AIR QUALITY PERMIT

Permit No. **Effective Date**
3851-121-0774-E-04-0

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: **Alcon Laboratories, Inc.**

Mailing Address: 11460 Johns Creek Parkway
Johns Creek, Georgia 30097

is issued a Permit for the following:

Operation of a contact lenses manufacturing facility, including the construction and operation of the new LS3 manufacturing lines (LS03A), a new JCM boiler, a new 1-propanol distillation column, new LS1 manufacturing lines (LS1A), a new regenerative thermal oxidizer (RTO2), and the new West Tank Farm.

Facility Location: 11460 Johns Creek Parkway
Johns Creek, Georgia 30097 (Fulton County)

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. 23466, dated August 10, 2015; 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 **23** pages.

Director
Environmental Protection Division

FACILITY EQUIPMENT LIST

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	Description	Applicable Requirements/Standards	Corresponding Permit Conditions	ID No.	Description
BTI1	10.46 MMBtu/hr natural gas-fired boiler	40 CFR 60 Subpart Dc 391-3-1-.02(2)(d) 391-3-1-.02(2)(g) 391-3-1-.02(2)(tt)	2.1, 2.3, 2.4, 2.5, 2.11, 4.6, 7.7, 7.9, 7.10, 7.11, 7.12, 7.17, 7.18, 7.19, 7.20	---	---
BTI2	10.46 MMBtu/hr natural gas-fired boiler	40 CFR 60 Subpart Dc 391-3-1-.02(2)(d) 391-3-1-.02(2)(g) 391-3-1-.02(2)(tt)	2.1, 2.3, 2.4, 2.5, 2.11, 4.6, 7.7, 7.9, 7.10, 7.11, 7.12, 7.17, 7.18, 7.19, 7.20	---	---
JCM1	3.00 MMBtu/hr natural gas-fired boiler	391-3-1-.02(2)(d) 391-3-1-.02(2)(g) 391-3-1-.02(2)(tt)	2.1, 2.5, 2.11, 4.6, 7.7, 7.17, 7.18, 7.19, 7.20	---	---
JCM2	3.00 MMBtu/hr natural gas-fired boiler	391-3-1-.02(2)(d) 391-3-1-.02(2)(g) 391-3-1-.02(2)(tt)	2.1, 2.5, 2.11, 4.6, 7.7, 7.17, 7.18, 7.19, 7.20	---	---
JCM3	3.00 MMBtu/hr natural gas-fired boiler	391-3-1-.02(2)(d) 391-3-1-.02(2)(g) 391-3-1-.02(2)(tt)	2.1, 2.5, 2.11, 4.6, 7.7, 7.17, 7.18, 7.19, 7.20	---	---
JCM4	3.00 MMBtu/hr natural gas-fired boiler	391-3-1-.02(2)(d) 391-3-1-.02(2)(g) 391-3-1-.02(2)(tt)	2.1, 2.5, 2.11, 4.6, 7.7, 7.17, 7.18, 7.19, 7.20	---	---
JCM5	3.00 MMBtu/hr natural gas-fired boiler	391-3-1-.02(2)(d) 391-3-1-.02(2)(g) 391-3-1-.02(2)(tt)	2.1, 2.5, 2.11, 4.6, 7.7, 7.17, 7.18, 7.19, 7.20	---	---
JCM6	3.00 MMBtu/hr natural gas-fired boiler	391-3-1-.02(2)(d) 391-3-1-.02(2)(g) 391-3-1-.02(2)(tt)	2.1, 2.5, 2.11, 4.6, 7.7, 7.17, 7.18, 7.19, 7.20	---	---
JCM7	3.00 MMBtu/hr natural gas-fired boiler	391-3-1-.02(2)(d) 391-3-1-.02(2)(g) 391-3-1-.02(2)(tt)	2.1, 2.5, 2.11, 4.6, 7.7, 7.17, 7.18, 7.19, 7.20	---	---
JCM8	3.00 MMBtu/hr natural gas-fired boiler	391-3-1-.02(2)(d) 391-3-1-.02(2)(g) 391-3-1-.02(2)(tt)	2.2, 2.5, 2.11, 4.6, 7.7, 7.17, 7.21, 7.22, 7.23	---	---
BGEN	750 kW diesel-fired emergency generator	40 CFR 63 Subpart ZZZZ 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(g) 391-3-1-.02(2)(tt)	2.1, 2.6, 2.7, 2.10, 2.12, 2.13, 2.14, 4.6, 5.3, 7.7, 7.16, 7.17, 7.18, 7.19, 7.20	---	---
DGEN2	750 kW diesel-fired emergency generator	40 CFR 63 Subpart ZZZZ 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(g) 391-3-1-.02(2)(tt)	2.1, 2.6, 2.7, 2.10, 2.12, 2.13, 2.14, 4.6, 5.3, 7.7, 7.16, 7.17, 7.18, 7.19, 7.20	---	---
GEN3	500 kW diesel-fired emergency generator	40 CFR 63 Subpart ZZZZ 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(g) 391-3-1-.02(2)(tt)	2.1, 2.6, 2.7, 2.10, 2.12, 2.13, 2.14, 4.6, 5.3, 7.7, 7.16, 7.17, 7.18, 7.19, 7.20	---	---
GEN4	500 kW diesel-fired emergency generator	40 CFR 63 Subpart ZZZZ 40 CFR 60 Subpart IIII 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(g) 391-3-1-.02(2)(tt)	2.1, 2.6, 2.8, 2.9, 2.10, 2.12, 2.13, 2.14, 4.6, 5.3, 7.7, 7.16, 7.17, 7.18, 7.19, 7.20	---	---

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	Description	Applicable Requirements/Standards	Corresponding Permit Conditions	ID No.	Description
RD01	Research and Development Equipment	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(tt)	2.1, 2.10, 2.12, 4.6, 7.7, 7.17, 7.18, 7.19, 7.20	---	---
LS01	LS1 (Dailies) Production Line	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(tt)	2.1, 2.10, 2.12, 4.6, 7.7, 7.17, 7.18, 7.19, 7.20	---	---
LS01A	New LS1 (Dailies) Production Line	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(tt)	2.2, 2.10, 2.12, 4.6, 7.7, 7.17, 7.21, 7.22, 7.23	---	---
LS03	LS3 (Dailies Total One) Production Line	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(tt)	2.1, 2.5, 2.10, 2.12, 4.1, 4.2, 4.4, 4.5, 4.6, 5.2, 6.3, 6.4, 6.5, 7.7, 7.13, 7.14, 7.15, 7.17, 7.18, 7.19, 7.20	RTO1 or RTO2	Regenerative Thermal Oxidizer
LS03A	New LS3 (Dailies Total One) Production Line	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(tt)	2.2, 2.5, 2.10, 2.12, 4.3, 4.4, 4.5, 4.6, 5.2, 6.3, 6.5, 7.7, 7.13, 7.15, 7.17, 7.21, 7.22, 7.23	RTO2	Regenerative Thermal Oxidizer
TK01	16,709 gallon MEK Storage Tank	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(tt) 391-3-1-.02(2)(vv)	2.1, 2.10, 2.12, 2.15, 4.6, 7.7, 7.17, 7.18, 7.19, 7.20	---	---
TK02	7,991 gallon PAA-Dip Storage Tank	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(tt) 391-3-1-.02(2)(vv)	2.1, 2.10, 2.12, 2.15, 4.6, 7.7, 7.17, 7.18, 7.19, 7.20	---	---
TK03	16,709 gallon 1-Propanol Storage Tank	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(tt) 391-3-1-.02(2)(vv)	2.1, 2.10, 2.12, 2.15, 4.6, 7.7, 7.17, 7.18, 7.19, 7.20	---	---
TK04	4,546 gallon MEK Day Tank	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(tt) 391-3-1-.02(2)(vv)	2.1, 2.10, 2.12, 2.15, 4.6, 7.7, 7.17, 7.18, 7.19, 7.20	---	---
TK05	4,546 gallon PAA-Dip Day Tank	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(tt) 391-3-1-.02(2)(vv)	2.1, 2.10, 2.12, 2.15, 4.6, 7.7, 7.17, 7.18, 7.19, 7.20	---	---
TK06	4,546 gallon 1-Propanol Day Tank	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(tt) 391-3-1-.02(2)(vv)	2.1, 2.10, 2.12, 2.15, 4.6, 7.7, 7.17, 7.18, 7.19, 7.20	---	---
TK07	19,247 gallon MEK Distillation Feed Tank	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(tt) 391-3-1-.02(2)(vv)	2.1, 2.10, 2.12, 2.15, 4.6, 7.7, 7.17, 7.18, 7.19, 7.20	---	---
TK08	7,991 gallon PAA-Dip Waste Tank	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(tt) 391-3-1-.02(2)(vv)	2.1, 2.10, 2.12, 2.15, 4.6, 7.7, 7.17, 7.18, 7.19, 7.20	---	---
TK09	16,709 gallon 1-Propanol Waste Tank	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(tt) 391-3-1-.02(2)(vv)	2.1, 2.10, 2.12, 2.15, 4.6, 7.7, 7.17, 7.18, 7.19, 7.20	---	---

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	**Description**	**Applicable Requirements/Standards**	**Corresponding Permit Conditions**	**ID No.**	**Description**
TK10	19,247 gallon MEK Recovery Tank	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(tt) 391-3-1-.02(2)(vv)	2.1, 2.10, 2.12, 2.15, 4.6, 7.7, 7.17, 7.18, 7.19, 7.20	---	---
TK11	4,546 gallon 1-Propanol Day Tank	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(tt) 391-3-1-.02(2)(vv)	2.1, 2.10, 2.12, 2.15, 4.6, 7.7, 7.17, 7.18, 7.19, 7.20	---	---
TK21	4,546 gallon MEK Waste Tank	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(tt) 391-3-1-.02(2)(vv)	2.2, 2.10, 2.12, 2.15, 4.6, 7.7, 7.17, 7.21, 7.22, 7.23	---	---
TK22	4,546 gallon PAA-Dip Waste Tank	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(tt) 391-3-1-.02(2)(vv)	2.2, 2.10, 2.12, 2.15, 4.6, 7.7, 7.17, 7.21, 7.22, 7.23	---	---
TK23	4,546 gallon 1-Propanol Waste Tank	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(tt) 391-3-1-.02(2)(vv)	2.2, 2.10, 2.12, 2.15, 4.6, 7.7, 7.17, 7.21, 7.22, 7.23	---	---
TK25	4,546 gallon 10% MEK Waste Tank	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(tt) 391-3-1-.02(2)(vv)	2.2, 2.10, 2.12, 2.15, 4.6, 7.7, 7.17, 7.21, 7.22, 7.23	---	---
TK27	11,280 gallon 1-Propanol Distillation Feed Tank	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(tt) 391-3-1-.02(2)(vv)	2.2, 2.10, 2.12, 2.15, 4.6, 7.7, 7.17, 7.21, 7.22, 7.23	---	---
MEK1	MEK Distillation System	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(tt)	2.1, 2.10, 2.12, 4.6, 7.7, 7.17, 7.18, 7.19, 7.20	---	---
PRO1	1-Propanol Distillation System	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(tt)	2.2, 2.10, 2.12, 4.6, 7.7, 7.17, 7.21, 7.22, 7.23	---	---
SP01	Secondary Packaging	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(tt)	2.1, 2.10, 2.12, 4.5, 4.6, 4.7, 7.7, 7.17, 7.18, 7.19, 7.20	DC01 DC02 DC03 DC04 DC05 DC06 DC07 DC08 DC09 DC10	Dust Collectors

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

Equipment Emission Caps and Operating Limits

2.1 The Permittee shall not discharge nor cause the discharge into the atmosphere from the equipment listed in Attachment A volatile organic compound (VOC) emissions in an amount equal to or exceeding 25 tons during any consecutive twelve-month period. For the purpose of this Condition, a twelve consecutive month period is defined as the total for a month in the reporting period plus the totals for the previous eleven consecutive months.
[Avoidance of 40 CFR 51.165]

2.2 The Permittee shall not discharge nor cause the discharge into the atmosphere from the equipment listed in Attachment B volatile organic compound (VOC) emissions in an amount equal to or exceeding 25 tons during any consecutive twelve-month period. For the purpose of this Condition, a twelve consecutive month period is defined as the total for a month in the reporting period plus the totals for the previous eleven consecutive months.
[Avoidance of 40 CFR 51.165]

2.3 The Permittee shall limit total combined natural gas usage of the BTI Boilers (BTI1 and BTI2) to no more than 70 million standard cubic feet per twelve consecutive months. For the purpose of this Condition, a twelve consecutive month period is defined as the total for a month in the reporting period plus the totals for the previous eleven consecutive months.
[Avoidance of 40 CFR 51.165]

Equipment Federal Rule Standards

2.4 The Permittee shall comply with all applicable provisions of the New Source Performance Standards (NSPS) as found in 40 CFR 60 Subpart A - "General Provisions" and 40 CFR 60 Subpart Dc - "Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units," for operation of the BTI Boilers (BTI1 and BTI2).
[40 CFR 60.40c] [Vault NS-023-OT, 03/10]

2.5 The Permittee shall not fire any fuel other than natural gas in any of the boilers BTI1, BTI2, and JCM1 through JCM8 or Regenerative Thermal Oxidizers RTO1 and RTO2.
[40 CFR 63.11195(e), 391-3-1-.03(2)(c), and 391-3-1-.02(2)(g)2 (subsumed)]

2.6 The Permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants (NESHAP) Subpart ZZZZ – "National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines" and the applicable provisions of Subpart A, "General Provisions" as defined in Table 8 to Subpart ZZZZ to Part 63 for operation of Generators BGEN, DGEN2, GEN3, and GEN4.
[40 CFR 63.6605 and Table 8 to Subpart ZZZZ of Part 63] [Vault MA-047-OT, 09/11]

2.7 The Permittee shall operate and maintain the Generators BGEN, DGEN2, and GEN3, including air pollution control and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions at all times, including during startup, shutdown, and malfunction.
[40 CFR 63.6605(b)] [Vault MA-047-OT 09/11]

2.8 The Permittee shall comply with all applicable provisions of the New Source Performance Standards (NSPS) as found in 40 CFR 60 Subpart A - "General Provisions" and 40 CFR 60 Subpart IIII - " Standards of Performance for Stationary Compression Ignition Internal Combustion Engines," for operation of Generator GEN4.
[40 CFR 60.4200] [Vault NS-038-OT, 09/11]

2.9 The accumulated non-emergency service (maintenance check and readiness testing) time for Generator GEN4 shall not exceed 100 hours per year. Any operation other than emergency operation, maintenance check and readiness testing is prohibited.
[40 CFR 60.4211(f)] [Vault NS-038-OL, 09/11]

Equipment SIP Rule Standards

2.10 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] [Vault GA-024-EL, 09/11]

2.11 The Permittee shall not cause, let, suffer, permit, or allow any emissions from the boilers BTI1, BTI2, and JCM1 through JCM8 which:

a. Contain fly ash and/or other particulate matter in amounts equal to or exceeding 0.5 pounds per million BTU heat input from each JCM boiler (JCM1 through JCM8).
[391-3-1-.02(2)(d)2(i)] [Vault GA-001-EL, 02/10]

b. Contain fly ash and/or other particulate matter in amounts equal to or exceeding the rate derived from $P = 0.5(10/R)^{0.5}$ where R equals heat input rate in million BTU per hour and P equals the allowable emission rate in pounds per million BTU from each BTI boiler (BTI1 and BTI2).
[391-3-1-.02(2)(d)2(ii)] [Vault GA-001-EL, 02/10]

c. Exhibit visible emissions, the opacity of which is equal to or greater than 20 percent except for one six minute period per hour of not more than 27 percent opacity from each of the boilers (BTI1, BTI2, and JCM1 through JCM8).
[391-3-1-.02(2)(d)3] [Vault GA-001-EL, 02/10]

2.12 The Permittee shall not cause, let, suffer, permit, or allow the emission from all process equipment, particulate matters (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)][Vault GA-022-EL, 02/10]

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.

2.13 The Permittee shall not burn fuel containing more than 2.5 percent sulfur, by weight, in the emergency generators (DGEN, BGEN2, GEN3, and GEN4), unless otherwise specified by the Director.
[391-3-1-.02(2)(g)2] [Vault GA-002-EL, 02/10]

2.14 The Permittee shall limit the operation of each of the emergency generators (BGEN, DGEN2, GEN3, and GEN4) to operation in the event of power loss from the local grid (emergency standby mode) or for the purpose of maintenance checks and readiness testing such that the total hours of operation for each generator are less than 200 hours during any consecutive twelve-month period. For the purpose of this Condition, a twelve consecutive month period is defined as the total for a month in the reporting period plus the totals for the previous eleven consecutive months.
[Avoidance of 391-3-1-.02(2)(mmm)]

2.15 No Permittee shall transfer or cause or allow the transfer of any volatile organic liquid other than gasoline from any delivery vessel into any of the storage tanks TK01 through TK11, TK21 through TK23, TK25, and TK27 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 to prevent fugitive dust from becoming airborne from any operation, process, handling, and transportation or storage facility. The opacity from any fugitive dust source shall not equal or exceed twenty percent. Reasonable precautions that should be taken to prevent dust from becoming airborne include, but are not limited to, the following:
[391-3-1-.02(2)(n)] [Vault GA-003-EL, 02/10]

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

b. Application of asphalt, water, or suitable chemicals on dirt roads, materials, stockpiles, and other surfaces that can give rise to airborne dusts;

c. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials. Adequate containment methods can be employed during sandblasting or other similar operations;

d. Covering, at all times when in motion, open-bodied trucks, transporting materials likely to give rise to airborne dust; and

e. The prompt removal of earth or other material from paved streets onto which earth or other material has been deposited.

4. Process & Control Equipment

4.1 The Permittee shall operate the appropriate Regenerative Thermal Oxidizer RTO1 or RTO2 during all times of LS3 process (LS03) operation.
[Avoidance of 40 CFR 51.165 and 391-3-1-.02(2)(tt)1]

4.2 The Permittee shall operate Regenerative Thermal Oxidizer RTO1 such that a minimum destruction efficiency of 90 percent of volatile organic compounds is achieved at all times that emissions from LS3 process (LS03) are routed to Regenerative Thermal Oxidizer RTO1.
[Avoidance of 40 CFR 51.165 and 391-3-1-.02(2)(tt)1]

4.3 The Permittee shall operate Regenerative Thermal Oxidizer RTO2 during all times of new LS3 process (LS03A) operation.
[Avoidance of 40 CFR 51.165 and 391-3-1-.02(2)(tt)1]

4.4 The Permittee shall operate Regenerative Thermal Oxidizer RTO2 such that a minimum destruction efficiency of 90 percent of volatile organic compounds is achieved at all times of new LS3 process (LS03A) operation and at all times that emissions from LS3 process (LS03) are routed to Regenerative Thermal Oxidizer RTO2.
[Avoidance of 40 CFR 51.165 and 391-3-1-.02(2)(tt)1]

4.5 Routine maintenance shall be performed on all air pollution control equipment. The Permittee shall record and maintain records of routine maintenance in a form suitable for inspection or submittal to the Division.
[391-3-1-.03(2)(c)]

4.6 The Permittee shall operate all process equipment in a manner consistent with good practices for minimizing air emissions.
[391-3-1-.02(2)(tt)1]

4.7 The Permittee shall operate the appropriate Dust Collector(s) (DC01 through DC10) during all times of Secondary Packaging (SP01) operation.
[391-3-1-.02(2)(b)1, 391-3-1-.02(2)(e), and 391-3-1-.02(6)(b)1]

5. Monitoring

General Monitoring Requirements

5.1 Any continuous monitoring system required by the Division and installed by the Permittee shall be in continuous operation and data recorded during all periods of operation of the affected facility except for continuous monitoring system breakdowns and repairs. Monitoring system response, relating only to calibration checks and zero and span adjustments, shall be measured and recorded during such periods. Maintenance or repair shall be conducted in the most expedient manner to minimize the period during which the system is out of service.
[391-3-1-.02(6)(b)1]

Specific Monitoring Requirements

5.2 The Permittee shall install, calibrate, maintain, and operate a system to continuously monitor and record the indicated parameters on the following equipment. Where such performance specification(s) exist, each system shall meet the applicable performance specification(s) of the Division's monitoring requirements.
[391-3-1-.02(6)(b)1]

a. The combustion temperature for Regenerative Thermal Oxidizer RTO1 at a position prior to any substantial heat loss/exchange. Such temperature monitoring device shall have an accuracy of $\pm$ 2% (^{o}F). Calibration checks of temperature monitoring equipment shall be performed annually.
[Avoidance of 40 CFR 51.165, 391-3-1-.02(2)(tt)1, and 391-3-1-.02(6)(b)1]

b. The combustion temperature for Regenerative Thermal Oxidizer RTO2 at a position prior to any substantial heat loss/exchange. Such temperature monitoring device shall have an accuracy of $\pm$ 2% (^{o}F). Calibration checks of temperature monitoring equipment shall be performed annually.
[Avoidance of 40 CFR 51.165, 391-3-1-.02(2)(tt)1, and 391-3-1-.02(6)(b)1]

5.3 The Permittee shall install, calibrate, maintain, and operate a non-resettable continuous monitoring system (or device) for each emergency generator (BGEN, DGEN2, GEN3, and GEN4) to track the hours operated during all periods of operation, and to record the cumulative total hours of operation. Each system shall meet the applicable performance specification(s) of the Division's monitoring requirements.
[40 CFR 63.6655(f)(2), 40 CFR 60.4209(a), and 391-3-1-.02(6)(b)1]

5.4 The Permittee shall conduct a leak detection and repair (LDAR) program for each valve and pump seal in gas/vapor or light liquid service associated with the operation of the LS3 process (LS03) or the new LS3 process (LS03A) in a manner consistent with the monitoring, inspection, and repair provisions of 40 CFR 60 Subpart VVa, "Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006." Regardless of any frequency specified under 40 CFR 60 Subpart VVa, the monitoring of affected valves and pump seals shall be conducted annually. Weekly visual inspection of pump seals shall also be conducted. The Permittee shall maintain records of the annual inspections, associated repairs, and any delay of repair. The recordkeeping and reporting requirements specified in 40 CFR 60.486a and 40 CFR 60.487a are not applicable to the inspection program required by this Condition.
[391-3-1-.02(2)(tt)1]

6. Performance Testing

General Testing Requirements

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.

6.2 Performance and compliance 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. The methods for the determination of compliance with emission limits listed under Section 2.0 are as follows:

a. Method 1 for the selection of sample point location.

b. Method 2 for the determination of stack gas velocity and volumetric flow rate.

c. Method 3 for the determination of dry molecular weight.

d. Method 3B for the determination of emission rate correction factor or excess air.

e. Method 4 for the determination of moisture content in stack gases.

f. Method 5 or Method 17, as applicable, for the determination of particulate matter (PM) emissions.

g. Method 6 or 6C, as applicable, for the determination of sulfur dioxide (SO_2) emissions.

h. Method 7 or 7E, as applicable, for the determination of nitrogen oxide (NO_X) emissions.

i. Method 9 and the Procedures of Section 1.3 for the visual determination of the opacity of emissions.

j. Method 10 for the determination of carbon monoxide (CO) emissions.

k. Method 25 for the determination of total gaseous nonmethane organic emissions as carbon to determine volatile organic compound (VOC) emissions.

Minor changes in methodology may be specified or approved by the Director or his designee when necessitated by process variables, changes in facility design, or improvement or corrections that, in his opinion, render those methods or procedures, or portions thereof, more reliable.
[391-3-1-.02(3)(a)]

Specific Testing Requirements

6.3 Within 180 days after the initial startup of the Regenerative Thermal Oxidizer RTO2, the Permittee shall conduct a volatile organic compound destruction efficiency performance test on Regenerative Thermal Oxidizer RTO2. During the performance testing, the Permittee shall determine and record the combustion temperature for Regenerative Thermal Oxidizer RTO2 using the monitor required by Condition No. 5.2.b. The Permittee shall establish the average destruction efficiency and average combustion temperature during the performance test. The average combustion temperature shall be included in the performance test results submitted to the Division.
[Avoidance of 40 CFR 51.165, 391-3-1-.02(2)(tt)1, 391-3-1-.02(3), and 391-3-1-.03(2)(c)]

6.4 No later than 24 months after the previous test, the Permittee shall conduct a volatile organic compound destruction efficiency performance test on Regenerative Thermal Oxidizer RTO1. During the performance testing, the Permittee shall determine and record the combustion temperature for Regenerative Thermal Oxidizer RTO1 using the monitor required by Condition No. 5.2.a. The Permittee shall establish the average destruction efficiency and average combustion temperature during the performance test. The average combustion temperature shall be included in the performance test results submitted to the Division.
[Avoidance of 40 CFR 51.165, 391-3-1-.02(2)(tt)1, 391-3-1-.02(3), and 391-3-1-.03(2)(c)]

6.5 No later than 24 months after the previous test, the Permittee shall conduct a volatile organic compound destruction efficiency performance test on Regenerative Thermal Oxidizer RTO2. During the performance testing, the Permittee shall determine and record the combustion temperature for Regenerative Thermal Oxidizer RTO2 using the monitor required by Condition No. 5.2.b. The Permittee shall establish the average destruction efficiency and average combustion temperature during the performance test. The average combustion temperature shall be included in the performance test results submitted to the Division.
[Avoidance of 40 CFR 51.165, 391-3-1-.02(2)(tt)1, 391-3-1-.02(3), and 391-3-1-.03(2)(c)]

7. Notification, Reporting and Record Keeping Requirements

General Record Keeping and Reporting Requirements

7.1 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 to the EPA. The records shall be retained for at least five (5) years following the date of entry. [391-3-1-.02(6)(b)1(i)]

7.2 In addition to any other reporting requirements of this Permit, the Permittee shall report to the Division in writing, within seven (7) days, any deviations from applicable requirements associated with any malfunction or breakdown of process, fuel burning, or emissions control equipment for a period of four hours or more which results in excessive emissions.

The Permittee shall submit a written report that shall contain the probable cause of the deviation(s), duration of the deviation(s), and any corrective actions or preventive measures taken.
[391-3-1-.02(6)(b)1(iv) and 391-3-1-.03(10)(d)1(i)]

7.3 The Permittee shall submit written reports of any failure to meet an applicable emission limitation or standard contained in this permit and/or any failure to comply with or complete a work practice standard or requirement contained in this permit which are not otherwise reported in accordance with Condition Nos. 7.4 or 7.2. Such failures shall be determined through observation, data from any monitoring protocol, or by any other monitoring which is required by this permit. The reports shall cover each semiannual period ending June 30 and December 31 of each year, shall be postmarked by August 29 and February 28, respectively following each reporting period, and shall contain the probable cause of the failure(s), duration of the failure(s), and any corrective actions or preventive measures taken.
[391-3-1-.03(10)(d)1.(i)]

7.4 The Permittee shall submit a written report containing any excess emissions, exceedances, and/or excursions as described in this permit and any monitor malfunctions for each semiannual period ending June 30 and December 31 of each year. All reports shall be postmarked by August 29 and February 28, respectively following each reporting period. In the event that there have not been any excess emissions, exceedances, excursions or malfunctions during a reporting period, the report should so state. Otherwise, the contents of each report shall be as specified by the Division's Procedures for Testing and Monitoring Sources of Air Pollutants and shall contain the following:
[391-3-1-.02(6)(b)1]

a. A summary report of excess emissions, exceedances and excursions, and monitor downtime, in accordance with Section 1.5(c) and (d) of the above referenced document, including any failure to follow required work practice procedures.

b. Total process operating time during each reporting period.

c. The magnitude of all excess emissions, exceedances and excursions computed in accordance with the applicable definitions as determined by the Director, and any conversion factors used, and the date and time of the commencement and completion of each time period of occurrence.

d. Specific identification of each period of such excess emissions, exceedances, and excursions that occur during startups, shutdowns, or malfunctions of the affected facility. Include the nature and cause of any malfunction (if known), the corrective action taken or preventive measures adopted.

e. The date and time identifying each period during which any required monitoring system or device was inoperative (including periods of malfunction) except for zero and span checks, and the nature of the repairs, adjustments, or replacement. When the monitoring system or device has not been inoperative, repaired, or adjusted, such information shall be stated in the report.

f. Certification by a Responsible Official that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

7.5 Where applicable, the Permittee shall keep the following records:
[391-3-1-.03(10)(d)1(i)]

a. The date, place, and time of sampling or measurement;

b. The date(s) analyses were performed;

c. The company or entity that performed the analyses;

d. The analytical techniques or methods used;

e. The results of such analyses; and

f. The operating conditions as existing at the time of sampling or measurement.

7.6 The Permittee shall maintain files of all required measurements, including continuous monitoring systems, monitoring devices, and performance testing measurements; all continuous monitoring system or monitoring device calibration checks; and adjustments and maintenance performed on these systems or devices. These files shall be kept in a permanent form suitable for inspection and shall be maintained for a period of at least five (5) years following the date of such measurements, reports, maintenance and records.
[391-3-1-.03(10)(d)1(i)]

7.7 For the purpose of reporting excess emissions, exceedances or excursions in the report required in Condition No. 7.4, the following excess emissions, exceedances, and excursions shall be reported:
[391-3-1-.02(6)(b)1]

a. Excess emissions: (means for the purpose of this Condition and Condition No. 7.4, any condition that is detected by monitoring or record keeping which is specifically defined, or stated to be, excess emissions by an applicable requirement)

None required to be reported in accordance with Condition No. 7.4.

b. Exceedances: (means for the purpose of this Condition and Condition No. 7.4, any condition that is detected by monitoring or record keeping that provides data in terms of an emission limitation or standard and that indicates that emissions (or opacity) do not meet the applicable emission limitation or standard consistent with the averaging period specified for averaging the results of the monitoring)

i. Any twelve-month rolling period during which the combined total VOC emissions from the equipment listed in Attachment A, calculated in accordance with Condition No. 7.20, equal or exceed 25 tons.
[Avoidance of 40 CFR 51.165 and 391-3-1-.02(6)(b)1]

ii. Any twelve-month rolling period during which the combined total VOC emissions from the equipment listed in Attachment B, calculated in accordance with Condition No. 7.23, equal or exceed 25 tons.
[Avoidance of 40 CFR 51.165 and 391-3-1-.02(6)(b)1]

c. Excursions: (means for the purpose of this Condition and Condition No. 7.4, any departure from an indicator range or value established for monitoring consistent with any averaging period specified for averaging the results of the monitoring)

i. Any twelve-month rolling period during which the combined natural gas usage of the BTI boilers (BTI1 and BTI2), calculated in accordance with Condition No. 7.12, exceeds 70 million standard cubic feet (MMscf)
[Avoidance of 40 CFR 51.165 and 391-3-1-.02(6)(b)1]

ii. Any time a fuel other than natural gas is fired in any of the boilers BTI1, BTI2, and JCM1 through JCM8 or in the Regenerative Thermal Oxidizers RTO1 and RTO2.
[40 CFR 63.11195(e), 391-3-1-.03(c), and 391-3-1-.02(2)(g)2 (subsumed)]

iii. Any time a fuel containing more 2.5 percent fuel sulfur is fired in any of the emergency generators BGEN, DGEN2, GEN3, and GEN4.
[391-3-1-.02(2)(g)2]

iv. Any time of operation of the LS3 process (LS03A) during which the appropriate Regenerative Thermal Oxidizer RTO1 or RTO2 is not in operation.
[Avoidance of 51.165 and 391-3-1-.02(2)(tt)1]

v. Any three-hour period that emissions from LS3 process (LS03) are routed to Regenerative Thermal Oxidizer RTO1 during which the average combustion temperature for Regenerative Thermal Oxidizer RTO1 falls more than 50°F below the Division-approved temperature established during the most recent performance test.
[Avoidance of 51.165 and 391-3-1-.02(2)(tt)1]

vi. Any time of operation of the new LS3 process (LS03A) during which Regenerative Thermal Oxidizer RTO2 is not in operation.
[Avoidance of 51.165 and 391-3-1-.02(2)(tt)1]

vii. Any three-hour period of new LS3 process (LS03A) operation or that emissions from LS3 process (LS03) are routed to Regenerative Thermal Oxidizer RTO2 during which the average combustion temperature for Regenerative Thermal Oxidizer RTO2 falls more than 50°F below the Division-approved temperature established during the most recent performance test.
[Avoidance of 51.165 and 391-3-1-.02(2)(tt)1]

viii. Any time all process equipment is not operated in a manner consistent with good practices for minimizing air emissions
[391-3-1-.02(2)(tt)1]

ix. Any time of operation of Secondary Packaging SP01 during which the appropriate Dust Collector (DC01 through DC10) is not operated.
[391-3-1-.02(2)(b)1 and 391-3-1-.02(2)(e)]

7.8 The Permittee shall provide the Division with a statement, in such form as the Director may prescribe, showing the actual emissions of nitrogen oxides and volatile organic compounds from the entire facility. These statements shall be submitted every year by the date specified in 391-3-1-.02(6)(a)4 and shall show the actual emissions of the previous calendar year.
[391-3-1-.02(6)(b)1(i)]

Specific Record Keeping and Reporting Requirements

7.9 As an alternative to fuel records required by 40 CFR 60.48c(g)(1), the Permittee may record and maintain records of the amount of each steam generating unit fuel delivered to that property during each calendar month for Boilers BTI1 and BTI2.
[40 CFR 60.48c(g)(3)] [Vault NS-023-RR, 03/10]

7.10 The Permittee shall retain records of the quantity of natural gas burned monthly in each of Boilers BTI1 and BTI2 as determined by Condition No. 7.9. The Permittee shall also retain records of the quantity of natural gas burned at the facility. These records shall be kept for a period of five years in a form suitable and available for inspection and submission to the Division.
[Avoidance of 40 CFR 51.165 and 391-3-1-.02(6)(b)1]

7.11 The Permittee shall notify the Division in writing if, during any calendar month, the combined quantity of natural gas burned in BTI boilers exceeds 7.5 million standard cubic feet. 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 natural gas quantity limit in Condition No. 2.3.
[Avoidance of 40 CFR 51.165 and 391-3-1-.02(6)(b)1]

7.12 The Permittee shall use the monthly usage records required in Condition 7.10 to calculate the twelve-month rolling total of the quantity of natural gas combusted in the BTI boilers. The Permittee shall notify the Division in writing if the total combined consumption of natural gas by the BTI boilers exceeds 70 million standard cubic feet during any twelve consecutive months. 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 No. 2.3.
[Avoidance of 40 CFR 51.165 and 391-3-1-.02(6)(b)1]

7.13 The Permittee shall submit written notification to the Division of the actual date of initial startup of Regenerative Thermal Oxidizer RTO2. This notification shall be postmarked within thirty days of the initial startup date.
[Avoidance of 40 CFR 51.165, 391-3-1-.02(2)(tt)1, and 391-3-1-.02(6)(b)1]

7.14 Deviations for Regenerative Thermal Oxidizer RTO1 are defined as any three-hour period of process operation during which the average combustion temperature for the thermal oxidizer falls more than 50°F below the temperature established during the most recent performance test as approved by the Division.

In the event of any malfunction, deviation, or breakdown of process or emission control equipment for a period of four hours or more which result in excessive emissions, the owner or operator shall submit a written report which would describe the cause of the breakdown, the corrective actions taken, and the plans to prevent future occurrences. This report must be submitted by means that would insure the Division's receipt of the report by no later than seven days after the occurrence.
[Avoidance of 40 CFR 51.165, 391-3-1-.02(2)(tt)1, and 391-3-1-.02(6)(b)1]

7.15 Deviations for Regenerative Thermal Oxidizer RTO2 are defined as any three-hour period of process operation during which the average combustion temperature for the thermal oxidizer falls more than 50°F below the temperature established during the most recent performance test as approved by the Division.

In the event of any malfunction, deviation, or breakdown of process or emission control equipment for a period of four hours or more which result in excessive emissions, the owner or operator shall submit a written report which would describe the cause of the breakdown, the corrective actions taken, and the plans to prevent future occurrences. This report must be submitted by means that would insure the Division's receipt of the report by no later than seven days after the occurrence.
[Avoidance of 40 CFR 51.165, 391-3-1-.02(2)(tt)1, and 391-3-1-.02(6)(b)1]

7.16 The Permittee shall maintain monthly records of the operation of the engines in emergency and non-emergency service that are recorded through the non-resettable hour meter required in Condition No. 5.3. The Permittee shall record the time of operation of the engine and the reason the engine was in operation during that time. These records shall be maintained in a format suitable for inspection or submittal.
[40 CFR 63.6655(f)(2), 40 CFR 60.4214(b), 391-3-1-.02(6)(b)1]

7.17 The Permittee shall maintain monthly usage records of all materials used at the facility that contain volatile organic compounds (VOC). These records shall include the total weight of each material used and the VOC content of each material (expressed as a weight percentage). The Permittee may subtract from the monthly usage the volatile content of any material disposed as waste provided that the total weight, VOC content (expressed as a weight percentage), and documentation of the method for determining the VOC content of any such waste material be included as part of the record. All other calculations used to determine usages should also be kept as part of the monthly record.
[Avoidance of 40 CFR 51.165 and 391-3-1-.02(6)(b)1]

7.18 The Permittee shall use the records required in Condition No. 7.17 to calculate the combined total monthly VOC emissions from the equipment listed in Attachment A. All demonstration calculations, including any Division-approved emission factor, control efficiency and/or coating transfer efficiency used in the calculations, shall be kept as part of the records required in Condition No. 7.17. For all periods that emissions from LS3 process (LS03) are routed to Regenerative Thermal Oxidizer RTO1 when the Regenerative Thermal Oxidizer RTO1 temperature is below that as determined in Condition No. 6.4 and/or is down, the destruction efficiency shall be assumed to be zero (this assumption is implemented through the use of monthly uptime). For all periods that emissions from LS3 process (LS03) are routed to Regenerative Thermal Oxidizer RTO2 when the Regenerative Thermal Oxidizer RTO2 temperature is below that as determined in Condition No. 6.3 or 6.5 and/or is down, the destruction efficiency shall be assumed to be zero (this assumption is implemented through the use of monthly uptime). The Permittee shall notify the Division in writing if the combined total monthly VOC emissions from the equipment listed in Attachment A exceed 2.08 tons 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 emission limit in Condition No. 2.13.
[Avoidance of 40 CFR 51.165 and 391-3-1-.02(6)(b)1]

7.19 The Permittee shall use the following equations when calculating the monthly VOC emissions from the equipment listed in Attachment A in accordance with Condition No. 7.18. All calculations should be kept as part of the monthly record. These records shall be kept available for inspection by or submittal to the Division for five years from the date of record. The Permittee shall use the oxidizer destruction efficiency for the appropriate Regenerative Thermal Oxidizer RTO1 or RTO2 as specified by the most recent Division approved performance test results when determining VOC emissions associated with the LS3 Production Line (LS03) Only.
[Avoidance of 40 CFR 51.165 and 391-3-1-.02(6)(b)1]

a. VOC_{LS3} (lbs)= [[Material use (lbs) * (%weight VOC)] – [Waste Material (lbs) * (%weight VOC)]] * (1 - destruction efficiency for LS3 Production Line Only); or

b. VOC_{LS3} (lbs)= [[Material used (gallons) * (VOC Content lbs/gallon)] – [Waste Material (gallons) * (VOC Content lbs/gallon)]] * (1 - destruction efficiency for LS3 Production Line Only); and

c. VOC_i (lbs) = Material use (lbs) * (%weight VOC); or

d. VOC_i (lbs) = Material used (gallons) * (VOC Content lbs/gallon); and

e. $VOC_{Boilers}$ (lbs) = Natural gas consumed at facility (Million standard cubic feet) * (5.5 pounds/ million standard cubic feet); and

f. $VOC_{RTO\ Afterburner}$ (lbs) = Natural gas consumed (Million standard cubic feet) * (5.5 pounds/ million standard cubic feet); and

g. $VOC_{Generator}$ (lbs) = Horsepower of the engine (Hp) * (6.42 x 10^{-4} pounds/ horsepower-hour) * Operating Hours as determined by Condition 5.1; and

h. VOC_{Tanks} (lbs) = 422 pounds (one twelfth the total annual losses as presented in the August 2012 Table D-32 of Application Number 21210); and

i. VOC_w (lbs) = Waste Material (lbs) * (%weight VOC); or

j. VOC_w (lbs) = Waste Material (gallons) * (VOC Content lbs/gallon); and

k. Total VOC (lbs) = $(VOC_{LS3} + \sum_{i=1}^{n} VOC_i + VOC_{Boilers} + VOC_{RTOAfterburner} + \sum_{i=1}^{n} VOC_{Generator} + VOC_{Tanks} - \sum_{w=1}^{n} VOC_w)$

7.20 The Permittee shall use the monthly VOC records in Condition No. 7.19 to calculate the twelve-month rolling combined total VOC emissions from the equipment listed in Attachment A. The Permittee shall notify the Division in writing if the combined total VOC emissions from the equipment listed in Attachment A exceed 25 tons during any twelve consecutive 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 maintain facility-wide VOC emissions below the emission limit in Condition No. 2.13.
[Avoidance of 40 CFR 51.165 and 391-3-1-.02(6)(b)1]

7.21 The Permittee shall use the records required in Condition No. 7.17 to calculate the combined total monthly VOC emissions from the equipment listed in Attachment B. All demonstration calculations, including any Division-approved emission factor, control efficiency and/or coating transfer efficiency used in the calculations, shall be kept as part of the records required in Condition No. 7.17. For all periods of new LS3 operation (LS03A) when the Regenerative Thermal Oxidizer RTO2 temperature is below that as determined in Condition No. 6.3 or 6.5 and/or is down, the destruction efficiency shall be assumed to be zero (this assumption is implemented through the use of monthly uptime). The Permittee shall notify the Division in writing if the combined total monthly VOC emissions from the equipment listed in Attachment B exceed 2.08 tons 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 emission limit in Condition No. 2.14.
[Avoidance of 40 CFR 51.165 and 391-3-1-.02(6)(b)1]

7.22 The Permittee shall use the following equations when calculating the monthly VOC emissions from the equipment listed in Attachment B in accordance with Condition No. 7.21. All calculations should be kept as part of the monthly record. These records shall be kept available for inspection by or submittal to the Division for five years from the date of record. The Permittee shall use the oxidizer destruction efficiency for Regenerative Thermal Oxidizer RTO2 as specified by the most recent Division approved performance test results when determining VOC emissions associated with the new LS3 Production Line (LS03A) Only. [Avoidance of 40 CFR 51.165 and 391-3-1-.02(6)(b)1]

a. VOC_{LS3} (lbs)= [[Material use (lbs) * (%weight VOC)] – [Waste Material (lbs) * (%weight VOC)]] * (1 - destruction efficiency for LS3 Production Line Only); or

b. VOC_{LS3} (lbs)= [[Material used (gallons) * (VOC Content lbs/gallon)] – [Waste Material (gallons) * (VOC Content lbs/gallon)]] * (1 - destruction efficiency for LS3 Production Line Only); and

c. VOC_i (lbs) = Material use (lbs) * (%weight VOC); or

d. VOC_i (lbs) = Material used (gallons) * (VOC Content lbs/gallon); and

e. $VOC_{Boilers}$ (lbs) = Natural gas consumed at facility (Million standard cubic feet) * (5.5 pounds/ million standard cubic feet); and

f. $VOC_{RTO\ Afterburner}$ (lbs) = Natural gas consumed (Million standard cubic feet) * (5.5 pounds/ million standard cubic feet); and

g. $VOC_{Generator}$ (lbs) = Horsepower of the engine (Hp) * (6.42×10^{-4} pounds/ horsepower-hour) * Operating Hours as determined by Condition 5.1; and

h. VOC_{Tanks} (lbs) = 422 pounds (one twelfth the total annual losses as presented in the August 2012 Table D-32 of Application Number 21210); and

i. VOC_w (lbs) = Waste Material (lbs) * (%weight VOC); or

j. VOC_w (lbs) = Waste Material (gallons) * (VOC Content lbs/gallon); and

k. Total VOC (lbs) = $(VOC_{LS3} + \sum_{i=1}^{n} VOC_i + VOC_{Boilers} + VOC_{RTOAfterburner} + \sum_{i=1}^{n} VOC_{Generator} + VOC_{Tanks} - \sum_{w=1}^{n} VOC_w)$

7.23 The Permittee shall use the monthly VOC records in Condition No. 7.22 to calculate the twelve-month rolling combined total VOC emissions from the equipment listed in Attachment B. The Permittee shall notify the Division in writing if the combined total VOC emissions from the equipment listed in Attachment B exceed 25 tons during any twelve consecutive 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 maintain facility-wide VOC emissions below the emission limit in Condition No. 2.14.
[Avoidance of 40 CFR 51.165 and 391-3-1-.02(6)(b)1]

7.24 The Permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment or any periods during which a continuous monitoring system or monitoring device is inoperative. The Permittee shall retain these records for at least five years after the date of any such startup, shutdown, malfunction, or measurements.
[Avoidance of 40 CFR 51.165 and 391-3-1-.02(6)(b)1]

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.

8.2 The Permittee shall calculate and pay an annual Permit fee to the Division. The amount of the fee shall be determined each year in accordance with the "Procedures for Calculating Air Permit Fees."

8.3 All Georgia Air Quality Permits previously issued to this facility, including Air Quality Permit Nos. 3851-121-0774-S-03-0 and 3851-121-0774-S-03-1, are hereby revoked in their entirety.
[391-3-1-.03(2)(c)] [Vault OT-057-OT, 09/11]

8.4 Within twelve months after commencing operation as a major source, the Permittee shall submit a completed Title V application to the Division.
[391-3-1-.03(10)(c)1]

ATTACHMENT A – EQUIPMENT SUBJECT TO CONDITION NO. 2.1

Emission Units		Associated Control Devices	
Source Code	Description	Source Code	Description
BTI1	10.46 x 106 Btu/hr natural gas fired boiler	---	---
BTI2	10.46 x 106 Btu/hr natural gas fired boiler	---	---
JCM1	3.00 x 106 Btu/hr natural gas fired boiler	---	---
JCM2	3.00 x 106 Btu/hr natural gas fired boiler	---	---
JCM3	3.00 x 106 Btu/hr natural gas fired boiler	---	---
JCM4	3.00 x 106 Btu/hr natural gas fired boiler	---	---
JCM5	3.00 x 106 Btu/hr natural gas fired boiler	---	---
JCM6	3.00 x 106 Btu/hr natural gas fired boiler	---	---
JCM7	3.00 x 106 Btu/hr natural gas fired boiler	---	---
BGEN	750 kW diesel fired emergency generator	---	---
DGEN2	750 kW diesel fired emergency generator	---	---
GEN3	500 kW diesel fired emergency generator	---	---
GEN4	500 kW diesel fired emergency generator	---	---
RD01	Research and Development Pilot Line	---	---
LS01	LS1 (Dailies) Production Line	---	---
LS03	LS3 (Dailies Total One) Production Line	RTO1 or RTO2	Regenerative Thermal Oxidizer
TK01	16,709 gallon MEK Storage Tank	---	---
TK02	7,991 gallon PAA-Dip Storage Tank	---	---
TK03	16,709 gallon 1-Propanol Storage Tank	---	---
TK04	4,546 gallon MEK Day Tank	---	---
TK05	4,546 gallon PAA-Dip Day Tank	---	---
TK06	4,546 gallon 1-Propanol Day Tank	---	---
TK07	19,247 gallon MEK Distillation Feed Tank	---	---
TK08	7,991 gallon PAA-Dip Waste Tank	---	---
TK09	16,709 gallon 1-Propanol Waste Tank	---	---
TK10	19,247 gallon MEK Recovery Tank	---	---
TK11	4,546 gallon 1-Propanol Day Tank	---	---
MEK1	MEK Distillation System	---	---
SP01	Secondary Packaging	DC01 DC02 DC03 DC04 DC05 DC06 DC07 DC08 DC09 DC10	Dust Collectors

ATTACHMENT B - EQUIPMENT SUBJECT TO CONDITION NO. 2.2

Emission Units		Associated Control Devices	
Source Code	**Description**	**Source Code**	**Description**
JCM8	3.00 x 10^6 Btu/hr natural gas fired boiler	---	---
LS01A	New LS1 (Dailies) Production Line	---	---
LS03A	New LS3 (Dailies Total One) Production Line	RT02	Regenerative Thermal Oxidizer
TK21	4,546 gallon MEK Waste Tank	---	---
TK22	4,546 gallon PAA-Dip Waste Tank	---	---
TK23	4,546 gallon 1-Propanol Waste Tank	---	---
TK25	4,546 gallon 10% MEK Waste Tank	---	---
TK27	11,280 gallon 1-Propanol Distillation Feed Tank	---	---
PRO1	1-Propanol Distillation System	---	---