catalyst in Unit 20 unless all BF₃ emissions from the Unit 20 Reactor and Holding Tank are being controlled by a packed-bed scrubber. [§2103.12.a.2.D; §129.114(c)]

2. Testing Requirements:

The Department reserves the right to require emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Article XXI §2108.02. [§2103.12.h.1]

3. Monitoring Requirements:

The permittee shall visually inspect the BF₃ scrubber required under condition V.A.1.f at least once per shift for visible emissions. If visible emissions are detected inside of the scrubber, the permittee shall adjust the flow of water to the scrubber accordingly. [§2103.12.i]

4. Record Keeping Requirements:

- a. The permittee shall keep and maintain the following data for the Unit 20/21 process and associated equipment: [§2103.12.j; §129.115(f)]
 - 1) Number of product changes per month and the rolling 12-month total;
 - 2) Poly oil addition rate (lb/hr) and the rolling 12-month total;
 - 3) Operation scenario and type of poly oil used per batch;
 - 4) Number of solvent flushes per batch; and
 - 5) If the rolling 12-month total throughput of poly oil exceeds 60,000,000 lbs or if the rolling 12-month total number of product changes exceeds 70, the calculated estimated emissions per month.
- b. The permittee shall keep and maintain the following data for the Unit 21 Aqueous Treaters: [§2103.12.j; 129.115(f)]
 - 1) Number of batch fillings per treater per month and the rolling 12-month total;

- 2) Amount of water used per treater per batch;
 - 3) Number of washings per treater per batch; and
- c. The permittee shall keep and maintain records of any compositional analyses of poly oil processed in Unit 20/21. [§2103.12.j; §129.115(f)]
 - d. The permittee shall keep and maintain the following data for the packed-bed scrubber: [§2103.12.j]
 - 1) The amount of BF_3 catalyst used in the reactor per batch; and
 - 2) A log of the monitoring required under condition V.A.3 above indicating the time and date of the inspection.
 - e. The permittee shall record all instances of non-compliance with the conditions of this permit in accordance with General Condition III.15.b. [§2103.12.j]
 - f. All records shall be retained by the facility in accordance with General Condition III.17. These records shall be made available to the Department upon request for inspection and/or copying. [§2103.12.j.2; §129.115(k)]

5. Reporting Requirements:

- a. The permittee shall report the following information semiannually to the Department in accordance with General Condition III.15. The reports shall contain, at a minimum, the following: [§2103.12.k; §129.115(f)]
 - 1) Calendar dates covered in the reporting period;
 - 2) All batch information required to be recorded under conditions V.A.4.a and V.A.4.b above; and
 - 3) Packed-bed scrubber information required to be recorded under condition V.A.4.d.1) above.
- b. The permittee shall notify the Department within 15 days any time a poly oil with a HAP composition other than the ones listed below is used. The notification shall include a copy of the analysis performed under condition V.A.4.c above: [§2103.12.k]
 - 1) Nevchem
 - 2) Nevpene
 - 3) Nevex (FT-11-134)
 - 4) NI-100
- c. Reporting instances of non-compliance does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.8, if appropriate. [§2103.12.k]

6. Work Practice Standard:

- a. The permittee shall do the following for Unit 20/21 and all associated equipment: [§2103.12.a.2.D]
 - 1) Perform regular maintenance considering 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. Unit 20/21 and all associated equipment shall be: [§2105.03; §129.114(c)]
 - 1) Properly operated and maintained at all times according to good engineering practices, with the exception of activities to mitigate emergency conditions; and

- 2) Operated and maintained in accordance with the manufacturer's specifications and the applicable terms and conditions of this permit.

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VI. ALTERNATIVE OPERATING SCENARIOS

No alternative operating scenarios exist for this Installation.

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VII. EMISSION LIMITATIONS SUMMARY

Annual emissions from Unit 20/21 at Neville Chemical Company shall not exceed the following at any time:

Table VII-1: Emissions Summary

Pollutant	Total (tpy)*
Volatile Organic Compounds (VOC)	9.707
Total Hazardous Air Pollutants (HAP)	4.973
Benzene	0.276
Ethylbenzene	1.074
Naphthalene	0.018
Styrene	0.127
Xylenes	2.401

* A year is defined as any consecutive 12-month period.

Total emissions from Neville Chemical Company, including emissions from Unit 20/21 and fugitive emissions, shall not exceed the following at any time:

Table VII-2: Total Facility Emissions

Pollutant	Total (tpy)*
Particulate Matter	13.953
Particulate Matter >10 µm (PM ₁₀)	10.913
Particulate Matter >2.5 µm (PM _{2.5})	10.063
Nitrogen Oxides (NO _x)	78.126
Sulfur Oxides (SO _x)	0.463
Carbon Monoxide (CO)	68.220
Volatile Organic Compounds (VOC)	225.894
Total Hazardous Air Pollutants (HAP)	17.651
Benzene	0.481
Ethylbenzene	1.332
Naphthalene	1.944
Styrene	1.305
Xylenes	7.202

* A year is defined as any consecutive 12-month period.