

PERMIT NO. 2843-015-0142-B-01-0

ISSUANCE DATE: 7-24-2020



# GEORGIA

DEPARTMENT OF NATURAL RESOURCES

## ENVIRONMENTAL PROTECTION DIVISION

### Air Quality Permit

In accordance with the provisions of the Georgia Air Quality Act, O.C.G.A. Section 12-9-1, et seq and the Rules, Chapter 391-3-1, adopted pursuant to and in effect under that Act,

**Facility Name:** Innovative Chemical Technologies, Inc.  
**Facility Address:** 103 Walnut Grove Road  
Cartersville, Georgia 30120 Bartow County  
**Mailing Address:** 8 Riverside Drive  
Cartersville, Georgia 30120  
**Facility AIRS Number:** 04-13-015-00142

is issued a Permit for the following:

#### Operation of a chemical manufacturing and mixing facility.

This Permit is conditioned upon compliance with all provisions of The Georgia Air Quality Act, O.C.G.A. Section 12-9-1, et seq, the Rules, Chapter 391-3-1, adopted and in effect under that Act, or any other condition of this Permit.

This Permit may be subject to revocation, suspension, modification or amendment by the Director for cause including evidence of noncompliance with any of the above; or for any misrepresentation made in Application No. 27375 dated December 18, 2019 any other applications upon which this Permit is based; supporting data entered therein or attached thereto; or any subsequent submittals or supporting data; or for any alterations affecting the emissions from this source.

This Permit is further subject to and conditioned upon the terms, conditions, limitations, standards, or schedules contained in or specified on the attached 5 pages.



Richard E. Dunn, Director  
Environmental Protection Division

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**1. General Requirements**

- 1.1 At all times, including periods of startup, shutdown, and malfunction, the Permittee shall maintain and operate this source, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection or surveillance of the source.
- 1.2 The Permittee shall not build, erect, install or use any article, machine, equipment or process the use of which conceals an emission which would otherwise constitute a violation of an applicable emission standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard that is based on the concentration of a pollutant in the gases discharged into the atmosphere.
- 1.3 The Permittee shall submit a Georgia Air Quality Permit application to the Division prior to the commencement of any modification, as defined in 391-3-1-.01(pp), which may result in air pollution and which is not exempt under 391-3-1-.03(6). Such application shall be submitted sufficiently in advance of any critical date involved to allow adequate time for review, discussion, or revision of plans, if necessary. The application shall include, but not be limited to, information describing the precise nature of the change, modifications to any emission control system, production capacity and pollutant emission rates of the plant before and after the change, and the anticipated completion date of the change.
- 1.4 Unless otherwise specified, all records required to be maintained by this Permit shall be recorded in a permanent form suitable for inspection and submission to the Division and shall be retained for at least five (5) years following the date of entry.
- 1.5 In cases where conditions of this Permit conflict with each other for any particular source or operation, the most stringent condition shall prevail.

**2. Allowable Emissions**

- 2.1 The Permittee shall limit manufacture of the non-ionic surfactants using ethylene oxide products to no more than 60 batches during any consecutive 12-month period.  
[Georgia Rule 391-3-1-.02(2)(a)(3)(ii)]
- 2.2 The Permittee shall use no more than 1,400 pounds of ethylene oxide in the manufacture of each batch of non-ionic surfactant product using ethylene oxide.  
[Georgia Rule 391-3-1-.02(2)(a)(3)(ii)]
- 2.3 The Permittee shall comply with all applicable provisions of 40 CFR 63 Subpart VVVVVV – “National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Areas Sources” for operation of the Flexipel Product Series processes.  
[40 CFR 63.11494]

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- 2.4 The Permittee shall comply with all applicable provisions of the National Emission Standard for Hazardous Air Pollutants as found in 40 CFR 63 Subpart A – “General Provisions” for the operation of the Flexipel Product Series processes, except as specified by 40 CFR 63.11501(a).  
[40 CFR 63 Subpart A]
- 2.5 For 40 CFR 63 Subpart VVVVVV, at all times, the Permittee must operate and maintain any affected chemical manufacturing process unit (CMPU), including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator, which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the CMPU.  
[40 CFR 63.11495(d)]
- 2.6 The Permittee shall not discharge, or cause the discharge, into the atmosphere, from all process equipment, any gases which exhibit visible emissions, the opacity of which is equal to or greater than 40 percent, unless otherwise specified.  
[391-3-1-.02(2)(b)1.]
- 2.7 The Permittee shall not cause, let, suffer, permit, or allow the emission from any source, particulate matter (PM) in total quantities equal to or exceeding the allowable rate as calculated using the applicable equation below, unless otherwise specified in this Permit.  
[391-3-1-.02(2)(e)1.]
- a.  $E = 4.1P^{0.67}$ , for process input weight rate up to and including 30 tons per hour;
- b.  $E = 55P^{0.11} - 40$ , for process input weight rate in excess of 30 tons per hour.

Where:

E = allowable emission rate in pounds per hour;  
P = process input weight rate in tons per hour.

- 2.8 The Permittee may not transfer or cause or allow the transfer of any volatile organic liquid other than gasoline from any delivery vessel into a stationary storage tank of greater than 4,000 gallons unless the tank is equipped with submerged fill pipes.  
[391-3-1-.02(2)(vv)1]

**3. Fugitive Emissions**

- 3.1 The Permittee shall take all reasonable precautions with any operation, process, handling, transportation, or storage facilities to prevent fugitive emissions of air contaminants.

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**4. Process & Control Equipment**

Not Applicable.

**5. Monitoring**

- 5.1 Any monitoring system or device installed by the Permittee shall be in continuous operation except during calibration checks, zero and span adjustments or periods of repair. Maintenance or repair shall be conducted in the most expedient manner to minimize the period during which the system is out of service.
- 5.2 The Permittee shall develop, implement, and maintain an ethylene oxide Leak Detection and Repair Program for the handling and operation of the ethylene oxide cylinders, ethylene oxide fittings, and Reactor No. 11 (Source Code R-11). The program, and any modifications to the program, shall be subject to review and approval by the Division. The initial copy of the program shall be submitted to the Division, in writing, no later than 60 following the date of issuance of this permit.  
[Georgia Rule 391-3-1-.02(2)(a)(3)(ii)]

**6. Performance Testing**

- 6.1 The Permittee shall cause to be conducted a performance test at any specified emission point when so directed by the Division. The following provisions shall apply with regard to such tests:
- a. All tests shall be conducted and data reduced in accordance with applicable procedures and methods specified in the Division's Procedures for Testing and Monitoring Sources of Air Pollutants.
  - b. All test results shall be submitted to the Division within sixty (60) days of the completion of testing.
  - c. The Permittee shall provide the Division thirty (30) days prior written notice of the date of any performance test(s) to afford the Division the opportunity to witness and/or audit the test, and shall provide with the notification a test plan in accordance with Division guidelines.
  - d. All monitoring systems and/or monitoring devices required by the Division shall be installed, calibrated and operational prior to conducting any performance test(s). For any performance test, the Permittee shall, using the monitoring systems and/or monitoring devices, acquire data during each performance test run. All monitoring system and/or monitoring device data acquired during the performance testing shall be submitted with the performance test results.

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**7. Notification, Reporting and Record Keeping Requirements**

- 7.1 The Permittee shall maintain records of the number of non-ionic surfactant product using ethylene oxide batches produced each day. The records shall include the date and time the batch was initiated, the amount of ethylene oxide used, and the date and time the batch was complete. The Permittee shall maintain these records on site at all times in a format suitable and available for inspection by or submittal to the Division on request.  
[391-3-1-.02(6)(b)1.]
- 7.2 The Permittee shall use the batch records specified in Condition 7.1 to calculate the total number of batches of non-ionic surfactant product using ethylene oxide produced each calendar month. All demonstration calculations shall be kept as part of the records required in this condition. The Permittee shall notify the Division in writing if batch production exceeds five (5) batches during any calendar month. This notification shall be postmarked by the fifteenth day of the following month and shall include an explanation of how the Permittee intends to maintain compliance with the limit in Condition 2.1. The Permittee shall maintain these records on site at all times in a format suitable and available for inspection by or submittal to the Division on request.  
[391-3-1-.02(6)(b)1.]
- 7.3 The Permittee shall use the calculations required by Condition 7.2 to determine the 12-month rolling total number of batches of non-ionic surfactant product using ethylene oxide produced each calendar month. The Permittee shall notify the Division in writing if the number of batches exceeds 60 during any consecutive 12-month period. This notification shall be postmarked by the fifteenth day of the following month and shall include an explanation of how the Permittee intends to attain compliance with the limit in Condition 2.1. The Permittee shall maintain these records on site at all times in a format suitable and available for inspection by or submittal to the Division on request.  
[391-3-1-.02(6)(b)1.]
- 7.4 The Permittee shall notify the Division in writing if the amount of ethylene oxide used in a non-ionic surfactant product batch, during any month, is in excess of 1,400 pounds. This notification shall be postmarked by the fifteenth day of the following month and shall include an explanation of how the Permittee intends to attain compliance with Condition 2.2. The Permittee shall maintain these records on site at all times in a format suitable and available for inspection by or submittal to the Division on request.  
[391-3-1-.02(6)(b)1.]
- 7.5 The Permittee shall submit an annual report, in writing, covering the period of January 1 to December 31 of each year. The report shall be postmarked by February 28 of each year and shall contain the following information:  
[391-3-1-.02(6)(b)1.]
- a. The total amount of ethylene oxide used (pounds) in each batch of non-ionic surfactant product during the reporting period.

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- b. The consecutive 12-month total number of batches of non-ionic surfactant product using ethylene oxide for each month in the reporting period.
  - c. Actual facility wide emissions of ethylene oxide (in pounds) for each month during the reporting period. All emission factors and calculations shall be kept as part of the record, readily available for inspection or submittal.
  - d. Total facility wide emissions of ethylene oxide (in pounds) for each consecutive 12-month period in the reporting period. All emission factors and calculations shall be kept as part of the record, readily available for inspection or submittal.
- 7.6 Any spill or unpermitted release of ethylene oxide at the facility, regardless of the amount of the release, shall be reported to the Air Protection Branch by email within 24 hours of discovering such spill or release. As used in this condition, the term “spill or release” shall have the same meaning as set forth in The Georgia Air Quality Act O.C.G.A. § 12-14-1. The report shall describe (1) the release, (2) its causes, (3) the estimated amount of ethylene oxide released, and (4) the steps taken to contain it.  
[Georgia Rule 391-3-1-.02(2)(a)(3)(ii)]
- 7.7 The Permittee shall maintain files of all information required by 40 CFR 63 Subpart VVVVVV for at least 5 years following the date of each occurrence according to the requirements in 40 CFR 63.10(b)(1).  
[40 CFR 63.11501(c)]
- 7.8 The Permittee shall submit semiannual compliance reports that contain information specified in 40 CFR 63.11501(d) for the operation of the Flexipel Product Series processes as required by 40 CFR 63 Subpart VVVVVV. Reports are required only for semiannual periods during which the Permittee experienced any of the events described in 40 CFR 63.11501(d). The reports shall be postmarked by August 29 and February 28, respectively following each reporting period.  
[40 CFR 63.11501(d)]

**8. Special Conditions**

- 8.1 At any time that the Division determines that additional control of emissions from the facility may reasonably be needed to provide for the continued protection of public health, safety and welfare, the Division reserves the right to amend the provisions of this Permit pursuant to the Division's authority as established in the Georgia Air Quality Act and the rules adopted pursuant to that Act.