



**STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR RESOURCES**

OPERATING PERMIT

CLARIANT CORPORATION

(Wastewater Treatment Plant – Part 6 of 6)

PERMIT NO. RI-45-06

(Expiration date: October 13, 2011)

Pursuant to the provisions of Air Pollution Control Regulation No. 29, this operating permit is issued to:

Clariant Corporation
500 Washington Street
Coventry, RI 02816

This permit shall be effective from the date of its issuance. All terms and conditions of the permit are enforceable by EPA and citizens under the federal Clean Air Act, 42 U.S.C. 7401, et seq., unless specifically designated as not federally enforceable.

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

Date of issuance: 10/13/06

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SECTION I. SOURCE SPECIFIC CONDITIONS

A. Requirements for Emissions Unit F601

- Emissions Unit F601 which is a wastewater treatment plant and collection system that includes all the collection system components from the point at which they exit the production buildings, four lift stations, a neutralization system (tank, grit remover, transfer station, and 3 lime slurry storage tanks), a diversion tank, a primary clarifier, an aeration basin and defoamer tank, two secondary clarifiers with return sumps, a polymer addition system, and an aluminum sulfate addition system.

There are no specific applicable requirements for F601. This does not relieve the permittee from compliance with the provisions of the General Conditions outlined in Section II of this permit as they apply to F601.

B. Requirements for Emissions Unit P602

The following requirements are applicable to:

- Emissions unit P602, which is a sludge dewatering system used for the handling, thickening, and dewatering of waste treatment sludge. It includes a 47-foot diameter covered sludge thickener, a 38,000-gallon sludge tank, two 2-meter belt presses, a water tank, and two polymer make-up systems. Emissions unit P602 is associated with pollution control device C922 which is a Ceilcote Model SPT-72-120 packed bed scrubber.

1. **Operating Requirements**

- a. The stack height for C922 shall be 44 feet from ground level. [Approval No. 922(1)]
- b. The permittee shall calibrate, operate, and maintain the Hydrogen Sulfide Analyzer, Treadwell Corporation Specification No. SP-750. [Approval No. 922(2)]
- c. C922 shall be operated according to its design specifications whenever P602 is in operation or is emitting air contaminants. [16.1]
- d. In case of a malfunction of C922, all reasonable measures shall be taken to assure resumption of the designed control efficiency as soon as possible. In the event that the malfunction of C922 is expected or may reasonably be expected to continue for longer than 24 hours and if the permittee wishes to

operate P602 at any time beyond that period, the Director shall be petitioned for a variance under Section 23-23-15 of the General Laws of Rhode Island, as amended. Such petition shall include, but is not limited to, the following: [16.2]

- (1) Identification of the specific air pollution control system (i.e. C922) and the source on which it is installed (P602), [16.2(a)]
- (2) The expected period of time that C922 will be malfunctioning or out of service, [16.2(b)]
- (3) The nature and quantity of air contaminants likely to be emitted during said period, [16.2(c)]
- (4) Measures that will be taken to minimize the length of said period, and [16.2(d)]
- (5) The reasons it would be impossible or impractical to cease the source operation during said period. [16.2(e)]

2. Monitoring Requirements

- a. The permittee shall continuously monitor hydrogen sulfide concentrations at the locations identified on sheet 2 of 3 of Specification No. SP-750, namely, the sludge pump house, the scrubber exhaust, the belt press operating area, the sludge dumpster room, and the thickener. [Approval No. 922(2)]

C. Requirements for Emissions Unit P603 and P604

The following requirements are applicable to:

- Emissions unit P603 and P604, which are two dry lime silos. Emissions unit P603 and P604 are associated with air pollution control devices C603 and C604, respectively, which are Flex Klean fabric filter baghouses. [Approval No. 603 is applicable to emission unit P603 and C603 only]

1. Emission Limitations

- a. Opacity

The permittee shall not emit into the atmosphere, any air contaminant, for a period or periods aggregating more than three minutes in any one hour, which is greater than or equal to 20 percent opacity. [1.2] Where the presence of uncombined water is the only reason for failure to meet this requirement, such failure shall not be a violation of this permit. [1.4]

- b. The permittee shall not emit into the atmosphere in any one hour from P603 or P604 particulate matter in excess of that determined from the following equation:

$$E = 4.10 P^{0.67}$$

Where E = allowable rate of emissions in lb/hr, and;

P = process weight rate in tons/hr

The process weight rate will be determined by dividing the total process weight by the number of hours in one complete operation, excluding any time during which the equipment is not operating.

2. Operating Requirements

- a. C603 and C604 shall be operated according to their design specifications whenever P603 and/or P604 are in operation or are emitting air contaminants. [16.1]
- a. In case of a malfunction of C603 or C604, all reasonable measures shall be taken to assure resumption of the designed control efficiency as soon as possible. In the event that the malfunction of C603 or C604 is expected or may reasonably be expected to continue for longer than 24 hours and if the permittee wishes to operate P603 at any time beyond that period, the Director shall be petitioned for a variance under Section 23-23-15 of the General Laws of Rhode Island, as amended. Such petition shall include, but is not limited to, the following: [16.2]
- (1) Identification of the specific air pollution control system (i.e. C603 and C604) and the source on which it is installed (P603, P604), [16.2(a)]
 - (2) The expected period of time that C603 and/or C604 will be malfunctioning or out of service, [16.2(b)]
 - (3) The nature and quantity of air contaminants likely to be emitted during said period, [16.2(c)]
 - (4) Measures that will be taken to minimize the length of said period, and [16.2(d)]
 - (5) The reasons it would be impossible or impractical to cease the source operation during said period. [16.2(e)]

3. Monitoring Requirements

- a. The permittee shall continuously monitor pressure drop across air pollution control devices C603 and C604. [29.6.3(b)]

4. Testing Requirements

- a. Opacity

Test for determining compliance with the opacity emissions limitations specified in Condition I.C.1.a of this permit shall be performed as per 40 CFR 60, Appendix A, Method 9. Additionally, all observers must qualify as per 40 CFR 60, Appendix A, Method 9. [1.3.1, 1.3.2]

- b. Particulates

Compliance with the particulate emissions limitations contained in Condition I.C.1.b of this permit shall be demonstrated by one of the following procedures:

- (1) Emissions testing conducted by the permittee according to 40 CFR 60, Appendix A, Method 5, or another method approved by the Director and USEPA, or
- (2) Technical evaluation based on such factors which may include the potential of the process to emit particulates, process design, design efficiency of the control systems and emissions test results on similar processes. [3.3]

5. Recordkeeping Requirements

- a. The permittee shall check the pressure drop across the air pollution control devices C603 and C604 during unloading into the silos and the date, time and measurement shall be recorded.[29.6.3(b)]