



COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
AIR QUALITY PROGRAM

STATE ONLY OPERATING PERMIT

Issue Date: November 25, 2019

Effective Date: August 17, 2020

Expiration Date: August 16, 2025

In accordance with the provisions of the Air Pollution Control Act, the Act of January 8, 1960, P.L. 2119, as amended, and 25 Pa. Code Chapter 127, the Owner, [and Operator if noted] (hereinafter referred to as permittee) identified below is authorized by the Department of Environmental Protection (Department) to operate the air emission source(s) more fully described in this permit. This Facility is subject to all terms and conditions specified in this permit. Nothing in this permit relieves the permittee from its obligations to comply with all applicable Federal, State and Local laws and regulations.

The regulatory or statutory authority for each permit condition is set forth in brackets. All terms and conditions in this permit are federally enforceable unless otherwise designated.

State Only Permit No: 39-00090

Federal Tax Id - Plant Code: 20-0149703-1

Owner Information

Name: INHANCE TECH LLC  
Mailing Address: 16223 PARK ROW STE 100  
HOUSTON, TX 77084-5137

Plant Information

Plant: INHANCE TECHNOLOGIES LLC/ALLENTOWN  
Location: 39 Lehigh County 39910 Hanover Township  
SIC Code: 2821 Manufacturing - Plastics Materials And Resins

Responsible Official

Name: MICHAEL KOMA  
Title: CHIEF OPERATING OFFICER  
Phone: (281) 578 - 1440 Ext.3004

Permit Contact Person

Name: RODRIGO FUENTES  
Title: HSSE MGR  
Phone: (281) 578 - 1440 Ext.3011

[Signature] \_\_\_\_\_  
MARK J. WEJKSZNER, NORTHEAST REGION AIR PROGRAM MANAGER



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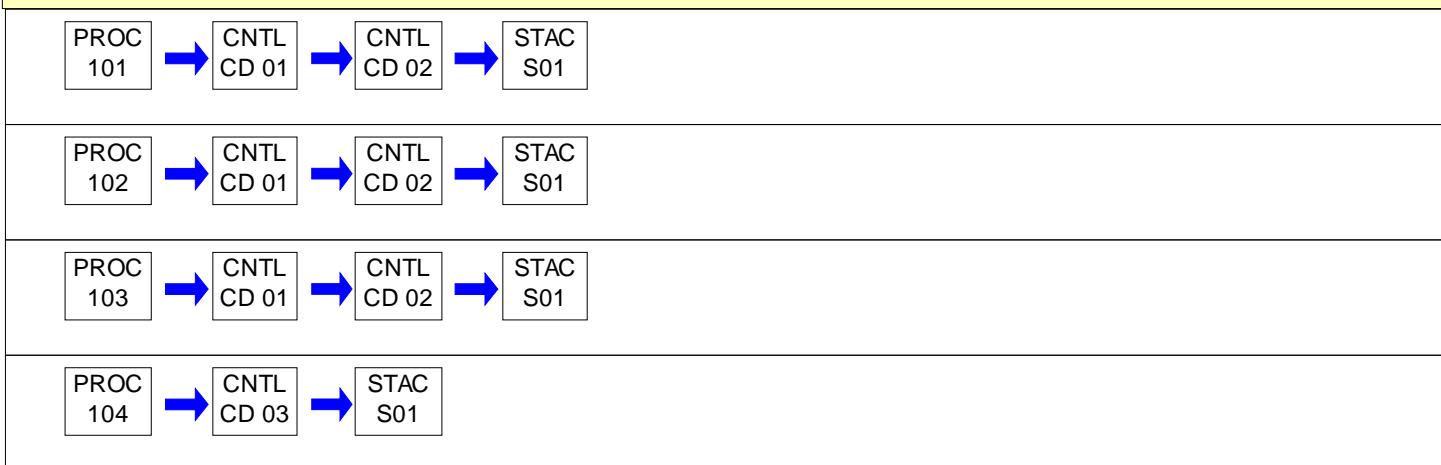
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S01	CHAMBER & FLUORINE CELL STACK		

**PERMIT MAPS**

**SECTION B. General State Only Requirements****#001 [25 Pa. Code § 121.1]****Definitions.**

Words and terms that are not otherwise defined in this permit shall have the meanings set forth in Section 3 of the Air Pollution Control Act (35 P.S. § 4003) and in 25 Pa. Code § 121.1.

**#002 [25 Pa. Code § 127.446]****Operating Permit Duration.**

(a) This operating permit is issued for a fixed term of five (5) years and shall expire on the date specified on Page 1 of this permit.

(b) The terms and conditions of the expired permit shall automatically continue pending issuance of a new operating permit, provided the permittee has submitted a timely and complete application and paid applicable fees required under 25 Pa. Code Chapter 127, Subchapter I and the Department is unable, through no fault of the permittee, to issue or deny a new permit before the expiration of the previous permit.

**#003 [25 Pa. Code §§ 127.412, 127.413, 127.414, 127.446 & 127.703(b)&(c)]****Permit Renewal.**

(a) The permittee shall submit a timely and complete application for renewal of the operating permit to the appropriate Regional Air Program Manager. The application for renewal of the operating permit shall be submitted at least six (6) months and not more than 18 months before the expiration date of this permit.

(b) The application for permit renewal shall include the current permit number, a description of any permit revisions that occurred during the permit term, and any applicable requirements that were promulgated and not incorporated into the permit during the permit term. An application is complete if it contains sufficient information to begin processing the application, has the applicable sections completed and has been signed by a responsible official.

(c) The permittee shall submit with the renewal application a fee for the processing of the application and an additional annual administrative fee as specified in 25 Pa. Code § 127.703(b) and (c). The fees shall be made payable to "The Commonwealth of Pennsylvania - Clean Air Fund" and shall be for the amount specified in the following schedule specified in 25 Pa. Code § 127.703(b) and (c).

(1) Three hundred dollars for applications filed during the 2000-2004 calendar years.

(2) Three hundred seventy-five dollars for applications filed for the calendar years beginning in 2005.

(d) The renewal application shall also include submission of proof that the local municipality and county, in which the facility is located, have been notified in accordance with 25 Pa. Code § 127.413.

(e) The application for renewal of the operating permit shall also include submission of supplemental compliance review forms in accordance with the requirements of 25 Pa. Code § 127.412(b) and § 127.412(j).

(f) The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information as necessary to address any requirements that become applicable to the source after the permittee submits a complete application, but prior to the date the Department takes action on the permit application.

**#004 [25 Pa. Code § 127.703]****Operating Permit Fees under Subchapter I.**

(a) The permittee shall pay fees according to the following schedule specified in 25 Pa. Code § 127.703(b):

(1) Three hundred dollars for applications filed during the 2000-2004 calendar years.

(2) Three hundred seventy-five dollars for applications filed for the calendar years beginning in 2005.

This fee schedule shall apply to the processing of an application for an operating permit as well as the extension,

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modification, revision, renewal, and re-issuance of each operating permit or part thereof.

(b) The permittee shall pay an annual operating permit administrative fee according to the fee schedule established in 25 Pa. Code § 127.703(c).

(1) Two hundred fifty dollars for applications filed during the 1995-1999 calendar years.

(2) Three hundred dollars for applications filed during the 2000-2004 calendar years.

(3) Three hundred seventy-five dollars for applications filed during the years beginning in 2005.

(c) The applicable fees shall be made payable to "The Commonwealth of Pennsylvania - Clean Air Fund".

**#005 [25 Pa. Code §§ 127.450 (a)(4) and 127.464]****Transfer of Operating Permits.**

(a) This operating permit may not be transferred to another person, except in cases of transfer-of-ownership that are documented and approved by the Department.

(b) In accordance with 25 Pa. Code § 127.450(a)(4), a change in ownership of the source shall be treated as an administrative amendment if the Department determines that no other change in the permit is required and a written agreement has been submitted to the Department identifying the specific date of the transfer of permit responsibility, coverage and liability between the current and the new permittee and a compliance review form has been submitted to, and the permit transfer has been approved by, the Department.

(c) This operating permit is valid only for those specific sources and the specific source locations described in this permit.

**#006 [25 Pa. Code § 127.441 and 35 P.S. § 4008]****Inspection and Entry.**

(a) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Department or authorized representatives of the Department to perform the following:

(1) Enter at reasonable times upon the permittee's premises where a source is located or emissions related activity is conducted, or where records are kept under the conditions of this permit;

(2) Have access to and copy, at reasonable times, any records that are kept under the conditions of this permit;

(3) Inspect at reasonable times, any facilities, equipment including monitoring and air pollution control equipment, practices, or operations regulated or required under this permit;

(4) Sample or monitor, at reasonable times, any substances or parameters, for the purpose of assuring compliance with the permit or applicable requirements as authorized by the Clean Air Act, the Air Pollution Control Act, or the regulations promulgated under the Acts.

(b) Pursuant to 35 P.S. § 4008, no person shall hinder, obstruct, prevent or interfere with the Department or its personnel in the performance of any duty authorized under the Air Pollution Control Act or regulations adopted thereunder including denying the Department access to a source at this facility. Refusal of entry or access may constitute grounds for permit revocation and assessment of criminal and/or civil penalties.

(c) Nothing in this permit condition shall limit the ability of the EPA to inspect or enter the premises of the permittee in accordance with Section 114 or other applicable provisions of the Clean Air Act.

**#007 [25 Pa. Code §§ 127.441 & 127.444]****Compliance Requirements.**

(a) The permittee shall comply with the conditions of this operating permit. Noncompliance with this permit constitutes

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a violation of the Clean Air Act and the Air Pollution Control Act and is grounds for one or more of the following:

- (1) Enforcement action
- (2) Permit termination, revocation and reissuance or modification
- (3) Denial of a permit renewal application

(b) A person may not cause or permit the operation of a source which is subject to 25 Pa. Code Article III unless the source(s) and air cleaning devices identified in the application for the plan approval and operating permit and the plan approval issued for the source is operated and maintained in accordance with specifications in the applications and the conditions in the plan approval and operating permit issued by the Department. A person may not cause or permit the operation of an air contamination source subject to 25 Pa. Code Chapter 127 in a manner inconsistent with good operating practices.

(c) For purposes of Sub-condition (b) of this permit condition, the specifications in applications for plan approvals and operating permits are the physical configurations and engineering design details which the Department determines are essential for the permittee's compliance with the applicable requirements in this State-Only permit. Nothing in this sub-condition shall be construed to create an independent affirmative duty upon the permittee to obtain a predetermination from the Department for physical configuration or engineering design detail changes made by the permittee.

**#008 [25 Pa. Code § 127.441]****Need to Halt or Reduce Activity Not a Defense.**

It shall not be a defense for the permittee in an enforcement action that it was necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

**#009 [25 Pa. Code §§ 127.442(a) & 127.461]****Duty to Provide Information.**

(a) The permittee shall submit reports to the Department containing information the Department may prescribe relative to the operation and maintenance of each source at the facility.

(b) The permittee shall furnish to the Department, in writing, information that the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Department copies of records that the permittee is required to maintain in accordance with this permit.

**#010 [25 Pa. Code § 127.461]****Revising an Operating Permit for Cause.**

This operating permit may be terminated, modified, suspended or revoked and reissued if one or more of the following applies:

- (1) The permittee constructs or operates the source subject to the operating permit so that it is in violation of the Air Pollution Control Act, the Clean Air Act, the regulations thereunder, a plan approval, a permit or in a manner that causes air pollution.
- (2) The permittee fails to properly or adequately maintain or repair an air pollution control device or equipment attached to or otherwise made a part of the source.
- (3) The permittee has failed to submit a report required by the operating permit or an applicable regulation.
- (4) The EPA determines that the permit is not in compliance with the Clean Air Act or the regulations thereunder.

**#011 [25 Pa. Code §§ 127.450 & 127.462]****Operating Permit Modifications**

(a) The permittee is authorized to make administrative amendments, minor operating permit modifications and

**SECTION B. General State Only Requirements**

significant operating permit modifications, under this permit, as outlined below:

(b) Administrative Amendments. The permittee shall make administrative operating permit amendments (as defined in 25 Pa. Code § 127.450(a)), according to procedures specified in § 127.450 unless precluded by the Clean Air Act or its regulations.

(c) Minor Operating Permit Modifications. The permittee shall make minor operating permit modifications (as defined 25 Pa. Code § 121.1) in accordance with 25 Pa. Code § 127.462.

(d) Permit modifications which do not qualify as minor permit modifications under 25 Pa. Code § 127.541 will be treated as a significant operating permit revision subject to the public notification procedures in §§ 127.424 and 127.425.

**#012 [25 Pa. Code § 127.441]****Severability Clause.**

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

**#013 [25 Pa. Code § 127.449]****De Minimis Emission Increases.**

(a) This permit authorizes de minimis emission increases in accordance with 25 Pa. Code § 127.449 so long as the permittee provides the Department with seven (7) days prior written notice before commencing any de minimis emissions increase. The written notice shall:

(1) Identify and describe the pollutants that will be emitted as a result of the de minimis emissions increase.

(2) Provide emission rates expressed in tons per year and in terms necessary to establish compliance consistent with any applicable requirement.

(b) The Department may disapprove or condition de minimis emission increases at any time.

(c) Except as provided below in (d), the permittee is authorized to make de minimis emission increases (expressed in tons per year) up to the following amounts without the need for a plan approval or prior issuance of a permit modification:

(1) Four tons of carbon monoxide from a single source during the term of the permit and 20 tons of carbon monoxide at the facility during the term of the permit.

(2) One ton of NO<sub>x</sub> from a single source during the term of the permit and 5 tons of NO<sub>x</sub> at the facility during the term of the permit.

(3) One and six-tenths tons of the oxides of sulfur from a single source during the term of the permit and 8.0 tons of oxides of sulfur at the facility during the term of the permit.

(4) Six-tenths of a ton of PM<sub>10</sub> from a single source during the term of the permit and 3.0 tons of PM<sub>10</sub> at the facility during the term of the permit. This shall include emissions of a pollutant regulated under Section 112 of the Clean Air Act unless precluded by the Clean Air Act, the regulations thereunder or 25 Pa. Code Article III.

(5) One ton of VOCs from a single source during the term of the permit and 5.0 tons of VOCs at the facility during the term of the permit. This shall include emissions of a pollutant regulated under Section 112 of the Clean Air Act unless precluded by the Clean Air Act, the regulations thereunder or 25 Pa. Code Article III.

(6) Other sources and classes of sources determined to be of minor significance by the Department.

(d) In accordance with § 127.14, the permittee is authorized to install the following minor sources without the need for a plan approval or permit modification:



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(1) Air conditioning or ventilation systems not designed to remove pollutants generated or released from other sources.

(2) Combustion units rated at 2,500,000 or less Btu per hour of heat input.

(3) Combustion units with a rated capacity of less than 10,000,000 Btu per hour heat input fueled by natural gas supplied by a public utility or by commercial fuel oils which are No. 2 or lighter, viscosity less than or equal to 5.82 c St, and which meet the sulfur content requirements of 25 Pa. Code §123.22 (relating to combustion units). For purposes of this permit, commercial fuel oil shall be virgin oil which has no reprocessed, recycled or waste material added.

(4) Space heaters which heat by direct heat transfer.

(5) Laboratory equipment used exclusively for chemical or physical analysis.

(6) Other sources and classes of sources determined to be of minor significance by the Department.

(e) This permit does not authorize de minimis emission increases if the emissions increase would cause one or more of the following:

(1) Increase the emissions of a pollutant regulated under Section 112 of the Clean Air Act except as authorized in Subparagraphs (c)(4) and (5) of this permit condition.

(2) Subject the facility to the prevention of significant deterioration requirements in 25 Pa. Code Chapter 127, Subchapter D and/or the new source review requirements in Subchapter E.

(3) Violate any applicable requirement of this permit, the Air Pollution Control Act, the Clean Air Act, or the regulations promulgated under either of the acts.

(f) Emissions authorized under this permit condition shall be included in the monitoring, recordkeeping and reporting requirements of this permit.

(g) Except for de minimis emission increases, installation of minor sources made pursuant to this permit condition and Plan Approval Exemptions under 25 Pa. Code § 127.14 (relating to exemptions), the permittee is prohibited from making changes or engaging in activities that are not specifically authorized under this permit without first applying for a plan approval. In accordance with § 127.14(b), a plan approval is not required for the construction, modification, reactivation, or installation of the sources creating the de minimis emissions increase.

(h) The permittee may not meet de minimis emission threshold levels by offsetting emission increases or decreases at the same source.

**#014 [25 Pa. Code § 127.3]****Operational Flexibility.**

The permittee is authorized to make changes within the facility in accordance with the regulatory provisions outlined in 25 Pa. Code § 127.3 (relating to operational flexibility) to implement the operational flexibility requirements provisions authorized under Section 6.1(i) of the Air Pollution Control Act and the operational flexibility terms and conditions of this permit. The provisions in 25 Pa. Code Chapter 127 which implement the operational flexibility requirements include the following:

(1) Section 127.14 (relating to exemptions)

(2) Section 127.447 (relating to alternative operating scenarios)

(3) Section 127.448 (relating to emissions trading at facilities with Federally enforceable emissions caps)

(4) Section 127.449 (relating to de minimis emission increases)

(5) Section 127.450 (relating to administrative operating permit amendments)

**SECTION B. General State Only Requirements**

(6) Section 127.462 (relating to minor operating permit modifications)

(7) Subchapter H (relating to general plan approvals and general operating permits)

**#015 [25 Pa. Code § 127.11]****Reactivation**

(a) The permittee may not reactivate a source that has been out of operation or production for at least one year unless the reactivation is conducted in accordance with a plan approval granted by the Department or in accordance with reactivation and maintenance plans developed and approved by the Department in accordance with 25 Pa. Code § 127.11a(a).

(b) A source which has been out of operation or production for more than five (5) years but less than 10 years may be reactivated and will not be considered a new source if the permittee satisfies the conditions specified in 25 Pa. Code § 127.11a(b).

**#016 [25 Pa. Code § 127.36]****Health Risk-based Emission Standards and Operating Practice Requirements.**

(a) When needed to protect public health, welfare and the environment from emissions of hazardous air pollutants from new and existing sources, the permittee shall comply with the health risk-based emission standards or operating practice requirements imposed by the Department, except as precluded by §§ 6.6(d)(2) and (3) of the Air Pollution Control Act [35 P.S. § 4006.6(d)(2) and (3)].

(b) A person challenging a performance or emission standard established by the Department has the burden to demonstrate that performance or emission standard does not meet the requirements of Section 112 of the Clean Air Act.

**#017 [25 Pa. Code § 121.9]****Circumvention.**

No person may permit the use of a device, stack height which exceeds good engineering practice stack height, dispersion technique or other technique which, without resulting in reduction of the total amount of air contaminants emitted, conceals or dilutes an emission of air contaminants which would otherwise be in violation of 25 Pa. Code Article III, except that with prior approval of the Department, the device or technique may be used for control of malodors.

**#018 [25 Pa. Code §§ 127.402(d) & 127.442]****Reporting Requirements.**

(a) The permittee shall comply with the applicable reporting requirements of the Clean Air Act, the regulations thereunder, the Air Pollution Control Act and 25 Pa. Code Article III including Chapters 127, 135 and 139.

(b) The permittee shall submit reports to the Department containing information the Department may prescribe relative to the operation and maintenance of any air contamination source.

(c) Reports, test data, monitoring data, notifications and requests for renewal of the permit shall be submitted to the:

Regional Air Program Manager  
PA Department of Environmental Protection  
(At the address given in the permit transmittal letter, or otherwise notified)

(d) Any records or information including applications, forms, or reports submitted pursuant to this permit condition shall contain a certification by a responsible official as to truth, accuracy and completeness. The certifications submitted under this permit shall require a responsible official of the facility to certify that based on information and belief formed after reasonable inquiry, the statements and information in the documents are true, accurate and complete.

(e) Any records, reports or information submitted to the Department shall be available to the public except for such

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records, reports or information which meet the confidentiality requirements of § 4013.2 of the Air Pollution Control Act and §§ 112(d) and 114(c) of the Clean Air Act. The permittee may not request a claim of confidentiality for any emissions data generated for the facility.

**#019 [25 Pa. Code §§ 127.441(c) & 135.5]****Sampling, Testing and Monitoring Procedures.**

(a) The permittee shall comply with the monitoring, recordkeeping or reporting requirements of 25 Pa. Code Chapter 139 and the other applicable requirements of 25 Pa. Code Article III and additional requirements related to monitoring, reporting and recordkeeping required by the Clean Air Act and the regulations thereunder including the Compliance Assurance Monitoring requirements of 40 CFR Part 64, where applicable.

(b) Unless alternative methodology is required by the Clean Air Act and regulations adopted thereunder, sampling, testing and monitoring required by or used by the permittee to demonstrate compliance with any applicable regulation or permit condition shall be conducted in accordance with the requirements of 25 Pa. Code Chapter 139.

**#020 [25 Pa. Code §§ 127.441(c) and 135.5]****Recordkeeping.**

(a) The permittee shall maintain and make available, upon request by the Department, the following records of monitored information:

- (1) The date, place (as defined in the permit) and time of sampling or measurements.
- (2) The dates the analyses were performed.
- (3) The company or entity that performed the analyses.
- (4) The analytical techniques or methods used.
- (5) The results of the analyses.
- (6) The operating conditions as existing at the time of sampling or measurement.

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

(c) 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, recordkeeping and emission statement requirements in 25 Pa. Code Chapter 135 (relating to reporting of sources). In accordance with 25 Pa. Code Chapter 135, § 135.5, 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.

**#021 [25 Pa. Code § 127.441(a)]****Property Rights.**

This permit does not convey any property rights of any sort, or any exclusive privileges.

**#022 [25 Pa. Code § 127.447]****Alternative Operating Scenarios.**

The permittee is authorized to make changes at the facility to implement alternative operating scenarios identified in this permit in accordance with 25 Pa. Code § 127.447.

**SECTION C. Site Level Requirements****I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §123.1]****Prohibition of certain fugitive emissions**

No person may permit the emission into the outdoor atmosphere of a fugitive air contaminant from a source other than the following:

- (1) Construction or demolition of buildings or structures.
- (2) Grading, paving and maintenance of roads and streets.
- (3) Use of roads and streets. Emissions from material in or on trucks, railroad cars and other vehicular equipment are not considered as emissions from use of roads and streets.
- (4) Clearing of land.
- (5) Stockpiling of materials.
- (6) Open burning operations.
- (7) Sources and classes of sources other than those identified above, for which the permittee has obtained a determination from the Department that fugitive emissions from the source, after appropriate control, meet the following requirements:

(a) The emissions are of minor significance with respect to causing air pollution.

(b) The emissions are not preventing or interfering with the attainment or maintenance of any ambient air quality standard.

**# 002 [25 Pa. Code §123.2]****Fugitive particulate matter**

No person may permit fugitive particulate matter to be emitted into the outdoor atmosphere from a source specified in Section C, Condition #001 if the emissions are visible at the point the emissions pass outside the person's property.

**# 003 [25 Pa. Code §123.31]****Limitations**

A person may not permit the emission into the outdoor atmosphere of any malodorous air contaminants from any source in a manner that the malodors are detectable outside the property of the person on whose land the source is being operated

**# 004 [25 Pa. Code §123.41]****Limitations**

A person may not permit the emission into the outdoor atmosphere of visible air contaminants in such a manner that the opacity of the emission is either of the following:

- (a) Equal to or greater than 20% for a period or periods aggregating more than three minutes in any 1 hour.
- (b) Equal to or greater than 60% at any time.

**# 005 [25 Pa. Code §123.42]****Exceptions**

The emission limitations of 25 Pa. Code Section 123.41 shall not apply when:

- (a) The presence of uncombined water is the only reason for failure of the emission to meet the limitations;
- (b) The emission results from the operation of equipment used solely to train and test persons in observing the opacity of visible emissions;
- (c) The emission results from sources specified in 25 Pa. Code Section 123.1(a)(1)-(9).

**# 006 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The facilities annual emission shall be limited to less than 50 tons of Volatile Organic Compounds (VOC's); less than 10 tons of individual Hazardous Air Pollutants (HAP's); and less than 25 tons of combined Hazardous Air Pollutants (HAP's). The facility shall update the facilities emissions on a monthly basis and calculate the annual emissions based on a 12-month rolling sum.

**# 007 [25 Pa. Code §129.14]****Open burning operations**

- (a) The permittee may not permit the open burning of material in an air basin.

**SECTION C. Site Level Requirements**

(b) Exceptions. The requirements above do not apply where the open burning operations result from a fire set for either of the following reasons:

- (1) to prevent or abate a fire hazard, when approved by the Department and set by or under the supervision of a public officer.
- (2) to instruct personnel in fire fighting, when approved by the Department.
- (3) for the prevention and control of disease or pests, when approved by the Department.
- (4) in conjunction with the production of agricultural commodities in their unmanufactured state on the premises of the farm operation.
- (5) for the burning of domestic refuse, when the fire is on the premises of a structure occupied solely as a dwelling by two families or less and when the refuse results from the normal occupancy of the structure.
- (6) for recreational or ceremonial purposes.
- (7) solely for cooking food.

(c) This permit does not constitute authorization to burn solid waste pursuant to Section 610(3) of the Solid Waste management Act, 35 P.S. Section 6018.610(3), or any other provision of the Solid Waste Management Act.

**II. TESTING REQUIREMENTS.****# 008 [25 Pa. Code §139.1]****Sampling facilities.**

Upon the request of the Department, the permittee shall provide adequate sampling ports, safe sampling platforms and adequate utilities for the performance by the Department of tests on such source. The Department will set forth, in the request, the time period in which the facilities shall be provided as well as the specifications for such facilities.

**# 009 [25 Pa. Code §139.11]****General requirements.**

(a) As specified in 25 Pa. Code Section 139.11(1), performance tests shall be conducted while the source is operating at maximum routine operating conditions or under such other conditions, within the capacity of the equipment, as may be requested by the Department.

(b) As specified in 25 Pa. Code Section 139.11(2), the Department will consider test results for approval where sufficient information is provided to verify the source conditions existing at the time of the test and where adequate data is available to show the manner in which the test was conducted. Information submitted to the Department shall include, as a minimum, all of the following:

- (1) A thorough source description, including a description of any air cleaning devices and the flue.
- (2) Process conditions, for example, the charging rate of raw material or rate of production of final product, boiler pressure, oven temperature and other conditions which may effect emissions from the process.
- (3) The location of sampling ports.
- (4) Effluent characteristics, including velocity, temperature, moisture content, gas density (percentage of CO, CO<sub>2</sub>, O<sub>2</sub> and N<sub>2</sub>), static and barometric pressures.
- (5) Sample collection techniques employed, including procedures used, equipment descriptions and data to verify that isokinetic sampling for particulate matter collection occurred and that acceptable test conditions were met.
- (6) Laboratory procedures and results.
- (7) Calculated results.

**III. MONITORING REQUIREMENTS.****# 010 [25 Pa. Code §123.43]****Measuring techniques**

Visible emissions may be measured using either of the following:

- (a) A device approved by the Department and maintained to provide accurate opacity measurements.
- (b) Observers, trained and qualified, to measure plume opacity with the naked eye or with the aid of any devices approved

**SECTION C. Site Level Requirements**

by the Department.

(c) Visible emissions may be measured according to the methods specified above, or alternatively, plant personnel who observe any visible emissions will report the incident of the visible emissions to the Department within four hours of each incident and make arrangements for a certified observer to verify the opacity of the visible emissions.

**# 011 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall conduct weekly inspections of this facility to determine the presence of fugitive and malodorous air emissions detectable beyond the boundaries of this facility.

**IV. RECORDKEEPING REQUIREMENTS.****# 012 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall maintain a file containing all records and other data that are required to be collected pursuant to the various provisions of this operating permit. The file shall include, but not be limited to: all air pollution control systems performance evaluations and records of calibration checks, adjustments and maintenance performed on all equipment which is subject to this operating permit. All measurement, records and other data required to be maintained by the permittee shall be retained for at least five years following the date on which such measurements, records or data are recorded. The permittee shall maintain a record of the results of the facility odor and fugitive emission inspections.

**V. REPORTING REQUIREMENTS.****# 013 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

1) The company, within one hour of occurrence, shall notify the Department, at 610-861-2070, of any malfunction of the source(s) or associated air cleaning device(s) which results in, or may possibly be resulting in, the emission of air contaminants in excess of the limitations specified in, or established pursuant to, any applicable rule or regulation contained in Article III of the Rules and Regulations of the Department of Environmental Protection. A written report shall be submitted to the Department within two working days following the incident describing the malfunctions and corrective actions taken.

2) Any changes in the location of the aforementioned source, or any changes in the process or control equipment would be consider a modification and would require the submittal of an amended application for plan approval in accordance with the provisions of 25 PA Code 127.11 and 127.12.

3) Any notification as a result of any condition herein should be directed to:

Air Quality Program Manager  
Department of Environmental Protection  
2 Public Square  
Wilkes-Barre, PA 18701-1915

**VI. WORK PRACTICE REQUIREMENTS.****# 014 [25 Pa. Code §123.1]****Prohibition of certain fugitive emissions**

For any source specified in Section C, Condition #001, the permittee shall take all reasonable actions to prevent particulate matter from becoming airborne. These actions shall include, but not be limited to, the following:

(a) Use, where possible, of water or chemicals for control of dust in the demolition of buildings or structures, construction operations, the grading of roads or the clearing of land.

(b) Application of asphalt, oil, or suitable chemicals on dirt roads, material stockpiles and other surfaces which may give rise to airborne dusts.

(c) Paving and maintenance of roadways.

(d) Prompt removal of earth or other material from paved streets onto which earth or other material has been transported by

**SECTION C. Site Level Requirements**

trucking or earth moving equipment, erosion by water, or other means.

**VII. ADDITIONAL REQUIREMENTS.**

**# 015 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

(a) If at any time the Department has cause to believe that air contaminant emissions from the sources at this facility may be in excess of the limitations specified in, or established pursuant to, any applicable rule or regulation contained in Article III of the Rules and Regulations of the Department of Environmental Protection, the permittee shall be required to conduct whatever tests are deemed necessary by the Department to determine the actual emission rate(s). Such testing shall be conducted in accordance with the revisions of Chapter 139 of the Rules and Regulations of the Department, where applicable, and in accordance with any restrictions or limitations established by the Department at such time as it notifies the permittee that testing is required.

(b) The permittee shall maintain and operate the air pollution control equipment and sources at this facility in accordance with good engineering practice.

**VIII. COMPLIANCE CERTIFICATION.**

No additional compliance certifications exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

**IX. COMPLIANCE SCHEDULE.**

No compliance milestones exist.

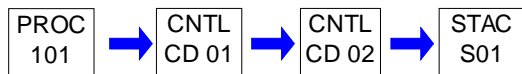
**SECTION D. Source Level Requirements**

Source ID: 101

Source Name: REACTION CHAMBER A

Source Capacity/Throughput:

Conditions for this source occur in the following groups: GROUP 1

**I. RESTRICTIONS.****Emission Restriction(s).**

# 001 [25 Pa. Code §123.13]

**Processes**

No person may permit the emission into the outdoor atmosphere of particulate matter in a manner that the concentration of particulate matter in the effluent gas exceeds .04 grains per dry standard cubic foot.

**II. TESTING REQUIREMENTS.**

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**III. MONITORING REQUIREMENTS.**

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**IV. RECORDKEEPING REQUIREMENTS.**

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**V. REPORTING REQUIREMENTS.**

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**VII. ADDITIONAL REQUIREMENTS.**

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).



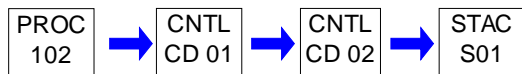
**SECTION D. Source Level Requirements**

Source ID: 102

Source Name: REACTION CHAMBER B

Source Capacity/Throughput:

Conditions for this source occur in the following groups: GROUP 1

**I. RESTRICTIONS.****Emission Restriction(s).**

# 001 [25 Pa. Code §123.13]

**Processes**

No person may permit the emission into the outdoor atmosphere of particulate matter in a manner that the concentration of particulate matter in the effluent gas exceeds .04 grains per dry standard cubic foot.

**II. TESTING REQUIREMENTS.**

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**III. MONITORING REQUIREMENTS.**

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**IV. RECORDKEEPING REQUIREMENTS.**

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**V. REPORTING REQUIREMENTS.**

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**VII. ADDITIONAL REQUIREMENTS.**

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

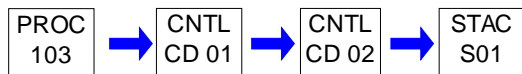
**SECTION D. Source Level Requirements**

Source ID: 103

Source Name: REACTION CHAMBER C

Source Capacity/Throughput:

Conditions for this source occur in the following groups: GROUP 1

**I. RESTRICTIONS.****Emission Restriction(s).**

# 001 [25 Pa. Code §123.13]

**Processes**

No person may permit the emission into the outdoor atmosphere of particulate matter in a manner that the concentration of particulate matter in the effluent gas exceeds .04 grains per dry standard cubic foot.

**II. TESTING REQUIREMENTS.**

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**III. MONITORING REQUIREMENTS.**

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**IV. RECORDKEEPING REQUIREMENTS.**

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**V. REPORTING REQUIREMENTS.**

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**VII. ADDITIONAL REQUIREMENTS.**

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

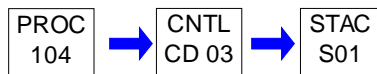
**SECTION D. Source Level Requirements**

Source ID: 104

Source Name: FLUORINE CELL AREA EC1 AND EC2

Source Capacity/Throughput:

Conditions for this source occur in the following groups: GROUP 1

**I. RESTRICTIONS.****Emission Restriction(s).**

# 001 [25 Pa. Code §123.13]

**Processes**

No person may permit the emission into the outdoor atmosphere of particulate matter in a manner that the concentration of particulate matter in the effluent gas exceeds .04 grains per dry standard cubic foot.

**II. TESTING REQUIREMENTS.**

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**III. MONITORING REQUIREMENTS.**

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**IV. RECORDKEEPING REQUIREMENTS.**

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**V. REPORTING REQUIREMENTS.**

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**VII. ADDITIONAL REQUIREMENTS.**

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**SECTION E. Source Group Restrictions.**

Group Name: GROUP 1

Group Description: REACTION CHAMBERS

Sources included in this group

ID	Name
101	REACTION CHAMBER A
102	REACTION CHAMBER B
103	REACTION CHAMBER C
104	FLUORINE CELL AREA EC1 AND EC2
CD 01	ACTIVATED ALUMINA SCRUBBING TOWER 1
CD 02	ACTIVATED ALUMINA SCRUBBING TOWER 2
CD 03	ACTIVATED ALUMINA SCRUBBING TOWER 3

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

Pursuant to best available technology requirement of Chapter 127.12 (a) (5) the facility is subject to the following air contaminant emission limitations from process equipment.

- a. Hydrogen Fluoride (HF)- 0.138 lb/hr, 0.312 tons/yr
- b. Fluorine (F2) - 0.104 lb/hr, 0.145 tons/yr.

**II. TESTING REQUIREMENTS.****# 002 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

If at any time the Department has cause to believe that air contaminant emissions from the aforementioned source(s) may be in excess of the limitations specified in, or established pursuant to, any applicable rule or regulation contained in Article III of the Rules and Regulations of the Department of Environmental Protection, the company shall be required to conduct whatever tests are deemed necessary by the Department to determine the actual emission rate(s). Such testing shall be conducted in accordance with the provision of Chapter 139 of the Rules and Regulations of the Department of Environmental Protection, where applicable, and in accordance with any restrictions or limitations established by the Department at such time as it notified the company that testing is required.

**# 003 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

1. Annually, a stack test shall be performed in accordance with the provision of Chapter 139 of the Rules and Regulations of the Department of Environmental Protection & 40 CFR part 60, to demonstrate the compliance with the emission limitations set by the condition above for HF emissions. The Permittee is required to conduct annual performance tests however, if two consecutive performance tests indicate the emissions below 50% of the emissions limitation for HF, the Permittee may not perform any more tests during the remainder of the permit term. The stack tests shall be performed while the aforementioned sources are operating at the maximum rated capacity as stated on the application. If testing is performed at a rate of less than full production, operation is restricted to the process-input rate of testing at such level until a subsequent compliance test is performed at a full production.

2. At least sixty (60) calendar days prior to commencing an emission testing program required by this permit, a test protocol shall be submitted to the Department's Division of Source Testing and Monitoring and the Regional Office for review and approval. The test protocol shall meet all applicable requirements specified in the most current version of the Department's Source Testing Manual.

3. At least fifteen (15) calendar days prior to commencing an emission testing program required by this permit, written notification of the date and time of testing shall be provided to the Department's appropriate Regional Office. Written notification shall also be sent to the Department's Bureau of Air Quality, Division of Source Testing and Monitoring. The notification shall not be made without prior receipt of a protocol acceptance letter from the Department. The Department is under no obligation to accept the results of any testing performed without adequate advance written notice to the Department of such testing. In addition, the emissions testing shall not commence prior to receipt of a protocol acceptance

**SECTION E. Source Group Restrictions.**

letter from the Department.

4. A complete test report shall be submitted to the Department no later than sixty (60) calendar days after completion of the on-site testing portion of an emission test program.

5. A complete test report shall include a summary of the emission results on the first page of the report indicating if each pollutant measured is within permitted limits and a statement of compliance or non-compliance with all applicable permit conditions. The summary results will include, at a minimum, the following information:

- a. A statement that the owner or operator has reviewed the report from the emissions testing body and agrees with the findings;
- b. Permit number(s) and condition(s) which are the basis for the evaluation;
- c. Summary of results with respect to each applicable permit condition; and
- d. Statement of compliance or non-compliance with each applicable permit condition.

**III. MONITORING REQUIREMENTS.**

**# 004 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

The company shall replace the alumina in the H2 scrubber on or before the operation of H2 cells reaches at 1,452,941 amps-hours.

**# 005 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

The company shall replace the alumina of fluorination reactors scrubbers on or before cumulative pressure changes in the associated reactors reaches 4,038 mm Hg.

**# 006 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

The permittee shall, at a minimum, on a monthly basis perform audible, visual, and olfactory (AVO) inspections to detect leaks from the process equipment.

**# 007 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

The permittee shall implement and maintain a program for leak detection and repair for process piping and equipment used in the fluorination process. Corrective actions taken to repair leaks shall be recorded and made available to the Department upon request. A copy of the leak detection program shall be made available to the Department upon request.

**# 008 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

The permittee shall monitor and record the usage of fluorine in the fluorination reactors for each batch.

**# 009 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

The permittee shall annually calibrate the flow monitoring system in accordance with manufacture's specifications and instructions. The Permittee shall maintain records of the calibrations, and corrective actions taken, if any.

**IV. RECORDKEEPING REQUIREMENTS.**

**# 010 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

The company shall monitor and record the pressure achieved for each batch processed, and the cumulative pressure for the train of reactors associated with the set of alumina towers.

**# 011 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

The permittee shall keep records of HF & F2 used each month, and the rolling 12-month total of HF & F2 used.

**SECTION E. Source Group Restrictions.****# 012 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall maintain records of daily amp-hours, and cumulative amp-hours for hydrogen cells between each alumina change for the packed bed scrubber for electrolytic cells. These records shall be kept for five years and made available to Department personnel upon request.

**V. REPORTING REQUIREMENTS.**

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**VI. WORK PRACTICE REQUIREMENTS.****# 013 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall maintain the type(s) and quantity(s) of clean-up solvent(s) used at the facility. These records shall also include, at a minimum, the VOC and HAP's content of the solvent(s).

**# 014 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall install, operate and maintain an amperage meter for the electrolytic cells to continuously monitor the amperage input to the cells.

**# 015 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall perform annual calibration on the amperage meter in accordance with Manufacture's specifications and instructions. The Permittee shall maintain records of the calibrations, and corrective actions taken, if any.

**VII. ADDITIONAL REQUIREMENTS.**

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).



**SECTION F. Alternative Operation Requirements.**

No Alternative Operations exist for this State Only facility.



**SECTION G. Emission Restriction Summary.**

No emission restrictions listed in this section of the permit.



**SECTION H. Miscellaneous.**

(a) The Department received the operating application for this facility on 8/28/2019. The annual operating permit administrative fee shall be submitted to the Department in accordance with 25 Pa. Code, Chapter 127, Section 127.703. The fee is due 30 days prior to the anniversary date of the issuance of the permit.

(b) Plan Approvals include:  
39-00090A



\*\*\*\*\* End of Report \*\*\*\*\*

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