



GOVERNMENT OF PUERTO RICO
DEPARTMENT OF NATURAL AND ENVIRONMENTAL RESOURCES

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Air Quality Area

REVISED FINAL TITLE V OPERATING PERMIT
AIR QUALITY AREA
PERMITS AND ENGINEERING DIVISION



Permit Number: PFE-TV-2834-16-0509-0194
Application Receipt Date: May 15, 2009
Final or Effective Issue Date: August 31, 2016
Revision Date due to Resolution R-18-10-42: July 16, 2019
Expiration Date: August 31, 2021

In conformity with the provisions of Part VI of the Regulation for the Control of Atmospheric Pollution (RCAP) and the provisions of the Code of Federal Regulations (CFR), Volume 40, Part 70 we authorize:

LILLY DEL CARIBE, INC.
CAROLINA, PUERTO RICO

hereinafter the **permittee** or **Lilly del Caribe, Inc., or Lilly**, to operate a stationary source of air pollutants emissions consisting of the units described in this permit. Until this permit expires, is modified or revoked, the permittee shall be able to emit atmospheric pollutants as a result of those processes and activities directly related and associated with the sources of emission, in compliance with the requirements, limitations and conditions of this permit, until its expiration date or until such is modified or revoked.

The conditions of the permit shall be enforceable by the federal and state government. Those requirements that are enforceable only by the state government shall be identified as such in the permit. A copy of the permit shall be kept in the aforementioned facility at all times.

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Section I - General Information

A. Facility Information

Company Name: Lilly del Caribe, Inc.

Postal Address: P.O. Box 1198
Carolina, P.R. 00986-1198

Facility Location: Road PR-3 Km 12.6
430 Fabril Street
Carolina, Puerto Rico

Responsible Officer: Víctor M. Cruz Rodríguez
President and General Manager

Phone: 787-257-5555

Fax: 787-257-5933

Contact Person: Damaris Carmona
EHS Director

Phone: 787-257-5555

Fax: 787-257-5933

SIC Primary Code: 2834

B. Process Description

Lilly del Caribe, Inc., is an industry dedicated to the intermediate industry of bulk and final pharmaceutical products. Lilly currently only manufactures products for human care in its two plants: PR-1 and PR-05 jointly located.

For the manufacture of these products Lilly uses a series of processes that result in atmospheric emissions, including: dispensing, mixing, drying and weighing of material, compression, finishing and imprinting of tablets; filling capsules; fermentation, purification, evaporation, crystallization and vacuum drying processes. In addition solvent recovery columns are used to support the manufacturing processes.

Lilly uses boilers as indirect manufacturing equipment to provide steam to the facility, emergency electric generators and storage tanks for chemical products, fuels and waste (wastewater with traces of ammonia) generated during the pharmaceutical production process.

To control atmospheric discharges from emission points, Lilly uses equipment such as: condensers, dust collectors, and several HEPA filters. The control equipment is described in Attachment II of this permit.

The emission units are defined in Section II of this permit and insignificant emission units in Section VIII. Lilly is considered a major source of air emissions as it has the potential to emit more than 100 tons annually of each of the following criteria pollutants: particulate matter (PM₁₀), sulfur dioxide (SO₂) and nitrogen oxides (NO_x) and greenhouse gases (GHGs) in excess of 100,000 tons per year expressed as CO₂e.

Section II - Emission Units and Control Equipment Description

The emission units regulated by this permit are the following:

Emission Units	Emission Point	Description	Control Equipment
 EU-LFOBOILER	EP/1/Boiler5 EP/2/Boiler201A	<u>Boiler #5Boiler #5:</u> Capacity: 1,100 hp Rated Heat Input Capacity: 43.3 MMBtu/hr Manufacturer : Babcock & Wilcox Type of fuel: Diesel and/or kerosene. Maximum fuel consumption rate: 241.79 gal/hr Stack: Height: 40'-0" Temperature: 350 F [PFE-16-0203-0187-I-II-C] <u>Boiler 201A:</u> Capacity:600 hp Rated Heat Input Capacity: 25.2 MMBtu/hr Manufacturer : Superior Type of fuel: Diesel and/or kerosene. Maximum fuel consumption rate: 180 gal/hr Stack: Height: 35'-0" Diameter: 36" Temperature: <500 F [PFE-16-0203-0187-I-II-C]	None
EU-HFOBOILER-2	EP/2/Boiler201B	<u>Boiler 201B:</u> Capacity: 300 hp Rated Heat Input Capacity: 12.6 MMBtu/hr Manufacturer: Superior Type of fuel: Fuel oil #5 Maximum fuel consumption rate: 85 gal/hr Stack: Height: 38'-0" Diameter: 20" Temperature: <500 F [PFE-16-0692-0843-I-II-O]	 None

Emission Units	Emission Point	Description	Control Equipment
EU-NSPSBOILER	EP/5/Boiler7610A EP/5/Boiler7610B	<p><u>Boiler 7610A:</u> Rated Heat Input Capacity: 64.99 MMBtu/hr Rated Heat Input Capacity: 64.99 MMBtu/hr Manufacturer: Babcock & Wilcox Type of fuel: Diesel and/or kerosene. Maximum fuel consumption rate: 464.21 gal/hr Stack: Height: 171'-0" Diameter: 60/36 Temperature: 220 F Exit velocity: 13 ft/s [PFE-16-0203-0187-I-II-C]</p> <p><u>Boiler 7610B:</u> Rated Heat Input Capacity: 64.99 MMBtu/hr Rated Heat Input Capacity: 64.99 MMBtu/hr Manufacturer: Babcock & Wilcox Type of fuel: Diesel and/or kerosene. Maximum fuel consumption rate: 464.21 gal/hr Stack: Height: 171'-0" Diameter: 60/36 Temperature: 220 F Exit velocity: 13 ft/s [PFE-16-0203-0187-I-II-C]</p>	None
EU-NSPSBOILER-2	EP/1/511 EP/1/512	<p><u>Boiler 511:</u> Capacity: 500 hp Rated Heat Input Capacity: 19.7 MMBtu/hr Marca: Cleaver Brooks Type of fuel: Diesel and/or kerosene. Maximum fuel consumption rate: 145.8 gal/hr Stack: Height: 80'-0" Diameter: 24" Temperature: <500 F Exit velocity: 32 ft/s [PFE-16-1108-0591-II-C]</p> <p><u>Boiler 512:</u> Capacity: 500 hp Rated Heat Input Capacity: 19.7 MMBtu/hr Manufacturer: Cleaver Brooks Type of fuel: Diesel and/or kerosene. Maximum fuel consumption rate: 145.8 gal/hr Stack: Height: 80'-0" Diameter: 24" Temperature: <500 F Exit velocity: 31.5 ft/s [PFE-16-1108-0591-II-C]</p>	None

Emission Units	Emission Point	Description	Control Equipment
EU-GT500EMGEN-2	EP/2/511D	<p><u>Emergency Electric Generator 511D:</u> Engine Power: 2,145 hp (1.6 MW) Manufacturer: Caterpillar Type of fuel: Diesel Design maximum fuel consumption rate: 108.3 gallons/hr Stack: Height: 16'-0" Diameter: 12" [PFE-16-0203-0187-I-II-C, November 10, 2010]</p>	None
EU-GT500EMGEN-3 	EP/5/Y-SG-101 EP/5/Y-SG-102 EP/5/Y-SG-103 EP/5/Fire Pump	<p><u>Emergency Electric Generator Y-SG-101:</u> Engine Power: 2.25 eMW (3,016 hp) Manufacturer: Caterpillar Type of fuel: Diesel Design maximum fuel consumption rate: 156 gallons/hr Stack: Height: 18'-0" Diameter: 18" [PFE-16-0203-0187-I-II-C]</p> <p><u>Emergency Electric Generator Y-SG-102:</u> Engine Power: 2.25 eMW (3,016 hp) Manufacturer: Caterpillar Type of fuel: Diesel Design maximum fuel consumption rate: 156 gallons/hr Stack: Height: 18'-0" Diameter: 18" [PFE-16-0203-0187-I-II-C]</p> <p><u>Emergency Electric Generator Y-SG-103 (3,016 Hp):</u> Engine Power: 2.25 eMW (3,016 hp) Manufacturer: Caterpillar Type of fuel: Diesel Design maximum fuel consumption rate: 156 gallons/hr Stack: Height: 18'-0" Diameter: 18" [PFE-16-0203-0187-I-II-C]</p> <p><u>Fire Pump EP/5/FirePump:</u> Engine Power: 0.28 eMW (375 hp) Manufacturer: Patterson Type of fuel: Diesel Design maximum fuel consumption rate: 18 gallons/hr Stack: Height: 12'-0" Diameter: 6" [PFE-16-0203-0187-I-II-C]</p>	None

Emission Units	Emission Point	Description	Control Equipment
EU-GT500EMGEN-4	EP/1/510F EP/1/510G EP/1/510H	<p><u>Emergency Electric Generator 510F:</u> Engine Power: 2.0 eMW (2,681 hp) Manufacturer: Cummins Type of fuel: Diesel Design maximum fuel consumption rate: 135 gallons/hr Stack: Height: 18'-0" [PFE-16-0203-0187-I-II-C]</p> <p><u>Emergency Electric Generator 510G:</u> Engine Power: 2.0 eMW (2,681 hp) Manufacturer: Cummins Type of fuel: Diesel Design maximum fuel consumption rate: 135 gallons/hr Stack: Height: 18'-0" [PFE-16-0203-0187-I-II-C]</p> <p><u>Emergency Electric Generator 510H:</u> Engine Power: 2.0 eMW (2,681 hp) Manufacturer: Cummins Type of fuel: Diesel Design maximum fuel consumption rate: 135 gallons/hr Stack: Height: 18'-0" [PFE-16-0203-0187-I-II-C]</p>	None

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Emission Units	Emission Point	Description	Control Equipment
EU- LT500EMGEN-5 		<u>Emergency Electric Generator EP/1/510A:</u> Engine Power: 100 kW Manufacturer: Perkins Type of fuel: Diesel Design maximum fuel consumption rate: 6 gallons/hr Stack: Height: 12'-0" Diameter: 6" [PFE-16-0692-0843-I-II-C]	None
		<u>Emergency Electric Generator EP/1/510B:</u> Engine Power: 60 kW Manufacturer: Cummins Type of fuel: Diesel Design maximum fuel consumption rate: 5.1 gallons/hr Stack: Height: 13'-0" Diameter: 6" [PFE-16-0795-0916-II-O]	
	EP/1/510A EP/1/510B EP/1/510C EP/1/510D EP/2/511B EP/2/511C EP/5/PR52	<u>Emergency Electric Generator EP/1/510C:</u> Engine Power: 100 kW Manufacturer: Cummins Type of fuel: Diesel Design maximum fuel consumption rate: 6.6 gallons/hr Stack: Height: 13'-0" Diameter: 6" [PFE-16-0700-1289-II-C]	
		<u>Emergency Electric Generator EP/1/510D:</u> Engine Power: 300 kW Manufacturer: Caterpillar Type of fuel: Diesel Design maximum fuel consumption rate: 23 gallons/hr Stack: Height: 12'-0" Diameter: 8" Temperature: 1,002.02 F Velocidad de salida: 118 ft/s [PFE-16-0397-0401- II-C]	

Emission Units	Emission Point	Description	Control Equipment
EU-LT500EMGEN-5 (continued)		<p><u>Emergency Electric Generator EP/2/511B:</u> Engine Power: 800 kW Manufacturer: Cummins Type of fuel: Diesel Design maximum fuel consumption rate: 69.4 gallons/hr Stack (Double): Height: 13'-0" Diameter: 8" [PFE-16-0692-0843-I-II-C]</p> <p><u>Emergency Electric Generator EP/2/511C:</u> Engine Power: 350 kW Manufacturer: Cummins Type of fuel: Diesel Design maximum fuel consumption rate: 27 gallons/hr Stack: Height: 13'-0" Diameter: 8" [PFE-16-0692-0843-I-II-C]</p> <p><u>Emergency Electric Generator EP/5/PR52:</u> Engine Power: 804 hp (600 kW) Manufacturer: Caterpillar Type of fuel: Diesel Design maximum fuel consumption rate: 44.5 gallons/hr Stack: Height: 12'-0" Diameter: 8" Temperature: 906.62 F</p>	None
EU-AMMONIAUNITS-2	See Attachment I	This unit includes process equipment at PR01 such as material transfer, suspension make-up and dispensing processes.	Various HEPA Filters Eff. 99%
EU-FERMENTATION	See Attachment I	This emission unit consists of fermentation process located at PR05 Plantsite. The fermentation process consists of three (3) fermenters, six (6) preparation tanks, six (6) pilot plants tanks with 120 L capacity each, and one ammonium hydroxide station. This process produces atmospheric emission of hydrogen sulfide (H ₂ S).	None

Emission Units	Emission Point	Description	Control Equipment
EU-TANKS	See Attachment I	This unit consist of tanks of volatile organic liquids with storage capacity less than 40,000 gallons. These tanks are equipped with safety valves or other equivalent equipment whose effect on emission controls are similar.	See Attachment II
EU-DUSTUNITS	See Attachment I	This unit includes Non-Process sources emitting particulate matter. Includes pharmaceutical production processes like raw material dispensing, material transfer, drying, granulation, mixing, coating, capsule filling, tables compression, among others.	See Attachment II
EU-VOCUNITS-2	See Attachment I	This unit includes processes that emit less than 3 lbs/hr and 15 lbs/day of volatile organic compound (VOC). Such as tablets printing, resin regeneration, product elution, drying, solvent recovery, concentration, solvent storage, solution preparation, and equipment cleaning, among others.	Various HEPA Filters Eff. 99%
EU-VOCUNITS-1	EP/5/TK/5740 EP/5/TK/5750	This emission unit includes processes that emit more than 3 lbs/hr and 15 lbs/day of VOC and are connected to some emission control equipment. Such as: "Heat Exchanger"	See Attachment II
EU-VOCEMISSIONS	See Attachment I	Include fugitive HAPs and VOC emissions occurring from process equipment at PR05 plantsite. Possible sources of fugitive emissions may include flanges, connectors, valves, pumps, vessels, containers, tanks, and process equipment. Fugitive losses occur from processes like, but not limited to, dispensing, material transfer, granulation, drying, mixing, tablet compression, tablet coating, capsule filling, tablet printing, equipment cleaning, evaporation, solvent recovery, elution, resin regeneration, concentration, filtration, and product recovery processes.	Leak Detection and Repair Program

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Section III – General Permit Conditions

1. **Sanctions and Penalties:** The permittee must comply with all terms, conditions, requirements, limitations and restrictions established in this permit. Any violation to the terms of this permit is subject to administrative, civil or criminal measures, as established in Section 16 of the Environmental Public Policy Act (Law No. 416 of September 22, 2004, as amended).
2. **Right of Entry:** As specified under Rules 103 and 603(c)(2) of the RCAP, the permittee shall allow the Board¹ or an authorized representative, upon presentation of credentials and other documents as may be required by law, to perform the following activities:
 - a) Enter upon the permittee premises where an emission source is located or where emissions related activities are conducted, or where records must be kept under the conditions of this permit, under the RCAP, or under the Clean Air Act;
 - b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit, under the RCAP, or under the Clean Air Act;
 - c) Inspect and examine any facility, equipment (including monitoring and air pollution control equipment), practices or operations (including QA/QC methods) regulated or required under this permit; as well as sampling emissions of air quality and fuels;
 - d) As authorized by the Clean Air Act and the RCAP, to sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements.
3. **Sworn Statement or Affidavit:** All reports required pursuant Rule 103(D) of the RCAP (i.e., semiannual monitoring reports and annual compliance certification) should be submitted together with a sworn statement or affidavit by the Responsible Official or a duly authorized representative. Such sworn statement or affidavit shall attest to the truth, correctness and completeness of such records and reports.

¹ In accordance with the Reorganization Plan of the Department of Natural and Environmental Resources of 2018, Law 171 of August 2, 2018, Section 28, the powers and functions previously delegated to the Environmental Quality Board, its President and / or its Governing Board through Law 416-2004, as amended, known as, "Law on Environmental Public Policy" are transferred to the Department of Natural and Environmental Resources for execution by the Secretary. For this reason, wherever the permit establishes EQB, Board, Environmental Quality Board or agency, it will be understood that it is currently referring to the Department of Natural and Environmental Resources (DNER).

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4. **Data Availability:** As specified under Rule 104 of the RCAP, all emission data obtained by or submitted to the EQB, including data reported pursuant to Rule 103 of the RCAP, as well as that obtained in any other way, shall be available for public inspection and may also be made available to the public in any additional manner that the EQB may deem appropriate.
5. **Emergency Plan:** According to Rule 107 of the RCAP, the permittee shall have available an Emergency Plan which must be consistent with adequate safety practices and provides for the reduction or retention of the emissions from the plant during periods classified by the Board as alerts, warnings or emergency. These plans shall identify the emission sources, include the reduction to be accomplished for each source and how this reduction will be accomplished. These plans will be available at all times for inspection by any authorized EQB representative.
6. **Air Pollution Control Equipment:** The permittee shall comply with Rule 108 of the RCAP, as follows:
 - a) All air pollution control equipment or control measures shall provide for continuous compliance with applicable rules and regulations. Such equipment or measures shall be installed, maintained, and operated according to those conditions imposed by this Title V permit, within the specified operating limitations of the manufacturer.
 - b) The collected material from air pollution control equipment shall be disposed in accordance with applicable rules and regulations. The removal, manipulation, transportation, storage, treatment or disposal will be done in such or manner that shall not to produce environmental degradation, and in accordance with applicable rules and regulations.
 - c) EQB may require, when deemed appropriate to safeguard the health and welfare of human beings, the installation and maintenance of additional, complete and separate air pollution control equipment of a capacity equal to the capacity of the primary control equipment. Furthermore, the Board may require that such additional air pollution control equipment be operated continuously and conjunctionally with the primary air pollution control equipment.
 - d) All air pollution control equipment shall be operated at all times while the source being controlled is in operation.
 - e) In the case of a shutdown of air pollution control equipment for the necessary scheduled maintenance, the intent to shutdown such equipment shall be reported to the Board at least three days prior to the planned shutdown. Such prior notice shall include, but is not limited to the following:

- (1) Identification of the specific source to be taken out of service with its location and permit number.
 - (2) The expected length of time that the air pollution control equipment will be out of service.
 - (3) The nature and quantity of emissions of air pollutants likely to be permitted during the shutdown period.
 - (4) Measures such as the use of off-shift labor and equipment that will be taken to minimize the length of the shutdown period.
 - (5) The reasons why it will be impossible or impractical to shutdown the operating source during the maintenance period.
- f) The permittee shall to the extent possible, maintain and operate at all times, including periods of start-up, shutdown and malfunction, any affected source, including equipment associated with air pollution control, consistent with the design specifications of the original manufacturer and in compliance with applicable rules and regulations and permit conditions.
7. **Compliance Certification:** As specified under Rule 602(c)(2)(ix)(C) of the RCAP, the permittee shall submit each year a compliance certification. This certification must be submitted to both the EQB and the Environmental Protection Agency (EPA)² no later than April 1st of each year, covering the previous calendar year. The compliance certification shall include, but is not limited to, the information required under Rule 603(c) of the RCAP as follows:
- a) The identification of each term or condition of the permit that is the basis of the certification; and
 - b) The compliance status. Each deviation shall be identified and taken into account in the compliance certification; and

² The certification to the EQB shall be mailed to: Manager, Air Quality Area, P.O. Box 11488, San Juan, P.R. 00910. The certification to the EPA shall be mailed to: U.S. Environmental Protection Agency, 48 Carr. 165 Suite 7000, Guaynabo, P.R. 00968-8073.

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- c) A statement indicating whether the compliance was continuous or intermittent; and
 - d) The methods or other means used for determining the compliance status with each term and condition, currently and over the reporting period consistent with sections (a)(3) - (5) of Rule 603 of the RCAP; and
 - e) Identification of possible exceptions to compliance, any periods which compliance is required and in which an excursion or exceedance as defined under 40 CFR Part 64 (CAM) occurred; and
 - f) Such other facts as the Board may require to determine the compliance status of a source.
8. **Regulation Compliance:** As specified under Rule 115 of the RCAP, any violation to the RCAP, or to any other applicable rule or regulation, shall be grounds for the Board to suspend, modify, or revoke any relevant permit, approval, variance or other authorization issued by the Board.
9. **Location Approval:** As specified under Rule 201 of the RCAP, nothing in this permit shall be interpreted as authorizing the location or construction of a major stationary source, or the modification of a major stationary source, or a major modification of a significant source, without obtaining first a location approval from the Board and without first demonstrating compliance with the National Ambient Air Quality Standards (NAAQS). This permit does not allow the construction of new minor sources without the required permit under Rule 203 of the RCAP.
10. **Objectionable Odors:** As specified under Rule 420 of the RCAP, the permittee shall not cause or permit emissions to the atmosphere of any matter which produces an *objectionable* odor that can be perceived in an area other than that designated for industrial purposes. If an objectionable odors are detectable beyond the premises that have been designated for industrial purposes and complaints are received, the permittee shall investigate and take measures to minimize or eliminate the malodors, if necessary. [This condition is enforceable only by the State]
11. **Permit Renewal Applications:** As established under Rule 602 (a)(1)(iv) of the RCAP, the permittee shall submit a permit renewal application applications for permit renewal shall be submitted at least 12 months prior to the date of permit expiration. A responsible official must certify all required applications consistent with paragraph (c)(3) of Rule 602 of the RCAP.

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12. **Permit Duration:** As specified under Rule 603 of the RCAP, the following terms will apply during the duration of this permit:
- a) **Expiration:** This authorization shall have a fixed term of 5 years since the effective date. The expiration date will be automatically extended until the Board approves or denies a renewal application (Rule 605(c)(4)(ii) of the RCAP) but only in those cases where the permittee submits a complete renewal application at least twelve (12) months before the expiration date. [Rules 603 (a)(2), 605 (c)(2), and 605(c)(4) of the RCAP]
 - b) **Permit Shield:** As specified under Rule 605 (c)(4)(i) of the RCAP, the permit shield may be extended until the time the permit is renewed if a timely and complete renewal application is submitted.
 - c) In case that this permit is subject to any challenge by third parties, the permit shall remain in effect until the time it is revoked by a court of law with jurisdiction in the matter.
13. **Recordkeeping Requirement:** As established under Rule 603(a)(4)(ii) of the RCAP, the permittee shall retain records of all required monitoring data and support information for a period of 5 years from the date of the monitoring sample, measurement, report, or application.
14. **Semiannual Monitoring Reports/Samplings³:** As established under Rule 603(a)(5)(i) of the RCAP, the permittee shall submit reports to the EQB of all required monitoring every 6 months, or more frequently if required by the Board or any other underlying applicable requirement. All instances of deviations from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official as established under Rule 602(c)(3) of the RCAP. The report covering the period from January through June shall be submitted no later than October 1 of the same year and the report covering the period from July through December shall be submitted no later than April 1 of the following year. Once the guidelines are developed by the Board, the permittee must use them to complete these reports.
15. **Deviations Reporting due to Emergencies:** According to Rule 603(a)(5)(ii)(a) of the RCAP, any deviation resulting from an upset (such as sudden malfunction or break-down) or emergency conditions, as defined in Rule 603(e) of the RCAP, must be reported to the Board (via telephone at 787-767-8181 ext. 3267, fax at 787-756-5906, letter, or to the following email: aire@jca.pr.gov) within the next 24 hours if a deviation that results in the

³ These reports cover two major elements. The first element is the summary of all periodic monitoring / sampling required in this permit. The second element requires that all deviations from permit conditions are clearly identified, summarized and reported to the Board.

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release of emissions of hazardous air pollutants for more than an hour in excess of the applicable limit. If the permittee raises the emergency defense upon an enforcement action, it will have the burden of proof to demonstrate that such deviation happens due to an emergency and that the Board was adequately notified. If such emergency deviation last for more than 24 hours, the affected units may be operated until the end of the cycle or 48 hours, whichever comes first. The Board may only extend the operation of an emission source in excess of 48 hours, if the source demonstrates to the satisfaction of the Board that the National Standards for Air Quality will not be exceeded and no risk to public health.

16. **Deviation Reporting (Hazardous Air Pollutants):** The source shall act as specified in its Emergency Response Plan (established in Rule 107(C) of the RCAP), when such Plan has shown no significant impact on an area other than those that have been designated for industrial purposes or will cease operations immediately if there is a significant impact on an area other than those that have been designated for industrial purposes (state-only enforceable condition). In accordance with Rule 603(a)(5)(ii)(b) of the RCAP, the Board shall be notified (via telephone at 787-767-8181 ext. 3267, fax at 787-756-5906, letter, or to the following email: aire@jca.pr.gov) within the next 24 hours if a deviation that results in the release of emissions of hazardous air pollutants for more than an hour in excess of the applicable limit occurs. For the discharge of any regulated air pollutant that continues for more than 2 hours in excess of the applicable limit, the permittee shall notify the Board within 24 hours of the deviation. The permittee shall submit to the Board, within 7 days of the deviation, a detailed written report which includes probable causes, time and duration of the deviation, remedial action taken and the steps you are following to prevent recurrence.
17. **Severability Clause:** As specified under Rule 603(a)(6) of the RCAP, the clauses in this permit are severable. In the event of a successful challenge to any portion of the permit in an administrative or judicial forum, or in the event any of its clauses is held to be invalid, all other portions of the permit shall remain valid and effective, including those related to emission limits, terms and conditions, be they specific or general, as well as monitoring, record keeping and reporting requirements.
18. **Permit Noncompliance:** According to Rule 603(a)(7)(i) of the RCAP, the permittee must comply with all conditions of the permit. Permit noncompliance constitutes a violation of the RCAP and will be grounds for taking the appropriate enforcement action, impose sanctions, revoke, terminate, modify, and/or reissue the permit, or to deny the permit renewal application.
19. **Defense not Allowed:** As specified under Rule 603(a)(7)(ii) of the RCAP, the permittee shall not allege as a defense in an enforcement action, that it would have been necessary to

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halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.

20. **Permit Modification and Revocation:** As specified under Rule 603(a)(7)(iii) of the RCAP, the permit may be modified, revoked, reopened, reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
21. **Property Rights:** As specified under Rule 603(a)(7)(iv) of the RCAP, this permit does not convey any property rights of any sort, nor does it grant any exclusive privilege.
22. **Obligation to Furnish Information:** As specified under Rule 603(a)(7)(v) of the RCAP, the permittee shall furnish to the EQB, within a reasonable time, any information that the EQB may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the EQB copies of documents related to this permit.
23. **Prohibition on Default Issuance:** As specified under Rule 605(d) of the RCAP, it shall never be considered that a permit has been issued by default as a result of the EQB's failure to take final action on a permit application within 18 months. The EQB's failure to issue a final permit within 18 months should be treated as a final action solely for the purpose of obtaining judicial review in a state court.
24. **Administrative Permit Amendments and Permit Modifications:** As specified under Rule 606 of the RCAP, the permit shall not be amended nor modified unless the permittee complies with the requirements for administrative permit amendments and permit modifications as described in the RCAP.
25. **Permit Reopening:** As specified under Rule 608(a)(1), this permit shall be reopened and revised under the following circumstances:
 - a) Whenever additional applicable requirements under any law or regulation become applicable to the permittee, when the remaining permit term is of 3 or more years. Such reopening shall be completed 18 months after promulgation of said applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to Rule 605(c)(4)(i) or Rule 605(c)(4)(ii) of the RCAP.

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- b) Whenever the EQB or the EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emission standards or other terms or conditions of the permit.
- c) Whenever the EQB or the EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
26. **Changes in Name or Responsible Official:** This permit is issued to **Lilly del Caribe, Inc.** In the event that the company and/or facility change its name, the responsible official must submit an administrative amendment to this permit to reflect the change in name. If the event that the responsible official changes, the new responsible official must submit no later than 30 days after the change, an administrative amendment including a sworn statement in which he/she accepts and promises to comply with all the conditions of this permit.
27. **Changes in Ownership:** This permit is issued to **Lilly del Caribe, Inc.** In the event that the company and/or facility is transferred to a different owner or change operational control and the Board determines that no other change in the permit is necessary, the new responsible official must submit an administrative amendment. The administrative amendment shall include a sworn statement in which the new responsible official accepts and promises to comply with all the conditions of this permit, and a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittee. This is not applicable if the Board determines that changes to the permit are necessary.
28. **Changes in Operating Scenarios:** In accordance with Rule 603(a)(10) of the RCAP, the permittee shall, contemporaneously with the change from one scenario to another, record in a logbook the scenario under which it is operating. This record will be kept on the facility at all times.
29. **Final Action:** In accordance with Rule 605 (d) of the RCAP, it will never be considered that a permit has been issued by default as a result of the Board's failure to take final action on a permit application within 18 months. The fact that the Board may not issue a final permit within 18 months should be treated as a final action only for the purpose of obtaining judicial review in state court.
30. **Renovation Work/ Demolition:** The permittee shall comply with the provisions set forth in 40 CFR §61.145 and §61.150, and Rule 422 of the RCAP, and Regulations for the Processing of General Permits (General Permit for the Handling of Asbestos Containing Materials) when doing any handling of asbestos containing materials at the facility.

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31. **Risk Management Plan:** If during the term of this permit, the permittee is subject to 40 CFR Part 68, the permittee shall submit a Risk Management Plan according with the compliance schedule in the 40 CFR part 68.10. If the permittee is subject to 40 CFR part 68, as part of the annual compliance certification required under 40 CFR part 70, during the term of this permit shall include a certification of compliance with the requirements of Part 68, including registration and Risk Management Plan.
- a) Identify risks that may result from accidental releases using appropriate techniques for assessing risk.
 - b) Develop, maintain and operate a safe facility.
 - c) Minimize the consequences of accidental releases if they occur.
32. **Compliance Clause:** Under no circumstances does compliance with this permit exempt the permittee from complying with all other applicable state or federal laws, regulations, permits, administrative orders or applicable court orders. General Duty: The permittee has the general obligation of identifying hazards which may result from accidental releases of any controlled substance under section 112(r) of the Clean Air Act or any other extremely hazardous substance in a process, using appropriate hazard assessment techniques, designing, maintaining, and operating a safe facility and minimizing the consequences of accidental releases if they occur as required in section 112(r)(1) of the Act and Rule 107(D) of the RCAP.
33. **Requirements for Refrigerants (Climatologic and Stratospheric Ozone Protection):**
- a) In the event that the permittee has equipment or appliances, including air conditioning units, which use Class I or II refrigerants as defined in 40 CFR part 82, subpart A, Appendices A and B, the permittee shall take the necessary measures to ensure that all maintenance, service or repair services performed are done so according to the practices, certification and personnel requirements, disposition requirements, and recycling and/or recovery equipment certification requirements specified under 40 CFR part 82, subpart F.
 - b) Owners/ operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR §82.166.
 - c) Service on Motor Vehicles: If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, subpart B, Servicing of Motor Vehicle Air Conditioners. The term motor vehicle as used in

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subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term MVAC as used in subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo or system used on passenger buses using HCFC-22 refrigerant.

34. **Labeling of Products Using Ozone-Depleting Substances:** The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR part 82, subpart E.
- a) All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to 40 CFR §82.106.
 - b) The placement of the required warning statement must comply with the requirements pursuant to 40 CFR §82.108.
 - c) The form of the label bearing the required warning statement must comply with the requirements pursuant to 40 CFR §82.110.
 - d) No person may modify, remove, or interfere with the required warning statement except as described in 40 CFR §82.112.
35. **Roof Surface Coating:** Pursuant to Rule 424 of the RCAP, the permittee shall not cause or permit the roof surface coating by applying hot tar or any other coating material containing organic compounds without previous notification to the Board. The use of used oil or hazardous waste for roof surface coating is prohibited. [State enforceable only]
36. **Open Burning:** Pursuant to Rule 402 of the RCAP, the permittee shall not cause or permit the open burning of refuse in their premises except as established under paragraph (E) of such rule which authorizes to conduct training or research of firefighting techniques, as previously approved by the Board.
37. **Fugitive Emissions:** Compliance with Rule 404 of the RCAP:
- a) The permittee shall use water or suitable chemicals for chemical stabilization and the control of dust in the demolition of a building or structures, construction operations, quarrying operations, the grading of roads, or the clearing of lands.
 - b) The permittee shall not cause or permit the discharge of visible emissions of fugitive dust beyond the boundary line of the property on which the emissions originate.

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- c) When air pollutants escape from a building or equipment causing disturbance or infringing any regulation, the Board could order the building or the equipment used in the process, handling and storage to be enclosed and ventilated in way that all the emissions be controlled by removing or destroying such air pollutants before their emission. The implementation of this measure should not create occupational health danger.
38. **Compliance Clause:** The compliance with this permit in no way relieves the permittee to comply with other state and federal laws, regulations, permits, administrative orders or applicable court orders.
39. **Emissions Calculations:** The permittee shall submit, on or before **April 1st of each year**, the actual or permissible emissions calculations for the previous natural year. The emissions calculations shall be submitted on the forms prepared by the Board for this purpose and the responsible official must certify all the information submitted as true, correct and representative of the permitted activity.
40. **Annual Fee:** As specified under Rule 610 of the RCAP, the permittee must submit an annual payment based on the emissions calculations for each regulated pollutant. The payment will be based on their actual emissions at a rate of \$37.00 per ton, unless the Board decides otherwise as permitted under Rule 610(b)(2)(iv) of the RCAP. This payment for the previous year must be made on or before **June 30 of each year**.
41. **New or Amended Regulation:** If federal or state regulation is promulgated or amended and the facility is affected by it, the owner or operator shall comply with the requirements of the new or amended regulation by the compliance date or granted extension of compliance date.
42. **Reports:** Unless a permit condition establishes otherwise, any requirement of information submittal to the Board shall be addressed to: Manager, Air Quality Area, PO Box 11488, San Juan, P.R. 00910.
43. **Source Modifications without a permit revision:** According to Rule 607 of the RCAP, the permittee may perform:
- a) Source changes
1. Permitted sources may make Section 502(b)(10) changes without requiring a permit revision, if the changes are not modifications under any provision of Title I of the Act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions).
- a. For each such change, the facility must provide the Administrator and the Board with written notification in advance of the proposed changes, which shall be seven (7) days. The written notification shall include a brief description of the change within the permitted facility, the date on which

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the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change. The source, the Board, and EPA shall attach each such notice to their copy of the relevant permit.

- b. The permit shield described in paragraph (d) of Rule 603 shall not apply to any change made pursuant to section (a)(1) of Rule 607.
2. Permitted sources may trade increases and decreases in emissions in the permitted facility for the same pollutant, where the permit provides for such emissions trades without requiring a permit revision and based on the 7-day notice prescribed in section (a)(2) of Rule 607. This provision is available in those cases where the permit does not already provide for such emissions trading.
 - a. Under paragraph (a)(2) of Rule 607, the written notification required shall include such information as may be required by the provision in the Puerto Rico State Implementation Plan (PR-SIP) authorizing the emissions trade, including when the proposed change will occur, a description of each such change, any change in emissions, the permit requirements with which the source will comply using the emissions trading provisions of the PR-SIP, and the pollutants emitted subject to the emissions trade. The notice shall also refer to the provisions with which the source will comply in the PR-SIP and that provide for the emissions trade.
 - b. The permit shield described in paragraph (d) of Rule 603 shall not extend to any change made under section (a)(2) of Rule 607. Compliance with the permit requirements that the source will meet using the emissions trade shall be determined according to requirements of the applicable implementation plan authorizing the emissions trade.
3. If a permit applicant requests it, the Board shall issue permits that contain terms and conditions (including all terms required under sections (a) and (c) of Rule 603 to determine compliance) allowing for the trading of emissions increases and decreases in the permitted facility solely for the purpose of complying with a federally-enforceable emissions cap. Such a cap must be established in the permit independent of otherwise applicable requirements. The permit applicant shall include in its application proposed replicable procedures and permit terms that ensure the emissions trades are quantifiable and enforceable. The Board shall not be required to include in the emissions trading provisions any emissions units for which emissions are not quantifiable or for which there are no replicable procedures to enforce the emissions trades. The permit shall also require compliance with all applicable requirements.
 - a. Under section (a)(3) of Rule 607, the written notification required shall state when the change will occur and shall describe the changes in emissions that

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will result and how these increases and decreases in emissions will comply with the terms and conditions of the permit.

- b. The permit shield described in paragraph (d) of Rule 603 may extend to terms and conditions that allow such increases and decreases in emissions.
- b) Off-Permit Changes. The Board may allow changes that are not addressed or prohibited by the permit and/or State Law.
1. A permitted facility may make changes without obtaining a permit revision if such changes are not addressed or prohibited by the permit, other than those described in paragraph (c) of Rule 607.
 - a. Each such change shall meet all applicable requirements and shall not violate any existing permit term or condition.
 - b. Sources must provide contemporaneous written notice to the Board and EPA of each such change, except for changes that qualify as insignificant under paragraph (c)(1) of Rule 602. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted and any applicable requirement that would apply because of the change.
 - c. The change shall not qualify for the shield under paragraph (d) of Rule 603.
 - d. The permittee shall keep a record describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.
 - c) A permitted facility cannot make changes without a permit revision if such changes are modifications under any provision of Title I of the Act.
44. a) The permittee may make changes under section 502(b)(10) of the Act without requiring a permit revision if such changes:
1. are not modifications under any provision of Title I of the Act,
 2. do not exceed the allowable emissions under the permit,
 3. do not result in the emission of any pollutant not previously emitted,

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4. do not violate any applicable requirement or contravene federally enforceable terms and permit conditions such as monitoring (including test methods), recordkeeping, reporting and compliance certification requirements,
 5. are not changes under Title I of the Act to an emission limit, a work practice or a voluntary emission cap.
- b) Rule 203 of the RCAP is required for any construction or modification of an emission source. For purposes of part II of the RCAP, a modification is defined as any physical change in, change in the method of operation or a change in type of fuel used of an existing stationary source, that would result in a net increase in that stationary source's potential to emit any air pollutant (subject to any standard), or which results in the emission of any pollutant (subject to an standard) not previously emitted. A physical change shall not include routine maintenance, repair and the replacement of any equipment having the same capacity, equal efficiency or greater environmental benefit to be used for the same purpose.
 - c) The written notification addressed in condition 43(a)(1)(i) refers to changes covered under condition 43(a)(1). Changes not covered will be processed under the requirements of Rule 203 of the RCAP.
 - d) Any emission trading as provided in condition 43(a)(2) above will not be authorized if the facility does not provide the reference to the PR-SIP provisions authorizing such emissions trading.
 - e) If the permittee requests so, the Board may allow the emission trading in the facility solely for the purpose of complying with a federally-enforceable emissions cap. The application shall be based in replicable procedures and shall include permit terms that ensure the emission trades are quantifiable, replicable and enforceable.
 - f) Off-permit changes will not be exempt from complying with the requirements and procedures of Rule 203 of the RCAP, if applicable.

45. **Reservation of Rights:** Except as expressly provided in this Title V permit:

- a) Nothing herein shall prevent Board or the EPA from taking administrative enforcement measures or seeking legal or equitable relief to enforce the terms of the Title V permits, including but not limited to the right to seek injunctive relief, and imposition of statutory penalties and/or fines.
- b) Nothing herein shall be construed to limit the rights of the Board or the EPA to undertake any criminal enforcement activity against the permittee or any person.

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- c) Nothing herein shall be construed to limit the authority the Board or the EPA to undertake any actions in response to conditions that present an imminent and substantial endangerment to public health or welfare, or the environment
- d) Nothing herein shall be construed to limit the permittee's rights to administrative hearing and judicial appeal of termination/ revocation/ disputes over modification/ denial actions in accordance with regulations and the Environmental Public Policy Act.

Section IV - Allowable Emissions

- a) The emissions described in the following table represent the allowable emissions at the time of the permit application and shall be used for payment purposes only. According to the EQB Resolution RI-06-02⁴, the emissions calculations shall be based on the current emissions of the permittee. However, calculations based on the emissions cap of the facility shall be accepted. If the permittee decides to make the calculations based on the allowable emissions, the permittee shall pay the same charge per ton as the sources that decide to make the calculations based on current emissions. Also, when the permittee requests a modification, administrative change or minor modification to its Title V permit, the source shall only pay those charges related with any emissions increase (if any) per ton, based on the change and not based on the previously paid total charges in conformity with Rule 610(a) of the RCAP.

Pollutants		Emissions (Tons/year)
PM		147.7
SO ₂		277.4
NO _x		291.7
CO		62.9
COV		64.8
Pb		0.0
HAP	H ₂ S	9.5
	Acetonitrile	9.5
	HCl	1.0
	Methanol	2.7
HAP (Combustion)		0.274
CO ₂ e		106,458

⁴ EQB Resolution - Payment procedure for Title V operating charges and Title V permit renewal charges, issued on March 20, 2006.

Section V - Specific Permit Conditions

A. External Combustion Unit: EU-LFOBOILER

The following table contains a summary of the requirements and test methods, operational limits, monitoring, recordkeeping and reporting for emission units identified in Section II of this permit.

Condition	Parameter	Value	Units	Test Method	Method Frequency	Recordkeeping Requirements	Reports Frequency
Particulate Matter Emission Limit	Particulate matter	0.3	Lb/MMBtu	Method 5 Emission calculations using AP-42 emission factors	During the first year of duration of the permit. Semiannual	Sampling protocol logs, support information and final report and emission calculations record.	<u>Final Report:</u> no later than 60 days after the test. Semiannual (See General Condition 14)
Visible Emissions Limit	Opacity	20%	Percentage (6 minutes average)	Method 9 Visible emissions inspection	Once during the first year of duration of the permit. Every 14 days	Test results Record date and hour of inspections, results and any corrective action taken.	<u>Final Report:</u> no later than 60 days after the test. Semiannual (See General Condition 14)
SO ₂ Emission Limit	Sulfur content	0.5	Percentage per weight	Fuel analysis supplier certification	Daily with each fuel (purchase) receipt	Log with each receipt of the fuel sulfur content provided by the supplier	Monthly and Semiannual (See General Condition 14)
Fuel Consumption Limit (Combined) EP/1/Boiler5 EP/1/Boiler201A	Diésel and/or kerosene	2,242,897	Gallons per year	Consumption through flow meter	Monthly	Consumption log and purchase receipts	Semiannual (See General Condition 14)

1. Particulate Matter Emission Limit (PM):

- a) The permittee shall not cause or allow the emission of particulate matter in excess of 0.3 lb/MMBtu of heat input from any equipment burning solid or liquid fuel. [Rule 406 of the RCAP]
- b) The permittee shall perform a performance test during the first year using Method 5, which appears under 40 CFR Part 60, Appendix A, in order to verify that the norm is

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complied with. Pursuant to Rule the permittee shall comply with the following: [Rule 603 (a)(3) of the RCAP]

1. The permittee shall submit to the EQB, 30 days before the test start date, a detailed sampling protocol that describes all the test equipment, procedures and quality assurance measures used. The protocol shall be specific for the test, facility, operational conditions and parameters that shall be measured. [Rule 106 (C) of the RCAP]
 2. The permittee shall submit a written notification indicating the sampling date, 15 days before the sampling, so the Board may appoint an observer. [Rule 106(D) of the RCAP]
 3. The permittee shall submit two copies of the sampling results report within 60 days after the tests. This report shall contain the information required under Rule 106(E) of the RCAP.
 4. During the test the source shall operate at full capacity or based on a representative performance of the affected facility when sampling; meaning that after demonstrating compliance with any applicable emission limit, the Board can restrict the operation of the source to the capacity reached during the performance tests. [Rule 106 (F) of the RCAP]
- c) The permittee shall submit semiannually emission calculations using AP-42 emission factors in order to verify compliance with Rule 406 of the RCAP. The permittee shall be based on the following to demonstrate compliance:
1. To determine compliance with the condition (1)(a) of Section V(B) Lilly shall calculate particulate matter emissions using emission factors applicable to this emission unit and the average ratio of heat input of the fuel, as stated in Table 1.3-1 of AP-42 (140,000 Btu / gal for Light Fuel Oil).
 2. The total heat input will result from the sum of the heat content of fuels whose combustion products pass through a chimney. The total heat input of all units burning fuel source shall be used to determine the maximum allowable amount of particulate matter that may be emitted.
- d) As specified in Rule 603(a)(4)(ii) of the RCAP, the permittee shall keep records of all the required sampling data and support information for a period of 5 years from the date of the sampling, measurement, report or sampling application.

2. Visible Emissions Limits (Opacity):

- a) The permittee shall not exceed the opacity limit of 20% in a 6-minutes average for unit EU-LFOBOILER. However, the permittee shall be able to release to the atmosphere

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visible emissions with an opacity up to 60% for a period no greater than 4 minutes within any consecutive interval of 30 minutes. [Rule 403(A) of the RCAP]

1. Further, the emission unit EU-LFOBOILER shall comply with 40 CFR Part 60.43c(c) may not emit visible emissions exceeding 27% opacity for a period longer than six (6) minutes in any interval of time. According to 40 CFR 60.43c(d), the opacity limits apply at all times except during periods of startup, shutdown or malfunction of the boiler.
- b) The permittee shall hire an independent opacity reader, certified by a school approved or endorsed by the EPA or the Board to perform an opacity reading on each stack/chimney of unit EU-LFOBOILER during the first year of the permit duration using Method 9 described in Appendix A of 40 CFR Part 60. The corresponding boiler shall be operating when making the opacity readings.
1. The permittee shall submit to the Board, at least 30 days prior to the opacity reading, a copy of the format to be used to record the visible emissions readings.
 2. The permittee shall notify in writing to the Board at least 15 days before the initial sampling using Method 9, to allow the Board the opportunity to appoint an observer present. [Rule 106(D) of the RCAP]
 3. The permittee shall submit two copies of the initial sampling results report using Method 9 within 60 days after the tests. This report shall contain the information required under Rule 106(E) of the RCAP. The requirements of the subsequent readings shall be submitted in the readings summary that shall be ratified with the semiannual report required in this permit.
- c) The permittee shall make bi-weekly readings on the EU- LFOBOILER emission unit in accordance with Method 9 of 40 CFR Part 60. Readings should be done at the point of greatest opacity on the part of the plume where the condensed water vapor is not present.
1. When a certified reader establishes that there are excess visible emissions, Lilly shall verify that the equipment causing these emissions is operating according to the manufacturer's specifications and permit conditions. Lilly take the necessary corrective actions to eliminate the excess visible emissions taking into account the provisions of Rule 403(A)(1) and (2) of the RCAP. The applicable boiler must be operating at the time of performance of the opacity readings.
 2. The permittee must submit a summary of the visible emissions inspections in the annual compliance certification corresponding to the year in which the readings took place. This summary shall include the date the reading was made. This summary shall include the date the visible emissions inspection was made with a certified opacity reader. The report shall also include the total number of

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inspections conducted every 14 days in the year for units subject to this requirement.

3. The permittee shall keep a record of visible emissions taken pursuant to 40 CFR section 60.7, the summary report form shall contain the information and be in the format shown in figure 1 of section 60.7(d) of 40 CFR, unless otherwise specified by the Administrator.
 4. The permittee within thirty (30) days from the end of each calendar semester must submit to the Board semiannually all Method 9 reports for visible emissions readings taken during the previous semester.
- d) The Board reserves the right to require additional visible emission readings in order to demonstrate compliance with the opacity limit.

3. Sulfur Content Limit (SO₂):

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- a) The permittee shall not burn or allow the use of distilled no. 2 (Diesel) or No.1 (kerosene) with a sulfur content exceeding 0.5% by weight in the EU-LFOBOILER unit. [PFE-16-0203-0187-I-II-C]
 - b) The permittee shall submit a monthly report indicating on a daily basis the sulfur content (percent by weight) in the fuel burned and the amount of fuel burned in the EU-LFOBOILER. This report shall be submitted to the Board to the attention of the Chief of the Division of Data Validation and Mathematical Modeling no later than the next 15 days of the following month for which the report is representative and shall be available at all times in the facility for review of the Board or EPA.
 - c) The permittee shall keep a copy of the fuel supplier certification in which the sulfur content is indicated to demonstrate compliance with the requirement of keeping a daily record of the sulfur content in the fuel. 
 - d) The permittee shall submit each year with the annual compliance certification, copies of the reports for that year indicating the sulfur content in weight percent in the fuel burned. The permittee shall also file monitoring reports, which must contain the following:
 1. The date, place (as defined in the permit) and time of sampling;
 2. the date on which analysis were performed;
 3. the company or entity that performed the analysis;
 4. methods or analytical techniques used;

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5. the results of these analysis; and
 6. operating conditions at the time of sampling.
- e) The permittee shall submit, with each semi-annual report and annual compliance certification, a summary of reports indicating the sulfur content of the boiler in monthly and annual terms. This report will be sent along with the semiannual report required in condition III.14. of this permit.
- f) According to Rule 603(a)(4)(ii) of the RCAP, the permittee shall retain records of all data required monitoring and supporting information for a period of 5 years from the date of the monitoring sample, measurement, report or application. This includes a record of monthly fuel consumption reports and the sulfur content of fuel burned.

4. Fuel Consumption Limit:

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- a) The permittee shall not exceed the limit of total fuel consumption of distillate no. 2 (Diesel) or No.1 (kerosene) of **2,242,897 gallons** in any period of 12 consecutive months for EU-LFOBOILER. Fuel consumption for any period of 12 consecutive months shall be calculated by adding the monthly consumption of the unit to the total fuel consumption of the unit during the previous 11 months. [PFE-16-0203-0187-I-II-C]
 - b) The permittee shall operate and maintain a fuel flow meter at the entrance to the boiler. The permittee shall calibrate the flow meters every six months and keep a record of the date and results of the calibration. This record shall be accessible and available for review by the technical staff of the Board.
 - c) The permittee shall maintain monthly records where the monthly fuel consumption in the EU-LFOBOILER unit indicated. These records must be accessible and available for review by the technical staff of the Board.
 - d) The permittee shall submit, with each semi-annual report and annual compliance certification, an annual report summary indicating the fuel consumption of the boiler in monthly and annual terms. This report will be sent along with the semiannual report required in condition III.14. of this permit.
 - e) According to Rule 603(a)(4)(ii) of the RCAP, the permittee shall retain records of all data required monitoring and supporting information for a period of 5 years from the date of the sample, measurement, report or application. This includes a record of monthly fuel consumption reports and the sulfur content of fuel burned.
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5. National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers in Area Sources (40 CFR Part 63, Subpart JJJJJ) (EP/1/Boiler5 and EP/2/201A)

- a) The permittee must comply with all the requirements in the National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers in Area Sources in Part 63 Subpart JJJJJ of Title 40 of the Code of Federal Regulations.
- b) The compliance date for Subpart JJJJJ for boilers EP/1/Boiler 5 and EP/2/201A will depend on the applicable requirements as described in section 63.11196 of 40 CFR.
- c) The permittee must comply with each work practice standard, emissions reduction measurement and management practice as specified in Table 2 of Subpart JJJJJ, respectively, as they apply to boilers EP/1/Boiler5 and EP/2/201A. [Section 63.11201(b) of 40 CFR]
1. Permittee must conduct an initial tune-up and conduct a tune-up every 2 years according to section 63.11223 of 40 CFR. Each biennial tune-up must be conducted no more than 25 months after the previous tune-up.
 2. Permittee must have a one-time energy assessment performed by a qualified energy assessor. An energy assessment completed on or after January 1st, 2008, that meets or is amended to meet the energy assessment requirements in Table 2 of Subpart JJJJJ satisfy the energy assessment requirement. A facility that operates under an energy management program compatible with ISO 50001, that includes the affected boilers, also satisfies the energy assessment requirement. [Section 63.11201(b) of 40 CFR]
- d) Subpart JJJJJ standards apply at all times the affected boiler is operating, except during periods of startup and shutdown as defined in section 63.11237 of 40 CFR, during which time the permittee must comply only with Table 2 of Subpart JJJJJ. [Section 63.11201(d) of 40 CFR]
- e) Permittee must comply with the applicable General Compliance Requirements as described in section 63.11205(a) of 40 CFR.
- f) Permittee must comply with the applicable Initial Compliance Requirements as described in section 63.11210(c) and 63.11214(b) and (c) of 40 CFR.
- i. The owners or operators of existing affected boilers with a heat input capacity of 10 MMBtu/hr or greater, must submit a signed certification in the Notification of Compliance Status report that ensures that an energy assessment of the boiler and its energy use systems was completed according to Table 2 of Subpart JJJJJ. [Section 63.11214(c) of 40 CFR]

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- g) Permittee must comply with the applicable Continuous Compliance Requirements as described in sections 63.11223, 63.11225(a), (b), (c), (d), (f) and (g) of 40 CFR.
- h) The owners or operators of affected boilers must comply with the notifications, reporting and record keeping requirements according to the requirements of section 63.11225 of 40 CFR.
1. An initial notification must be submitted no later than January 20, 2014 or within 120 days after the source becomes subject to the standard. [Section 63.11225(a)(2) of 40 CFR]
 2. A Notification of Compliance Status (NCS) must be submitted no later than 120 days after the applicable compliance date specified in section 63.11196 of 40 CFR, unless the boiler is subject to the requirement of conducting a performance stack test, in which case the NCS must be submitted within 60 days of completing the performance stack test. The NCS must be submitted in accordance with paragraphs 63.11225(a)(4)(i) to (vi) of 40 CFR. The NCS must include the information and compliance certification(s) in paragraphs 63.11225(a)(4)(i) to (v), as applicable, and must be signed by the responsible official. [Section 63.11225(a)(4) of 40 CFR]
 3. The Notification of Compliance Status must be submitted electronically using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX), at www.epa.gov/cdx. If the reporting form is not available at the time that the notification is due, the written notification must be submitted using the appropriate address listed in section 63.13 of 40 CFR. [Section 63.11225(a)(4)(vi) of 40 CFR]
 4. By March 1 of each year, the permittee must prepare an annual compliance certification report for the previous calendar year, and submit it to the Board upon request, containing the information specified in section 63.11225(b)(1) to (b)(4) of 40 CFR. The report must be submitted by March 15 if you had any instance described by section 63.11225(b)(3) of 40 CFR. For boilers subject only to the energy assessment requirement and/or to the biennial or 5-year tune-up according to section 63.11223(a) and not subject to emission limits or operating limits, the permittee may prepare only a biennial or 5-year compliance reports specified in paragraphs (b)(1) and (2) of section 63.11225. [Section 63.11225(b) of 40 CFR]
 5. Records required in Subpart JJJJJ must be in a form suitable and readily available for review by EPA or EQB personnel. Each record must be kept for 5 years following the date of each recorded action. Each record must be kept on-site or be accessible from a central location by computer or other means that instantly provide access at the site for at least 2 years after the date of each

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recorded action. Records may be kept off site for the remaining 3 years. [Section 63.11225 (d) of 40 CFR]

- i) The permittee must comply with the General Provisions of sections 63.1 to 63.16, as applicable, which are in Table 8 of Subpart JJJJJ of 40 CFR.

Boiler (EP/1/Boiler5)

6. Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units (40 CFR Part 60 Subpart Dc)

- a) The boiler (EP/1/Boiler5) is affected by 40 CFR Part 60, Subpart Dc and general provisions of Subpart A. The boiler shall operate in compliance with the applicable requirements of this regulation.
- b) According to Section 60.42c(h) of 40 CFR, the limit of sulfur content in fuel for the boiler (EP/1/Boiler5) shall be determined based on a fuel supplier certification. The certification shall comply with the requirements of Section 60.48c(f) of 40 CFR, as applicable.
- c) According to Sections 60.44c(h) of 40 CFR, the initial performance test for this boiler consists of a fuel supplier certification.
- d) The permittee shall submit a fuel supplier certification for No. 2 (Diesel) or No.1 (kerosene) burned in the boiler (EP/1/Boiler5). This to demonstrate that the sulfur content in the fuel does not exceed 0.5% by weight (sections 60.42c (d)⁵ or (h) and 60.44c (g) and (h) of 40 CFR, as applicable). The certification must be obtained each time fuel is received at the facility. This shall regularly accompany the monthly report required by condition V(A)(3)(b) of this permit as fuel is received at the facility. The certification shall correspond to the period of the report and include the following information: [section 60.48c(f)(1) of 40 CFR]
 1. The name of the fuel supplier.
 2. A statement by the fuel supplier that the fuel complies with the specifications under the definition of distillate oil in §60.41c of 40 CFR; and
 3. The sulfur content or maximum sulfur content of the fuel.
- e) According to section 60.46c(d)(2) of 40 CFR, as an alternative fuel sampling procedure for affected facilities combusting fuel, fuel samples may be collected from the fuel tank

⁵ Lilly chose to demonstrate compliance with the SO₂ standards based on the certification provided by the fuel supplier according to section 60.44c(h) of 40 CFR Part 60, Subpart Dc, unless it uses the alternate sampling procedure in condition 6(e).

immediately after the fuel tank is filled but before any oil is combusted. The owner or operator of the affected facility shall analyze the fuel sample to determine the sulfur content. If a partially empty fuel tank is refilled, a new sample and analysis of the fuel in the tank would be required upon filling. Results of the fuel analysis taken after each new shipment of fuel is received shall be used as the daily value when calculating the 30-day rolling average until the next shipment is received. If the fuel analysis shows that the sulfur content in the fuel tank is greater than 0.5 weight percent sulfur, the owner or operator shall ensure that the sulfur content of subsequent oil shipments is low enough to cause the 30-day rolling average sulfur content to be 0.5 weight percent sulfur or less.

- f) With respect to the boiler EP/1/Boiler5, the permittee shall meet the following maintenance and recordkeeping requirements related to the emission limit of sulfur oxide (SO₂) and sulfur content in fuel: [40 CFR section 60.48c]
1. Calendar dates covered in the reporting period.
 2. Each 30-day average SO₂ emission rate (ng/l or lb/MMBtu), or 30-day average sulfur content (weight percent), calculated during the reporting period, ending with the last 30-day period; reasons for any noncompliance with the emission standards; and a description of corrective actions taken.
 3. Average percentage rate of potential emissions of SO₂ for periods of 30 days
 4. Identify the design capacity of the units and the types of fuels used.
 5. If fuel supplier certifications of sulfur content are used to demonstrate compliance with the limit of sulfur content in fuel, the permittee shall comply with the requirements in Section 60.48c(f) of 40 CFR. The report shall include a certified statement signed by the owner or operator of the facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period.
 6. The permittee shall register and keep records of the amount of each fuel burned during each day of operation. In the alternative, the permittee shall use the procedures set forth in Section 60.48c(g)(2) or (3) of 40 CFR.
 7. The permittee shall calculate the annual capacity factor to which the owner or operator anticipates operate based on all fuels burned and based on each individual fuel burned. [Section 60.48c(a)(3) of 40 CFR]
 8. As a requirement of the Board, the reports shall be kept at the facility for a minimum period of five years.

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9. The reports required by 40 CFR Part 60, Subpart Dc shall be submitted to the Environmental Protection Agency (EPA) every six months with a copy to the Board.

B. External Combustion Unit: EU-HFOBOILER-2

The following table contains a summary of the requirements and test methods, operational limits, monitoring, recordkeeping and reporting for emission units identified in Section II of this permit.

Condition	Parameter	Value	Units	Test Method	Method Frequency	Recordkeeping Requirements	Reports Frequency
Particulate Matter Emission Limit	Particulate matter	0.3	Lb/MMBtu	Method 5 Emission calculations using AP-42 emission factors	During the first year of duration of the permit. Semiannual	Sampling protocol logs, support information and final report and emission calculations record.	<u>Final Report:</u> no later than 60 days after the test. Semiannual (See General Condition 14)
Visible Emissions Limit	Opacity	20%	Percentage (6 minutes average)	Method 9 Visible emissions inspection	Once during the first year of duration of the permit. Every 14 days	Test results Record date and hour of inspections, results and any corrective action taken.	<u>Final Report:</u> no later than 60 days after the test. Semiannual (See General Condition 14)
SO ₂ Emission Limit	Sulfur content	1.5	Percentage per weight	Fuel analysis supplier certification	Daily with each fuel (purchase) receipt	Log with each receipt of the fuel sulfur content provided by the supplier	Monthly and Semiannual (See General Condition 14)
Fuel Consumption Limit (Combined) EP/2/201B	Residual Oil No. 5	744,600	Gallons per year	Consumption through flow meter	Monthly	Consumption log and purchase receipts	Semiannual (See General Condition 14)

1. Particulate Matter Emission Limit (PM):

- a) The permittee shall not cause or allow the emission of particulate matter in excess of 0.3 lb/MMBtu of heat input from any equipment burning solid or liquid fuel. [Rule 406 of the RCAP]

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- b) The permittee shall perform a performance test during the first year using Method 5, which appears under 40 CFR Part 60, Appendix A, in order to verify that the norm is complied with. Pursuant to Rule the permittee shall comply with the following: [Rule 603 (a)(3) of the RCAP]
1. The permittee shall submit to the EQB, 30 days before the test start date, a detailed sampling protocol that describes all the test equipment, procedures and quality assurance measures used. The protocol shall be specific for the test, facility, operational conditions and parameters that shall be measured. [Rule 106 (C) of the RCAP]
 2. The permittee shall submit a written notification indicating the sampling date, 15 days before the sampling, so the Board may appoint an observer. [Rule 106(D) of the RCAP]
 3. The permittee shall submit two copies of the sampling results report within 60 days after the tests. This report shall contain the information required under Rule 106(E) of the RCAP.
 4. During the test the source shall operate at full capacity or based on a representative performance of the affected facility when sampling; meaning that after demonstrating compliance with any applicable emission limit, the Board can restrict the operation of the source to the capacity reached during the performance tests. [Rule 106 (F) of the RCAP]
- c) The permittee shall submit semiannually emission calculations using AP-42 emission factors in order to verify compliance with Rule 406 of the RCAP. The permittee shall be based on the following to demonstrate compliance:
1. To determine compliance with the condition (1)(a) of Section V(B) Lilly shall calculate particulate matter emissions using emission factors applicable to this emission unit and the average ratio of heat input of the fuel, as stated in AP-42.
 2. The total heat input will result from the sum of the heat content of fuels whose combustion products pass through a chimney. The total heat input of all units burning fuel source shall be used to determine the maximum allowable amount of particulate matter that may be emitted.
- d) As specified in Rule 603(a)(4)(ii) of the RCAP, the permittee shall keep records of all the required sampling data and support information for a period of 5 years from the date of the sampling, measurement, report or sampling application.

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2. Visible Emissions Limits (Opacity):

- a) The permittee shall not exceed the opacity limit of 20% in a 6-minutes average for unit EU-LFOBOILER-2. However, the permittee shall be able to release to the atmosphere visible emissions with an opacity up to 60% for a period no greater than 4 minutes within any consecutive interval of 30 minutes. [Rule 403(A) of the RCAP]
- b) The permittee shall hire an independent opacity reader, certified by a school approved or endorsed by the EPA or the Board to perform an opacity reading on each stack/chimney of unit EU-LFOBOILER-2 during the first year of the permit duration using Method 9 described in Appendix A of 40 CFR Part 60. The corresponding boiler shall be operating when making the opacity readings.
1. The permittee shall submit to the Board, at least 30 days prior to the opacity reading, a copy of the format to be used to record the visible emissions readings.
 2. The permittee shall notify in writing to the Board at least 15 days before the initial sampling using Method 9, to allow the Board the opportunity to appoint an observer present. [Rule 106(D) of the RCAP]
 3. The permittee shall submit two copies of the initial sampling results report using Method 9 within 60 days after the tests. This report shall contain the information required under Rule 106(E) of the RCAP. The requirements of the subsequent readings shall be submitted in the readings summary that shall be ratified with the semiannual report required in this permit.
- c) The permittee shall make bi-weekly readings on the EU-LFOBOILER-2 emission unit in accordance with Method 9 of 40 CFR Part 60. Readings should be done at the point of greatest opacity on the part of the plume where the condensed water vapor is not present.
1. When a certified reader establishes that there are excess visible emissions, Lilly shall verify that the equipment causing these emissions is operating according to the manufacturer's specifications and permit conditions. Lilly take the necessary corrective actions to eliminate the excess visible emissions taking into account the provisions of Rule 403(A)(1) and (2) of the RCAP. The applicable boiler must be operating at the time of performance of the opacity readings.
 2. The permittee must submit a summary of the visible emissions inspections in the annual compliance certification corresponding to the year in which the readings took place. This summary shall include the date the reading was made. This summary shall include the date the visible emissions inspection was made with a certified opacity reader. The report shall also include the total number of inspections conducted every 14 days in the year for units subject to this requirement.

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3. The permittee within thirty (30) days from the end of each calendar semester must submit to the Board semiannually all Method 9 reports for visible emissions readings taken during the previous semester.
- d) The Board reserves the right to require additional visible emission readings in order to demonstrate compliance with the opacity limit.

3. Sulfur Content Limit (SO₂):

- a) The permittee shall not burn or allow the use of fuel oil No. 5 with a sulfur content exceeding 1.5% by weight in unit EU-HFOBOILER-2. [PFE-16-1108-0591-II-C]
- b) The permittee shall submit a monthly report indicating on a daily basis the sulfur content (percent by weight) in the fuel burned and the amount of fuel burned in the EU-LFOBOILER-2. This report shall be submitted to the Board to the attention of the Chief of the Division of Data Validation and Mathematical Modeling no later than the next 15 days of the following month for which the report is representative and shall be available at all times in the facility for review of the Board or EPA.
- c) The permittee shall keep a copy of the fuel supplier certification in which the sulfur content is indicated to demonstrate compliance with the requirement of keeping a daily record of the sulfur content in the fuel.
- d) The permittee shall submit each year with the annual compliance certification, copies of the reports for that year indicating the sulfur content in weight percent in the fuel burned. The permittee shall also file monitoring reports, which must contain the following:
 1. The date, place (as defined in the permit) and time of sampling;
 2. the date on which analysis were performed;
 3. the company or entity that performed the analysis;
 4. methods or analytical techniques used;
 5. the results of these analysis; and
 6. operating conditions at the time of sampling.
- e) The permittee shall submit, with each semi-annual report and annual compliance certification, a summary of reports indicating the sulfur content of the boiler in monthly and annual terms. This report will be sent along with the semiannual report required in condition III.14. of this permit.

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- f) According to Rule 603(a)(4)(ii) of the RCAP, the permittee shall retain records of all data required monitoring and supporting information for a period of 5 years from the date of the monitoring sample, measurement, report or application. This includes a record of monthly fuel consumption reports and the sulfur content of fuel burned.

4. Fuel Consumption Limit:

- a) The permittee shall not exceed the limit of total fuel consumption of fuel oil No. 5 of **744,600 gallons** in any period of 12 consecutive months for EU-LFOBOILER-2. Fuel consumption for any period of 12 consecutive months shall be calculated by adding the monthly consumption of the unit to the total fuel consumption of the unit during the previous 11 months. [PFE-16-0203-0187-I-II-C]
- b) The permittee shall operate and maintain a fuel flow meter at the entrance to the boiler. The permittee shall calibrate the flow meters every six months and keep a record of the date and results of the calibration. This record shall be accessible and available for review by the technical staff of the Board.
- c) The permittee shall maintain monthly records where the monthly fuel consumption in the EU-LFOBOILER-2 unit indicated. These records must be accessible and available for review by the technical staff of the Board.
- d) The permittee shall submit, with each semi-annual report and annual compliance certification, an annual report summary indicating the fuel consumption of the boiler in monthly and annual terms. This report will be sent along with the semiannual report required in condition III.14. of this permit.
- e) According to Rule 603(a)(4)(ii) of the RCAP, the permittee shall retain records of all data required monitoring and supporting information for a period of 5 years from the date of the sample, measurement, report or application. This includes a record of monthly fuel consumption reports and the sulfur content of fuel burned.

5. National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers in Area Sources (40 CFR Part 63, Subpart JJJJJ) (EP/2/Boiler201B)

- a) The permittee must comply with all the requirements in the National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers in Area Sources in Part 63 Subpart JJJJJ of Title 40 of the Code of Federal Regulations.
- b) The compliance date for Subpart JJJJJ for boiler **EP/2/Boiler201B** will depend on the applicable requirements as described in section 63.11196 of 40 CFR.

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- c) The permittee must comply with each work practice standard, emissions reduction measurement and management practice as specified in Table 2 of Subpart JJJJJ, respectively, as they apply to boiler **EP/2/Boiler201B**. [Section 63.11201(b) of 40 CFR]
1. Permittee must conduct an initial tune-up and conduct a tune-up every 2 years according to section 63.11223 of 40 CFR. Each biennial tune-up must be conducted no more than 25 months after the previous tune-up.
 2. Permittee must have a one-time energy assessment performed by a qualified energy assessor. An energy assessment completed on or after January 1st, 2008, that meets or is amended to meet the energy assessment requirements in Table 2 of Subpart JJJJJ satisfy the energy assessment requirement. A facility that operates under an energy management program compatible with ISO 50001, that includes the affected boilers, also satisfies the energy assessment requirement. [Section 63.11201(b) of 40 CFR]
- d) Subpart JJJJJ standards apply at all times the affected boiler is operating, except during periods of startup and shutdown as defined in section 63.11237 of 40 CFR, during which time the permittee must comply only with Table 2 of Subpart JJJJJ. [Section 63.11201(d) of 40 CFR]
- e) Permittee must comply with the applicable General Compliance Requirements as described in section 63.11205(a) of 40 CFR.
- f) Permittee must comply with the applicable Initial Compliance Requirements as described in section 63.11210(c) and 63.11214(b) and (c) of 40 CFR.
- i. The owners or operators of existing affected boilers with a heat input capacity of 10 MMBtu/hr or greater, must submit a signed certification in the Notification of Compliance Status report that ensures that an energy assessment of the boiler and its energy use systems was completed according to Table 2 of Subpart JJJJJ. [Section 63.11214(c) of 40 CFR]
- g) Permittee must comply with the applicable Continuous Compliance Requirements as described in sections 63.11223, 63.11225(a), (b), (c), (d), (f) and (g) of 40 CFR.
- h) The owners or operators of affected boilers must comply with the notifications, reporting and record keeping requirements according to the requirements of section 63.11225 of 40 CFR.
1. An initial notification must be submitted no later than January 20, 2014 or within 120 days after the source becomes subject to the standard. [Section 63.11225(a)(2) of 40 CFR]

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2. A Notification of Compliance Status (NCS) must be submitted no later than 120 days after the applicable compliance date specified in section 63.11196 of 40 CFR, unless the boiler is subject to the requirement of conducting a performance stack test, in which case the NCS must be submitted within 60 days of completing the performance stack test. The NCS must be submitted in accordance with paragraphs 63.11225(a)(4)(i) to (vi) of 40 CFR. The NCS must include the information and compliance certification(s) in paragraphs 63.11225(a)(4)(i) to (v), as applicable, and must be signed by the responsible official. [Section 63.11225(a)(4) of 40 CFR]
 3. The Notification of Compliance Status must be submitted electronically using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX), at www.epa.gov/cdx. If the reporting form is not available at the time that the notification is due, the written notification must be submitted using the appropriate address listed in section 63.13 of 40 CFR. [Section 63.11225(a)(4)(vi) of 40 CFR]
 4. By March 1 of each year, the permittee must prepare an annual compliance certification report for the previous calendar year, and submit it to the Board upon request, containing the information specified in section 63.11225(b)(1) to (b)(4) of 40 CFR. The report must be submitted by March 15 if you had any instance described by section 63.11225(b)(3) of 40 CFR. For boilers subject only to the energy assessment requirement and/or to the biennial or 5-year tune-up according to section 63.11223(a) and not subject to emission limits or operating limits, the permittee may prepare only a biennial or 5-year compliance reports specified in paragraphs (b)(1) and (2) of section 63.11225. [Section 63.11225(b) of 40 CFR]
 5. Records required in Subpart JJJJJ must be in a form suitable and readily available for review by EPA or EQB personnel. Each record must be kept for 5 years following the date of each recorded action. Each record must be kept on-site or be accessible from a central location by computer or other means that instantly provide access at the site for at least 2 years after the date of each recorded action. Records may be kept off site for the remaining 3 years. [Section 63.11225 (d) of 40 CFR]
- i) The permittee must comply with the General Provisions of sections 63.1 to 63.16, as applicable, which are in Table 8 of Subpart JJJJJ of 40 CFR.

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C. External Combustion Unit: EU-NSPSBOILER

The following table contains a summary of the requirements and test methods, operational limits, monitoring, recordkeeping and reporting for emission units identified in Section II of this permit.

Condition	Parameter	Value	Units	Test Method	Method Frequency	Recordkeeping Requirements	Reports Frequency
Particulate Matter Emission Limit	Particulate matter	0.3	Lb/MMBtu	Method 5 Emission calculations using AP-42 emission factors	During the first year of duration of the permit. Semiannual	Sampling protocol logs, support information and final report and emission calculations record.	<u>Final Report:</u> no later than 60 days after the test. Semiannual (See General Condition 14)
Visible Emissions Limit	Opacity	20%	Percentage (6 minutes average)	Method 9 Visible emissions inspection	Once during the first year of duration of the permit. Every 14 days	Test results Record date and hour of inspections, results and any corrective action taken.	<u>Final Report:</u> no later than 60 days after the test. Semiannual (See General Condition 14)
SO ₂ Emission Limit	Sulfur content	0.2	Percentage per weight	Fuel analysis supplier certification	Daily with each fuel (purchase) receipt	Log with each receipt of the fuel sulfur content provided by the supplier	Monthly and Semiannual (See General Condition 14)
Fuel Consumption Limit (Combined)EP/5/1076A EP/5/1076B	Diesel and/or kerosene	4,504,519	Gallons per year	Consumption through flow meter	Monthly	Consumption log and purchase receipts	Semiannual (See General Condition 14)

1. Particulate Matter Emission Limit (PM):

- a) The permittee shall not cause or allow the emission of particulate matter in excess of 0.3 lb/MMBtu of heat input from any equipment burning solid or liquid fuel. [Rule 406 of the RCAP]
- b) The permittee shall perform a performance test during the first year using Method 5, which appears under 40 CFR Part 60, Appendix A, in order to verify that the norm is complied with. Pursuant to Rule the permittee shall comply with the following: [Rule 603 (a)(3) of the RCAP]

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1. The permittee shall submit to the EQB, 30 days before the test start date, a detailed sampling protocol that describes all the test equipment, procedures and quality assurance measures used. The protocol shall be specific for the test, facility, operational conditions and parameters that shall be measured. [Rule 106 (C) of the RCAP]
 2. The permittee shall submit a written notification indicating the sampling date, 15 days before the sampling, so the Board may appoint an observer. [Rule 106(D) of the RCAP]
 3. The permittee shall submit two copies of the sampling results report within 60 days after the tests. This report shall contain the information required under Rule 106(E) of the RCAP.
 4. During the test the source shall operate at full capacity or based on a representative performance of the affected facility when sampling; meaning that after demonstrating compliance with any applicable emission limit, the Board can restrict the operation of the source to the capacity reached during the performance tests. [Rule 106 (F) of the RCAP]
- c) The permittee shall submit semiannually emission calculations using AP-42 emission factors in order to verify compliance with Rule 406 of the RCAP. The permittee shall be based on the following to demonstrate compliance:
1. To determine compliance with the condition (1)(a) of Section V(B) Lilly shall calculate particulate matter emissions using emission factors applicable to this emission unit and the average ratio of heat input of the fuel, as stated in Table 1.3-1 of AP-42 (140,000 Btu / gal for Light Fuel Oil).
 2. The total heat input will result from the sum of the heat content of fuels whose combustion products pass through a chimney. The total heat input of all units burning fuel source shall be used to determine the maximum allowable amount of particulate matter that may be emitted.
- d) As specified in Rule 603(a)(4)(ii) of the RCAP, the permittee shall keep records of all the required sampling data and support information for a period of 5 years from the date of the sampling, measurement, report or sampling application.
- 2. Visible Emissions Limits (Opacity):**
- a) The permittee shall not exceed the opacity limit of 20% in a 6-minutes average for unit EU-NSPSBOILER. However, the permittee shall be able to release to the atmosphere visible emissions with an opacity up to 60% for a period no greater than 4 minutes within any consecutive interval of 30 minutes. [Rule 403(A) of the RCAP]

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1. Further, the emission unit EU-NSPSBOILER shall comply with 40 CFR Part 60.43c(c) may not emit visible emissions exceeding 27% opacity for a period longer than six (6) minutes in any interval of time. According to 40 CFR 60.43c(d), the opacity limits apply at all times except during periods of startup, shutdown or malfunction of the boiler.
- b) The permittee shall hire an independent opacity reader, certified by a school approved or endorsed by the EPA or the Board to perform an opacity reading on each stack/chimney of unit EU-NSPSBOILER during the first year of the permit duration using Method 9 described in Appendix A of 40 CFR Part 60. The corresponding boiler shall be operating when making the opacity readings.
 1. The permittee shall submit to the Board, at least 30 days prior to the opacity reading, a copy of the format to be used to record the visible emissions readings.
 2. The permittee shall notify in writing to the Board at least 15 days before the initial sampling using Method 9, to allow the Board the opportunity to appoint an observer present. [Rule 106(D) of the RCAP]
 3. The permittee shall submit two copies of the initial sampling results report using Method 9 within 60 days after the tests. This report shall contain the information required under Rule 106(E) of the RCAP. The requirements of the subsequent readings shall be submitted in the readings summary that shall be ratified with the semiannual report required in this permit.
- c)  The permittee shall make bi-weekly readings on the EU-NSPSBOILER emission unit in accordance with Method 9 of 40 CFR Part 60. Readings should be done at the point of greatest opacity on the part of the plume where the condensed water vapor is not present.
 1. When a certified reader establishes that there are excess visible emissions, Lilly shall verify that the equipment causing these emissions is operating according to the manufacturer's specifications and permit conditions. Lilly take the necessary corrective actions to eliminate the excess visible emissions taking into account the provisions of Rule 403(A)(1) and (2) of the RCAP. The applicable boiler must be operating at the time of performance of the opacity readings.
 2. The permittee must submit a summary of the visible emissions inspections in the annual compliance certification corresponding to the year in which the readings took place. This summary shall include the date the reading was made. This summary shall include the date the visible emissions inspection was made with a certified opacity reader. The report shall also include the total number of inspections conducted every 14 days in the year for units subject to this requirement.

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3. The permittee shall keep a record of visible emissions taken pursuant to 40 CFR section 60.7, the summary report form shall contain the information and be in the format shown in figure 1 of section 60.7(d) of 40 CFR, unless otherwise specified by the Administrator.
 4. The permittee within thirty (30) days from the end of each calendar semester must submit to the Board semiannually all Method 9 reports for visible emissions readings taken during the previous semester.
- d) The Board reserves the right to require additional visible emission readings in order to demonstrate compliance with the opacity limit.

3. Sulfur Content Limit (SO₂):

- a) The permittee shall not burn or allow the use of distilled No. 2 (Diesel) or No.1 (kerosene) with a sulfur content exceeding 0.2% by weight in the EU-NSPSBOILER unit. [PFE-16-0203-0187-I-II-C]
- b) The permittee shall submit a monthly report indicating on a daily basis the sulfur content (percent by weight) in the fuel burned and the amount of fuel burned in the EU-NSPSBOILER. This report shall be submitted to the Board to the attention of the Chief of the Division of Data Validation and Mathematical Modeling no later than the next 15 days of the following month for which the report is representative and shall be available at all times in the facility for review of the Board or EPA.
- c) The permittee shall keep a copy of the fuel supplier certification in which the sulfur content is indicated to demonstrate compliance with the requirement of keeping a daily record of the sulfur content in the fuel.
- d) The permittee shall submit each year with the annual compliance certification, copies of the reports for that year indicating the sulfur content in weight percent in the fuel burned. The permittee shall also file monitoring reports, which must contain the following:
 1. The date, place (as defined in the permit) and time of sampling;
 2. the date on which analysis were performed;
 3. the company or entity that performed the analysis;
 4. methods or analytical techniques used;
 5. the results of these analysis; and
 6. operating conditions at the time of sampling.

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- e) The permittee shall submit, with each semi-annual report and annual compliance certification, a summary of reports indicating the sulfur content of the boiler in monthly and annual terms. This report will be sent along with the semiannual report required in condition III.14. of this permit.
- f) According to Rule 603(a)(4)(ii) of the RCAP, the permittee shall retain records of all data required monitoring and supporting information for a period of 5 years from the date of the monitoring sample, measurement, report or application. This includes a record of monthly fuel consumption reports and the sulfur content of fuel burned.

4. Fuel Consumption Limit:

- a) The permittee shall not exceed the limit of total fuel consumption of distillate no. 2 (Diesel) or No.1 (kerosene) of **4,504,519 gallons** in any period of 365 consecutive rolling days, if the generators contained in EU-GT500EMGEN-3 does not consume fuel in the same period [PFE-16-0203-0187-I-II-C]. The total fuel consumption is determined by adding that fuel consumption of the day to the previous 364 days.
- b) The permittee shall operate and maintain a flow meter at the entrance of each boiler fuel. [PFE-16-0203-0187-I-II-C]
 - 1. The flow meter shall be operated and maintained in accordance with the manufacturer's recommendations.
 - 2. The permittee shall calibrate the flow meter every six (6) months and shall maintain available certificates and records of calibrations for a minimum period of five (5) years.
- c)  The permittee shall maintain monthly records where the monthly fuel consumption in the NSPSBOILER unit indicated. These records must be accessible and available for review by the technical staff of the Board.
- d) The permittee shall submit, with each semi-annual report and annual compliance certification, an annual report summary indicating the fuel consumption of the boiler in monthly and annual terms. This report will be sent along with the semiannual report required in condition III.14. of this permit.
- e) According to Rule 603(a)(4)(ii) of the RCAP, the permittee shall retain records of all data required monitoring and supporting information for a period of 5 years from the date of the sample, measurement, report or application. This includes a record of monthly fuel consumption reports and the sulfur content of fuel burned.

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5. National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers in Area Sources (40 CFR Part 63, Subpart JJJJJJ) (EP/5/Boiler7610A and EP/5/7610B)

- a) The permittee must comply with all the requirements in the National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers in Area Sources in Part 63 Subpart JJJJJJ of Title 40 of the Code of Federal Regulations.
- b) The compliance date for Subpart JJJJJJ for boilers **EP/5/Boiler7610A and EP/5/7610B** will depend on the applicable requirements as described in section 63.11196 of 40 CFR.
- c) The permittee must comply with each work practice standard, emissions reduction measurement and management practice as specified in Table 2 of Subpart JJJJJJ, respectively, as they apply to boilers **EP/5/Boiler7610A and EP/5/7610B**. [Section 63.11201(b) of 40 CFR]
1. Permittee must conduct an initial tune-up and conduct a tune-up every 2 years according to section 63.11223 of 40 CFR. Each biennial tune-up must be conducted no more than 25 months after the previous tune-up.
 2. Permittee must have a one-time energy assessment performed by a qualified energy assessor. An energy assessment completed on or after January 1st, 2008, that meets or is amended to meet the energy assessment requirements in Table 2 of Subpart JJJJJJ satisfy the energy assessment requirement. A facility that operates under an energy management program compatible with ISO 50001, that includes the affected boilers, also satisfies the energy assessment requirement. [Section 63.11201(b) of 40 CFR]
- d) Subpart JJJJJJ standards apply at all times the affected boiler is operating, except during periods of startup and shutdown as defined in section 63.11237 of 40 CFR, during which time the permittee must comply only with Table 2 of Subpart JJJJJJ. [Section 63.11201(d) of 40 CFR]
- e) Permittee must comply with the applicable General Compliance Requirements as described in section 63.11205(a) of 40 CFR.
- f) Permittee must comply with the applicable Initial Compliance Requirements as described in section 63.11210(c) and 63.11214(b) and (c) of 40 CFR.
- i. The owners or operators of existing affected boilers with a heat input capacity of 10 MMBtu/hr or greater, must submit a signed certification in the Notification of Compliance Status report that ensures that an energy assessment of the boiler and its energy use systems was completed according to Table 2 of Subpart JJJJJJ. [Section 63.11214(c) of 40 CFR]

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- g) Permittee must comply with the applicable Continuous Compliance Requirements as described in sections 63.11223, 63.11225(a), (b), (c), (d), (f) and (g) of 40 CFR.
- h) The owners or operators of affected boilers must comply with the notifications, reporting and record keeping requirements according to the requirements of section 63.11225 of 40 CFR.
1. An initial notification must be submitted no later than January 20, 2014 or within 120 days after the source becomes subject to the standard. [Section 63.11225(a)(2) of 40 CFR]
 2. A Notification of Compliance Status (NCS) must be submitted no later than 120 days after the applicable compliance date specified in section 63.11196 of 40 CFR, unless the boiler is subject to the requirement of conducting a performance stack test, in which case the NCS must be submitted within 60 days of completing the performance stack test. The NCS must be submitted in accordance with paragraphs 63.11225(a)(4)(i) to (vi) of 40 CFR. The NCS must include the information and compliance certification(s) in paragraphs 63.11225(a)(4)(i) to (v), as applicable, and must be signed by the responsible official. [Section 63.11225(a)(4) of 40 CFR]
 3. The Notification of Compliance Status must be submitted electronically using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX), at www.epa.gov/cdx. If the reporting form is not available at the time that the notification is due, the written notification must be submitted using the appropriate address listed in section 63.13 of 40 CFR. [Section 63.11225(a)(4)(vi) of 40 CFR]
 4. By March 1 of each year, the permittee must prepare an annual compliance certification report for the previous calendar year, and submit it to the Board upon request, containing the information specified in section 63.11225(b)(1) to (b)(4) of 40 CFR. The report must be submitted by March 15 if you had any instance described by section 63.11225(b)(3) of 40 CFR. For boilers subject only to the energy assessment requirement and/or to the biennial or 5-year tune-up according to section 63.11223(a) and not subject to emission limits or operating limits, the permittee may prepare only a biennial or 5-year compliance reports specified in paragraphs (b)(1) and (2) of section 63.11225. [Section 63.11225(b) of 40 CFR]
 5. Records required in Subpart JJJJJ must be in a form suitable and readily available for review by EPA or EQB personnel. Each record must be kept for 5 years following the date of each recorded action. Each record must be kept on-site or be accessible from a central location by computer or other means that instantly provide access at the site for at least 2 years after the date of each

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recorded action. Records may be kept off site for the remaining 3 years. [Section 63.11225 (d) of 40 CFR]

- i) The permittee must comply with the General Provisions of sections 63.1 to 63.16, as applicable, which are in Table 8 of Subpart JJJJJ of 40 CFR.

6. Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units (40 CFR Part 60 Subpart Dc) (EP/5/Boiler7610A and EP-5/7610B)

- a) Boilers (EP/5/Boiler7610A and EP-5/7610B) are affected by 40 CFR Part 60, Subpart Dc and general provisions of Subpart A. The boilers shall operate in compliance with the applicable requirements of this regulation.
- b) According to Section 60.42c(h) of 40 CFR, the limit of sulfur content in fuel for the boilers (EP/5/Boiler7610A and EP-5/7610B) shall be determined based on a fuel supplier certification. The certification shall comply with the requirements of Section 60.48c(f) of 40 CFR, as applicable.
- c) According to Sections 60.44c(h) of 40 CFR, the initial performance test for this boiler consists of a fuel supplier certification.
- d) The permittee shall submit a fuel supplier certification for No. 2 (Diesel) or No.1 (kerosene) burned in the boilers (EP/5/Boiler7610A and EP-5/7610B). This to demonstrate that the sulfur content in the fuel does not exceed 0.2% by weight (sections 60.42c (d)⁶ or (h) and 60.44c (g) and (h) of 40 CFR, as applicable). The certification must be obtained each time fuel is received at the facility. This shall regularly accompany the monthly report required by condition V(C)(3)(b) of this permit as fuel is received at the facility. The certification shall correspond to the period of the report and include the following information: [section 60.48c(f)(1) of 40 CFR]
 - 1. The name of the fuel supplier.
 - 2. A statement by the fuel supplier that the fuel complies with the specifications under the definition of distillate oil in §60.41c of 40 CFR; and
 - 2. The sulfur content or maximum sulfur content of the fuel.
- e) According to section 60.46c(d)(2) of 40 CFR, as an alternative fuel sampling procedure for affected facilities combusting fuel, fuel samples may be collected from the fuel tank immediately after the fuel tank is filled but before any oil is combusted. The owner or operator of the affected facility shall analyze the fuel sample to determine the sulfur

⁶ Lilly chose to demonstrate compliance with the SO₂ standards based on the certification provided by the fuel supplier according to section 60.44c(h) of 40 CFR Part 60, Subpart Dc, unless it uses the alternate sampling procedure in condition 6(e).

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content. If a partially empty fuel tank is refilled, a new sample and analysis of the fuel in the tank would be required upon filling. Results of the fuel analysis taken after each new shipment of fuel is received shall be used as the daily value when calculating the 30-day rolling average until the next shipment is received. If the fuel analysis shows that the sulfur content in the fuel tank is greater than 0.2 weight percent sulfur, the owner or operator shall ensure that the sulfur content of subsequent oil shipments is low enough to cause the 30-day rolling average sulfur content to be 0.5 weight percent sulfur or less.

- f) With respect to the boiler EP/1/Boiler5, the permittee shall meet the following maintenance and recordkeeping requirements related to the emission limit of sulfur oxide (SO₂) and sulfur content in fuel: [40 CFR section 60.48c]
1. Calendar dates covered in the reporting period.
 2. Each 30-day average SO₂ emission rate (ng/J or lb/MMBtu), or 30-day average sulfur content (weight percent), calculated during the reporting period, ending with the last 30-day period; reasons for any noncompliance with the emission standards; and a description of corrective actions taken.
 3. Average percentage rate of potential emissions of SO₂ for periods of 30 days
 4. Identify the design capacity of the units and the types of fuels used.
 5. If fuel supplier certifications of sulfur content are used to demonstrate compliance with the limit of sulfur content in fuel, the permittee shall comply with the requirements in Section 60.48c(f) of 40 CFR. The report shall include a certified statement signed by the owner or operator of the facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period.
 6. The permittee shall register and keep records of the amount of each fuel burned during each day of operation. In the alternative, the permittee shall use the procedures set forth in Section 60.48c(g)(2) or (3) of 40 CFR.
 7. The permittee shall calculate the annual capacity factor to which the owner or operator anticipates operate based on all fuels burned and based on each individual fuel burned. [Section 60.48c(a)(3) of 40 CFR]
 8. As a requirement of the Board, the reports shall be kept at the facility for a minimum period of five years.
 9. The reports required by 40 CFR Part 60, Subpart Dc shall be submitted to the Environmental Protection Agency (EPA) every six months with a copy to the Board.

D. External Combustion Unit: EU-NSPSBOILER-2

The following table contains a summary of the requirements and test methods, operational limits, monitoring, recordkeeping and reporting for emission units identified in Section II of this permit.

Condition	Parameter	Value	Units	Test Method	Method Frequency	Recordkeeping Requirements	Reports Frequency
Particulate Matter Emission Limit	Particulate matter	0.3	Lb/MMBtu	Method 5 Emission calculations using AP-42 emission factors	During the first year of duration of the permit. Semiannual	Sampling protocol logs, support information and final report and emission calculations record.	<u>Final Report:</u> no later than 60 days after the test. Semiannual (See General Condition 14)
Visible Emissions Limit	Opacity	20%	Percentage (6 minutes average)	Method 9 Visible emissions inspection	Once during the first year of duration of the permit. Every 14 days	Test results Record date and hour of inspections, results and any corrective action taken.	<u>Final Report:</u> no later than 60 days after the test. Semiannual (See General Condition 14)
SO ₂ Emission Limit	Sulfur content	0.2	Percentage per weight	Fuel analysis supplier certification	Daily with each fuel (purchase) receipt	Log with each receipt of the fuel sulfur content provided by the supplier	Monthly and Semiannual (See General Condition 14)
Fuel Consumption Limit (Combined) EP/1/511 EP/2/512	Diesel and/or kerosene	2,554,416	Gallons per year	Consumption through flow meter	Monthly	Consumption log and purchase receipts	Semiannual (See General Condition 14)

1. Particulate Matter Emission Limit (PM):

- a) The permittee shall not cause or allow the emission of particulate matter in excess of 0.3 lb/MMBtu of heat input from any equipment burning solid or liquid fuel. [Rule 406 of the RCAP]
- b) The permittee shall perform a performance test during the first year using Method 5, which appears under 40 CFR Part 60, Appendix A, in order to verify that the norm is complied with. Pursuant to Rule the permittee shall comply with the following: [Rule 603 (a)(3) of the RCAP]

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1. The permittee shall submit to the EQB, 30 days before the test start date, a detailed sampling protocol that describes all the test equipment, procedures and quality assurance measures used. The protocol shall be specific for the test, facility, operational conditions and parameters that shall be measured. [Rule 106 (C) of the RCAP]
 2. The permittee shall submit a written notification indicating the sampling date, 15 days before the sampling, so the Board may appoint an observer. [Rule 106(D) of the RCAP]
 3. The permittee shall submit two copies of the sampling results report within 60 days after the tests. This report shall contain the information required under Rule 106(E) of the RCAP.
 4. During the test the source shall operate at full capacity or based on a representative performance of the affected facility when sampling; meaning that after demonstrating compliance with any applicable emission limit, the Board can restrict the operation of the source to the capacity reached during the performance tests. [Rule 106 (F) of the RCAP]
- c) The permittee shall submit semiannually emission calculations using AP-42 emission factors in order to verify compliance with Rule 406 of the RCAP. The permittee shall be based on the following to demonstrate compliance:
1. To determine compliance with the condition (1)(a) of Section V(B) Lilly shall calculate particulate matter emissions using emission factors applicable to this emission unit and the average ratio of heat input of the fuel, as stated in Table 1.3-1 of AP-42 (140,000 Btu / gal for Light Fuel Oil).
 2. The total heat input will result from the sum of the heat content of fuels whose combustion products pass through a chimney. The total heat input of all units burning fuel source shall be used to determine the maximum allowable amount of particulate matter that may be emitted.
- d) As specified in Rule 603(a)(4)(ii) of the RCAP, the permittee shall keep records of all the required sampling data and support information for a period of 5 years from the date of the sampling, measurement, report or sampling application.

2. Visible Emissions Limits (Opacity):

- a) The permittee shall not exceed the opacity limit of 20% in a 6-minutes average for unit EU-NSPSBOILER-2. However, the permittee shall be able to release to the atmosphere visible emissions with an opacity up to 60% for a period no greater than 4 minutes within any consecutive interval of 30 minutes. [Rule 403(A) of the RCAP]

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1. Further, the emission unit EU-NSPSBOILER-2 shall comply with 40 CFR Part 60.43c(c) may not emit visible emissions exceeding 27% opacity for a period longer than six (6) minutes in any interval of time. According to 40 CFR 60.43c(d), the opacity limits apply at all times except during periods of startup, shutdown or malfunction of the boiler.
- b) The permittee shall hire an independent opacity reader, certified by a school approved or endorsed by the EPA or the Board to perform an opacity reading on each stack/chimney of unit EU-NSPSBOILER-2 during the first year of the permit duration using Method 9 described in Appendix A of 40 CFR Part 60. The corresponding boiler shall be operating when making the opacity readings.
 1. The permittee shall submit to the Board, at least 30 days prior to the opacity reading, a copy of the format to be used to record the visible emissions readings.
 2. The permittee shall notify in writing to the Board at least 15 days before the initial sampling using Method 9, to allow the Board the opportunity to appoint an observer present. [Rule 106(D) of the RCAP]
 3. The permittee shall submit two copies of the initial sampling results report using Method 9 within 60 days after the tests. This report shall contain the information required under Rule 106(E) of the RCAP. The requirements of the subsequent readings shall be submitted in the readings summary that shall be ratified with the semiannual report required in this permit.
- c) The permittee shall make bi-weekly readings on the EU-NSPSBOILER-2 emission unit in accordance with Method 9 of 40 CFR Part 60. Readings should be done at the point of greatest opacity on the part of the plume where the condensed water vapor is not present.
 1. When a certified reader establishes that there are excess visible emissions, Lilly shall verify that the equipment causing these emissions is operating according to the manufacturer's specifications and permit conditions. Lilly take the necessary corrective actions to eliminate the excess visible emissions taking into account the provisions of Rule 403(A)(1) and (2) of the RCAP. The applicable boiler must be operating at the time of performance of the opacity readings.
 2. The permittee must submit a summary of the visible emissions inspections in the annual compliance certification corresponding to the year in which the readings took place. This summary shall include the date the reading was made. This summary shall include the date the visible emissions inspection was made with a certified opacity reader. The report shall also include the total number of inspections conducted every 14 days in the year for units subject to this requirement.

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3. The permittee shall keep a record of visible emissions taken pursuant to 40 CFR section 60.7, the summary report form shall contain the information and be in the format shown in figure 1 of section 60.7(d) of 40 CFR, unless otherwise specified by the Administrator.
 4. The permittee within thirty (30) days from the end of each calendar semester must submit to the Board semiannually all Method 9 reports for visible emissions readings taken during the previous semester.
- d) The Board reserves the right to require additional visible emission readings in order to demonstrate compliance with the opacity limit.

3. Sulfur Content Limit (SO₂):

- a) The permittee shall not burn or allow the use of distilled No. 2 (Diesel) or No.1 (kerosene) with a sulfur content exceeding 0.2% by weight in the EU-NSPSBOILER-2 unit. [PFE-16-1108-0591-I-II-C]
- b) The permittee shall submit a monthly report indicating on a daily basis the sulfur content (percent by weight) in the fuel burned and the amount of fuel burned in the EU-NSPSBOILER-2. This report shall be submitted to the Board to the attention of the Chief of the Division of Data Validation and Mathematical Modeling no later than the next 15 days of the following month for which the report is representative and shall be available at all times in the facility for review of the Board or EPA.
- c) The permittee shall keep a copy of the fuel supplier certification in which the sulfur content is indicated to demonstrate compliance with the requirement of keeping a daily record of the sulfur content in the fuel.
- d) The permittee shall submit each year with the annual compliance certification, copies of the reports for that year indicating the sulfur content in weight percent in the fuel burned. The permittee shall also file monitoring reports, which must contain the following:
 1. The date, place (as defined in the permit) and time of sampling;
 2. the date on which analysis were performed;
 3. the company or entity that performed the analysis;
 4. methods or analytical techniques used;
 5. the results of these analysis; and
 6. operating conditions at the time of sampling.

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- e) The permittee shall submit, with each semi-annual report and annual compliance certification, a summary of reports indicating the sulfur content of the boiler in monthly and annual terms. This report will be sent along with the semiannual report required in condition III.14. of this permit.
- f) According to Rule 603(a)(4)(ii) of the RCAP, the permittee shall retain records of all data required monitoring and supporting information for a period of 5 years from the date of the monitoring sample, measurement, report or application. This includes a record of monthly fuel consumption reports and the sulfur content of fuel burned.

4. Fuel Consumption Limit:

- a) The permittee shall not exceed the limit of total fuel consumption of distillate no. 2 (Diesel) or No.1 (kerosene) of **2,554,416 gallons** in any period of 365 consecutive rolling days. The total fuel consumption is determined by adding that fuel consumption of the day to the previous 364 days. [PFE-16-1108-0591-I-II-C]
- b) The permittee shall operate and maintain a flow meter at the entrance of each boiler fuel.
 - 1. The flow meter shall be operated and maintained in accordance with the manufacturer's recommendations.
 - 2. The permittee shall calibrate the flow meter every six (6) months and shall maintain available certificates and records of calibrations for a minimum period of five (5) years.
- c) The permittee shall maintain monthly records where the monthly fuel consumption in the NSPSBOILER-2 unit indicated. These records must be accessible and available for review by the technical staff of the Board.
- d) The permittee shall submit, with each semi-annual report and annual compliance certification, an annual report summary indicating the fuel consumption of the boiler in monthly and annual terms. This report will be sent along with the semiannual report required in condition III.14. of this permit.
- e) According to Rule 603(a)(4)(ii) of the RCAP, the permittee shall retain records of all data required monitoring and supporting information for a period of 5 years from the date of the sample, measurement, report or application. This includes a record of monthly fuel consumption reports and the sulfur content of fuel burned.

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5. National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers in Area Sources (40 CFR Part 63, Subpart JJJJJJ) (EP/1/511 and EP/1/512)

- a) The permittee must comply with all the requirements in the National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers in Area Sources in Part 63 Subpart JJJJJJ of Title 40 of the Code of Federal Regulations.
- b) The compliance date for Subpart JJJJJJ for boilers **EP/1/511 and EP/1/512** will depend on the applicable requirements as described in section 63.11196 of 40 CFR.
- c) The permittee must comply with each work practice standard, emissions reduction measurement and management practice as specified in Table 2 of Subpart JJJJJJ, respectively, as they apply to boilers **EP/1/511 and EP/1/512**. [Section 63.11201(b) of 40 CFR]
1. Permittee must conduct an initial tune-up and conduct a tune-up every 2 years according to section 63.11223 of 40 CFR. Each biennial tune-up must be conducted no more than 25 months after the previous tune-up.
 2. Permittee must have a one-time energy assessment performed by a qualified energy assessor. An energy assessment completed on or after January 1st, 2008, that meets or is amended to meet the energy assessment requirements in Table 2 of Subpart JJJJJJ satisfy the energy assessment requirement. A facility that operates under an energy management program compatible with ISO 50001, that includes the affected boilers, also satisfies the energy assessment requirement. [Section 63.11201(b) of 40 CFR]
- d) Subpart JJJJJJ standards apply at all times the affected boiler is operating, except during periods of startup and shutdown as defined in section 63.11237 of 40 CFR, during which time the permittee must comply only with Table 2 of Subpart JJJJJJ. [Section 63.11201(d) of 40 CFR]
- e) Permittee must comply with the applicable General Compliance Requirements as described in section 63.11205(a) of 40 CFR.
- f) Permittee must comply with the applicable Initial Compliance Requirements as described in section 63.11210(c) and 63.11214(b) and (c) of 40 CFR.
- i. The owners or operators of existing affected boilers with a heat input capacity of 10 MMBtu/hr or greater, must submit a signed certification in the Notification of Compliance Status report that ensures that an energy assessment of the boiler and its energy use systems was completed according to Table 2 of Subpart JJJJJJ. [Section 63.11214(c) of 40 CFR]

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- g) Permittee must comply with the applicable Continuous Compliance Requirements as described in sections 63.11223, 63.11225(a), (b), (c), (d), (f) and (g) of 40 CFR.
- h) The owners or operators of affected boilers must comply with the notifications, reporting and record keeping requirements according to the requirements of section 63.11225 of 40 CFR.
1. An initial notification must be submitted no later than January 20, 2014 or within 120 days after the source becomes subject to the standard. [Section 63.11225(a)(2) of 40 CFR]
 2. A Notification of Compliance Status (NCS) must be submitted no later than 120 days after the applicable compliance date specified in section 63.11196 of 40 CFR, unless the boiler is subject to the requirement of conducting a performance stack test, in which case the NCS must be submitted within 60 days of completing the performance stack test. The NCS must be submitted in accordance with paragraphs 63.11225(a)(4)(i) to (vi) of 40 CFR. The NCS must include the information and compliance certification(s) in paragraphs 63.11225(a)(4)(i) to (v), as applicable, and must be signed by the responsible official. [Section 63.11225(a)(4) of 40 CFR]
 3. The Notification of Compliance Status must be submitted electronically using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX), at www.epa.gov/cdx. If the reporting form is not available at the time that the notification is due, the written notification must be submitted using the appropriate address listed in section 63.13 of 40 CFR. [Section 63.11225(a)(4)(vi) of 40 CFR]
 4. By March 1 of each year, the permittee must prepare an annual compliance certification report for the previous calendar year, and submit it to the Board upon request, containing the information specified in section 63.11225(b)(1) to (b)(4) of 40 CFR. The report must be submitted by March 15 if you had any instance described by section 63.11225(b)(3) of 40 CFR. For boilers subject only to the energy assessment requirement and/or to the biennial or 5-year tune-up according to section 63.11223(a) and not subject to emission limits or operating limits, the permittee may prepare only a biennial or 5-year compliance reports specified in paragraphs (b)(1) and (2) of section 63.11225. [Section 63.11225(b) of 40 CFR]
 5. Records required in Subpart JJJJJ must be in a form suitable and readily available for review by EPA or EQB personnel. Each record must be kept for 5 years following the date of each recorded action. Each record must be kept on-site or be accessible from a central location by computer or other means that instantly provide access at the site for at least 2 years after the date of each

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recorded action. Records may be kept off site for the remaining 3 years. [Section 63.11225 (d) of 40 CFR]

- i) The permittee must comply with the General Provisions of sections 63.1 to 63.16, as applicable, which are in Table 8 of Subpart JJJJJ of 40 CFR.

6. Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units (40 CFR Part 60 Subpart Dc) (EP/1/511 and EP/1/512)

- a) Boilers (EP/1/511 and EP/1/512) are affected by 40 CFR Part 60, Subpart Dc and general provisions of Subpart A. The boilers shall operate in compliance with the applicable requirements of this regulation.
- b) According to Section 60.42c(h) of 40 CFR, the limit of sulfur content in fuel for the boilers (EP/1/511 and EP/1/512) will be determined based on a fuel supplier certification. The certification shall comply with the requirements of Section 60.48c(f) of 40 CFR, as applicable.
- c) According to Sections 60.44c(h) of 40 CFR, the initial performance test for this boiler consists of a fuel supplier certification.
- d) The permittee shall submit a fuel supplier certification for No. 2 (Diesel) or No.1 (kerosene) burned in the boilers (EP/1/511 and EP/1/512). This to demonstrate that the sulfur content in the fuel does not exceed 0.2% by weight (sections 60.42c(d)⁷ or (h) and 60.44c(g) and (h) of 40 CFR, as applicable). The certification must be obtained each time fuel is received at the facility. This shall regularly accompany the monthly report required by condition V(D)(3)(b) of this permit as fuel is received at the facility. The certification shall correspond to the period of the report and include the following information: [section 60.48c(f)(1) of 40 CFR]
 - 1. The name of the fuel supplier.
 - 2. A statement by the fuel supplier that the fuel complies with the specifications under the definition of distillate oil in §60.41c of 40 CFR; and
 - 3. The sulfur content or maximum sulfur content of the fuel.
- e) According to section 60.46c(d)(2) of 40 CFR, as an alternative fuel sampling procedure for affected facilities combusting fuel, fuel samples may be collected from the fuel tank immediately after the fuel tank is filled but before any oil is combusted. The owner or operator of the affected facility shall analyze the fuel sample to determine the sulfur

⁷ Lilly chose to demonstrate compliance with the SO₂ standards based on the certification provided by the fuel supplier according to section 60.44c(h) of 40 CFR Part 60, Subpart Dc, unless it uses the alternate sampling procedure in condition 6(e).

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content. If a partially empty fuel tank is refilled, a new sample and analysis of the fuel in the tank would be required upon filling. Results of the fuel analysis taken after each new shipment of fuel is received shall be used as the daily value when calculating the 30-day rolling average until the next shipment is received. If the fuel analysis shows that the sulfur content in the fuel tank is greater than 0.2 weight percent sulfur, the owner or operator shall ensure that the sulfur content of subsequent oil shipments is low enough to cause the 30-day rolling average sulfur content to be 0.2 weight percent sulfur or less.

- f) The permittee shall submit a certification from the fuel supplier for kerosene (Light Fuel Oil No. 1) or diesel (Fuel Oil No. 2) burned in boilers (EP/1/5114 and EP/1/512). This to demonstrate compliance with the maintenance and recordkeeping requirements related to the emission limit of sulfur oxide (SO₂) and sulfur content in fuel: [40 CFR section 60.48c]
1. Calendar dates covered in the reporting period.
 2. Each 30-day average SO₂ emission rate (ng/J or lb/MMBtu), or 30-day average sulfur content (weight percent), calculated during the reporting period, ending with the last 30-day period; reasons for any noncompliance with the emission standards; and a description of corrective actions taken.
 3. Average percentage rate of potential emissions of SO₂ for periods of 30 days
 4. Identify the design capacity of the units and the types of fuels used.
 5. If fuel supplier certifications of sulfur content are used to demonstrate compliance with the limit of sulfur content in fuel, the permittee shall comply with the requirements in Section 60.48c(f) of 40 CFR. The report shall include a certified statement signed by the owner or operator of the facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period.
 6. The permittee shall register and keep records of the amount of each fuel burned during each day of operation. In the alternative, the permittee shall use the procedures set forth in Section 60.48c(g)(2) or (3) of 40 CFR.
 7. The permittee shall calculate the annual capacity factor to which the owner or operator anticipates operate based on all fuels burned and based on each individual fuel burned. [Section 60.48c(a)(3) of 40 CFR]
 8. As a requirement of the Board, the reports shall be kept at the facility for a minimum period of five years.

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9. The reports required by 40 CFR Part 60, Subpart Dc shall be submitted to the Environmental Protection Agency (EPA) every six months with a copy to the Board.

E. Internal Combustion Unit: EU-GT500EMGEN-2

The following table contains a summary of the requirements and test methods, operational limits, monitoring, recordkeeping and reporting for emission units identified in Section II of this permit.

Condition	Parameter	Value	Units	Test Method	Method Frequency	Recordkeeping Requirements	Reports Frequency
Visible Emissions Limit	Opacity	20%	Percentage (6 minutes average)	Method 9	Once during the first year of duration of the permit.	Test results	No later than 60 days after the test.
SO ₂ Emission Limit	Sulfur content	0.5	Percentage per weight	Fuel analysis supplier certification	Daily with each fuel (purchase) receipt	Log with each receipt of the fuel sulfur content provided by the supplier	Monthly Semiannual (See General Condition 14)
Fuel Consumption Limit EP/2/511D	Diesel	167,215	Gallons per year	Consumption through flow meter	Monthly	Consumption log and purchase receipts	Monthly Semiannual (See General Condition 14)

1. Visible Emissions Limits (Opacity):

- TM*
- a) The permittee shall not exceed the opacity limit of 20% in a 6-minutes average for the unit. However, the permittee shall be able to release to the atmosphere visible emissions with an opacity up to 60% for a period no greater than 4 minutes within any consecutive interval of 30 minutes. [Rule 403(A) of the RCAP]
 - b) The permittee shall hire an independent opacity reader, certified by a school approved or endorsed by the EPA or the Board to perform an opacity reading on the stack/chimney of the internal combustion unit during the first year of the permit duration using Method 9 described in Appendix A of 40 CFR Part 60. The corresponding internal combustion equipment shall be operating when making the opacity readings.
 - c) The permittee shall submit to the Board, at least 30 days prior to the opacity reading, a copy of the format to be used to record the visible emissions readings.

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- d) The permittee shall notify in writing to the Board at least 15 days before the initial sampling using Method 9, to allow the Board the opportunity to appoint an observer present. [Rule 106(D) of the RCAP]
- e) The permittee shall submit two copies of the initial sampling results report using Method 9 within 60 days after the tests. This report shall contain the information required under Rule 106(E) of the RCAP.
- f) The Board reserves the right to require additional visible emission readings in order to demonstrate compliance with the opacity limit.

2. Sulfur Content Limit (SO₂):

- a) The permittee shall not burn or allow the use of distilled No. 2 (Diesel) with a sulfur content exceeding 0.5% by weight in emission unit EU-GT500EMGEN-2. [PFE-16-0203-0187-I-II-C].
- b) According to Rule 603(a)(4)(ii) of the RCAP, the permittee shall retain records of all data required monitoring and supporting information for a period of 5 years from the date of the monitoring sample, measurement, report or application. This includes a record of monthly fuel consumption reports and the sulfur content of fuel burned.
- c) The permittee shall submit a monthly report indicating on a daily basis the sulfur content (percent by weight) in the fuel burned and the amount of fuel burned in the EU-GT500EMGEN-2. This report shall be submitted to the Board to the attention of the Chief of the Division of Data Validation and Mathematical Modeling no later than the next 15 days of the following month for which the report is representative and shall be available at all times in the facility for review of the Board or EPA.
- d) The permittee shall keep a copy of the fuel supplier certification in which the sulfur content is indicated to demonstrate compliance with the requirement of keeping a daily record of the sulfur content in the fuel
- e) The permittee shall record along with the semi-annual reports required in condition III.14 and the annual compliance certification, a summary of the reports for that period indicating a summary of the sulfur content in percent by weight in the burned fuel or can send a copy of the supplier's fuel certifications for this period.

3. Fuel Consumption Limit:

- a) The permittee shall not exceed the limit of total fuel consumption of distillate no. 2 (Diesel) of **167,215 gallons** in any period of 12 consecutive months in emission unit EU-GT500EMGEN-2. The total fuel consumption is determined by adding the fuel consumption of the month to the previous 11 months. [PFE-16-0203-0187-I-II-C]

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- i.) In order to maintain the emergency use category as specified in 40 CFR Part 63 Subpart ZZZZ, each engine subject to this subpart is authorized to operate for a maximum of 100 hours per calendar year for any of the combination of the purposes specified in 40 CFR §63.6640(f)(2)(i) through (iii)⁸, and up to 50 hours of operation in non-emergency situations, as specified in 40 CFR 63.6640(f)(4). The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in section 63.6640(f)(2) of the 40 CFR, whereas these 100 hours of operation shall be counted as part of the global fuel consumption limit established in the condition above and construction permit PFE-16-0203-0187-I-II-C.
- b) The engine shall be provided with a non-resettable hour meter so that hours of operation can be checked and fuel consumption can be calculated. [40 CFR section 63.6625(f)]
- c) The permittee shall maintain monthly records where the monthly fuel consumption in emission unit EU-GT500EMGEN-2 is recorded. These records must be accessible and available for review by the technical staff of the Board.
- d) The permittee shall submit, along with the semiannual report required in condition III.14. and annual compliance certification, an annual report summary indicating the fuel consumption of internal combustion equipment in monthly and annual terms.
- e) According to Rule 603(a)(4)(ii) of the RCAP, the permittee shall retain records of all data required monitoring and supporting information for a period of 5 years from the date of the sample, measurement, report or application. This includes a record of monthly fuel consumption reports and the sulfur content of fuel burned.

4. National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (40 CFR Part 63 Subpart ZZZZ) (EP/2/511D)

- a) The existing stationary engine in emission unit GT500EMGEN-2 is affected by 40 CFR, Part 63, Subpart ZZZZ: National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE NESHAP)

⁸ See Vacatur on RICE NESHAP and NSPS Provisions for Emergency Engines; Delaware v. EPA785 F. 3d 1(D.C. Cir. 2015). Vacated Paragraphs; 60.4211(f)(2)(ii)-(iii), 60.4243(d)(2)(ii)-(iii), and 63.6640(f)(2)(ii)-(iii). After the vacatur (May 4, 2016), engines operating for Emergency Demand Response and voltage/frequency deviations must comply with the standards for non-emergency engines.

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as defined in section 63.6585(a) of 40 CFR, therefore it shall have met the applicable requirements of this regulation on or before **May 3, 2013**.

- b) According to Table 2 of Subpart ZZZZ the permittee shall:
1. change the engine oil and filter after every 500 hours of operation or annually, whatever is first
 - a. The permittee will have the option to use an oil analysis program as described in section 63.6625(i) of 40 CFR to extend the oil change requirement specified in Table 2d of Subpart ZZZZ.
 2. inspect the air filter after every 1,000 hours of use or annually, whichever is first, and replace as necessary, and
 3. inspect all hoses and belts after 500 hours of use or annually, whichever is first and replace as necessary.
- c) According to 40 CFR §63.6625, the permittee shall:
1. operate and maintain the engine and control equipment (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which shall provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
 2. install a non-resettable hour meter if one is not already installed.
 3. minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.
- d) According to 40 CFR §63.6605, the permittee shall operate the engine so that emissions are minimized.
-  e) According to 40 CFR §63.6640, the permittee shall operate and demonstrate compliance with the Management and Work Practices in Table 6 of the Subpart.
- f) To keep the emergency engine classification the permittee shall comply with the limitations of use and operation of 40 CFR §63.6640(f). For any engine operation that does not meet with these requirements, the engine will not be considered an emergency engine under this Subpart and the engine shall have to meet all the requirements of non-emergency engines.
- g) The permittee shall maintain all applicable records as established in 40 CFR §63.6655(f).
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1. Shall keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter.
 2. Shall document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.
 3. If the engine is used for the purposes specified in 40 CFR §63.6640(f)(2)(ii) or (iii) or §63.6640(f)(4)(ii), you shall keep a record of the notification of the emergency situation, the date, the time the operation began and ended for such purposes.
- h) The permittee shall comply with the applicable **General Provisions** of sections 63.1 to 63.15 included in Table 8 of Subpart ZZZZ of 40 CFR.

F. Internal Combustion Unit: EU-GT500EMGEN-3

The following table contains a summary of the requirements and test methods, operational limits, monitoring, recordkeeping and reporting for emission units identified in Section II of this permit.

Condition	Parameter	Value	Units	Test Method	Method Frequency	Recordkeeping Requirements	Reports Frequency
Visible Emissions Limit	Opacity	20%	Percentage (6 minutes average)	Method 9	Once during the first year of duration of the permit.	Test results	No later than 60 days after the test.
SO ₂ Emission Limit	Sulfur content	0.05	Percentage per weight	Fuel analysis supplier certification	Daily with each fuel (purchase) receipt	Log with each receipt of the fuel sulfur content provided by the supplier	Monthly Semiannual (See General Condition 14)
Fuel Consumption Limit (Combined) EP/5/Y-SG-101 EP/5/Y-SG-102 EP/5/Y-SG-103 EP/5/Fire Pump	Diésel	According to condition V(F)(3)(a) below	Gallons per year	Consumption through flow meter	Monthly	Consumption log and purchase receipts	Monthly Semiannual (See General Condition 14)

1. Visible Emissions Limits (Opacity):

- a) The permittee shall not exceed the opacity limit of 20% in a 6-minutes average for the unit. However, the permittee shall be able to release to the atmosphere visible emissions with an opacity up to 60% for a period no greater than 4 minutes within any consecutive interval of 30 minutes. [Rule 403(A) of the RCAP]

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- b) The permittee shall hire an independent opacity reader, certified by a school approved or endorsed by the EPA or the Board to perform an opacity reading on the stack/chimney of the internal combustion unit during the first year of the permit duration using Method 9 described in Appendix A of 40 CFR Part 60. The corresponding internal combustion equipment shall be operating when making the opacity readings.
- c) The permittee shall submit to the Board, at least 30 days prior to the opacity reading, a copy of the format to be used to record the visible emissions readings.
- d) The permittee shall notify in writing to the Board at least 15 days before the initial sampling using Method 9, to allow the Board the opportunity to appoint an observer present. [Rule 106(D) of the RCAP]
- e) The permittee shall submit two copies of the initial sampling results report using Method 9 within 60 days after the tests. This report shall contain the information required under Rule 106(E) of the RCAP.
- f) The Board reserves the right to require additional visible emission readings in order to demonstrate compliance with the opacity limit.

2. Sulfur Content Limit (SO₂):

- a) The permittee shall not burn or allow the use of distilled No. 2 (Diesel) with a sulfur content exceeding 0.05% by weight in emission unit EU-GT500EMGEN-3. [PFE-16-0203-0187-I-II-C].
- b) According to Rule 603(a)(4)(ii) of the RCAP, the permittee shall retain records of all data required monitoring and supporting information for a period of 5 years from the date of the monitoring sample, measurement, report or application. This includes a record of monthly fuel consumption reports and the sulfur content of fuel burned.
- c) The permittee shall submit a monthly report indicating on a daily basis the sulfur content (percent by weight) in the fuel burned and the amount of fuel burned in the EU-GT500EMGEN-3. This report shall be submitted to the Board to the attention of the Chief of the Division of Data Validation and Mathematical Modeling no later than the next 15 days of the following month for which the report is representative and shall be available at all times in the facility for review of the Board or EPA.
- d) The permittee shall keep a copy of the fuel supplier certification in which the sulfur content is indicated to demonstrate compliance with the requirement of keeping a daily record of the sulfur content in the fuel
- e) The permittee shall record along with the semi-annual reports required in condition III.14 and the annual compliance certification, a summary of the reports for that period

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indicating a summary of the sulfur content in percent by weight in the burned fuel or can send a copy of the supplier's fuel certifications for this period.

3. Fuel Consumption Limit:

- a) The maximum consumption allowed (in gallons per year) for this unit shall be determined according to the following equation: [PFE-16-0203-0187-I-II-C]

If the combined consumption in the boilers (EU-NSPSBOILER) (EP/5/Boiler7610A and EP/5/Boiler7610B) is...	Then the maximum consumption allowed in this generators (EU – GT500EMGEN3) is...
≤ 4,450,000	$220,339 + \frac{(4,409,999 - \text{fuel used in boilers}) \times 33.482}{1,000}$
> 4,450,000 and < 4,504,519	$(4,504,519 - \text{fuel used in boilers}) \times 4,016.97$ 1,000

- i) In order to maintain the emergency use category as specified in 40 CFR Part 63 Subpart ZZZZ, each engine subject to this subpart is authorized to operate for a maximum of 100 hours per calendar year for any of the combination of the purposes specified in 40 CFR §63.6640(f)(2)(i) through (iii)⁹, and up to 50 hours of operation in non-emergency situations, as specified in 40 CFR 63.6640(f)(4). The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in section 63.6640(f)(2) of the 40 CFR, whereas these 100 hours of operation shall be counted as part of the global fuel consumption limit established in the table above and construction permit PFE-16-0203-0187-I-II-C.
- ii) In order to maintain the emergency use category as specified in 40 CFR Part 60 Subpart IIII, each engine subject to this subpart is authorized to operate for a maximum of 100 hours per calendar year for any of the combination of the purposes specified in 40 CFR §60.4211(f)(2)(i) through (iii)¹⁰, and up to 50 hours of operation in non-emergency situations, as specified in 40 CFR 60.4211(f)(3).

⁹ See Vacatur on RICE NESHAP and NSPS Provisions for Emergency Engines; Delaware v. EPA785 F. 3d 1(D.C. Cir. 2015). Vacated Paragraphs; 60.4211(f)(2)(ii)-(iii), 60.4243(d)(2)(ii)-(iii), and 63.6640(f)(2)(ii)-(iii). After the vacatur (May 4, 2016), engines operating for Emergency Demand Response and voltage/frequency deviations must comply with the standards for non-emergency engines.

¹⁰ See Vacatur on RICE NESHAP and NSPS Provisions for Emergency Engines; Delaware v. EPA785 F. 3d 1(D.C. Cir. 2015). Vacated Paragraphs; 60.4211(f)(2)(ii)-(iii), 60.4243(d)(2)(ii)-(iii), and 63.6640(f)(2)(ii)-(iii). After the vacatur (May 4, 2016), engines operating for Emergency Demand Response and voltage/frequency deviations must comply with the standards for non-emergency engines.

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The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in section 60.4211(f)(2) of the 40 CFR, whereas these 100 hours of operation shall be counted as part of the 100 hours of operation shall be counted as part of the global fuel consumption limit established in the table above and construction permit PFE-16-0203-0187-I-II-C.

- b) Compliance with the fuel limit specified in the **condition V(F)(3)(a)** shall be determined on a daily rolling period, adding the consumption of that day to the total fuel consumption of the previous 364 days for each boiler and generator, separately and in combination. [PFE-16-0203-0187-I-II-C]
 - c) The engines shall be provided with a non-resettable hour meter so that hours of operation can be checked and fuel consumption can be calculated. [40 CFR section 63.6625(f) or section 60.4209(a)].
 - d) The permittee shall maintain monthly records where the monthly fuel consumption in emission unit EU-GT500EMGEN-3. These records must be accessible and available for review by the technical staff of the Board.
 - e) The permittee shall submit, along with the semiannual report required in condition III.14. and annual compliance certification, an annual report summary indicating the fuel consumption of internal combustion equipment in monthly and annual terms.
- 4. National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (40 CFR Part 63 Subpart ZZZZ) (EP/5/Y-SG-101, EP/5/Y-SG-102 y EP/5/FirePump)**
- a) The existing stationary engines in emission unit GT500EMGEN-3 are affected by Title 40 CFR, Part 63, Subpart ZZZZ: National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE NESHAP) as defined in section 63.6585(a) of 40 CFR, therefore it shall have met the applicable requirements of this regulation on or before **May 3, 2013**.
 - b) According to Table 2 of Subpart ZZZZ the permittee shall:
 - 1. change the engine oil and filter after every 500 hours of operation or annually, whatever is first
 - a. The permittee will have the option to use an oil analysis program as described in section 63.6625(i) of 40 CFR to extend the oil change requirement specified in Table 2d of Subpart ZZZZ.
 - 2. inspect the air filter after every 1,000 hours of use or annually, whichever is first, and replace as necessary, and

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3. inspect all hoses and belts after 500 hours of use or annually, whichever is first and replace as necessary.
- c) According to 40 CFR §63.6625, the permittee shall:
1. operate and maintain the engine and control equipment (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which shall provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
 2. install a non-resettable hour meter if one is not already installed.
 3. minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.
- d) According to 40 CFR §63.6605, the permittee shall operate the engine so that emissions are minimized.
- e) According to 40 CFR §63.6640, the permittee shall operate and demonstrate compliance with the Management and Work Practices in Table 6 of the Subpart.
- f) To keep the emergency engine classification you shall comply with the limitations of use and operation of 40 CFR §63.6640(f). For any engine operation that does not meet with these requirements, the engine will not be considered an emergency engine under this Subpart and shall have to meet all the requirements of non-emergency engines.
- g) The permittee shall maintain all applicable records as established in 40 CFR §63.6655(f).
1. Shall keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter.
 2. Shall document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.
 3. If the engine is used for the purposes specified in 40 CFR §63.6640(f)(2)(ii) or (iii) or §63.6640(f)(4)(ii), you shall keep a record of the notification of the emergency situation, the date, the time the operation began and ended for such purposes.
- h) The permittee shall comply with the applicable **General Provisions** of sections 63.1 to 63.15 included in Table 8 of Subpart ZZZZ of 40 CFR.

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Electric Emergency Generator (EP/5/Y-SG-103)

5. National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (40 CFR Part 63 Subpart ZZZZ)

- a) For the Y-SG-103 engine: The internal combustion engine of the Y-SG-103 emergency generator is subject to the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines contained in 40 CFR Part 63 Subpart ZZZZ. The permittee shall comply with the applicable requirements of Subpart ZZZZ by complying with the applicable requirements of 40 CFR Part 60 Subpart IIII. Other requirements will not apply under subpart ZZZZ.

6. New Source Performance Standards for Stationary Compression Ignition Internal Combustion Engines (40 CFR Part 60, Subpart IIII) for Y-SG-103

- a) The internal combustion engine of the electric generator Y-SG-103 for emergencies is subject to 40 CFR, Part 60, Subpart IIII, so the permittee must comply with all applicable requirements under said Subpart.

- b) In accordance with section 60.4205(a) of 40 CFR, the 3,016 hp electricity generator engine shall comply with the applicable emission standards of Table 1 of this subpart IIII, for all pollutants, which correspond to the same model year and maximum engine power. That is, the emissions may not exceed:

1. 1.3 g/kW - hr of HC
2. 9.2 g/kW - hr of NO_x
3. 11.4 g/kW - hr of CO
4. 0.54 g/kW - hr of PM

- c) The permittee shall operate and maintain the engine in a manner that complies with the emission standards required in condition V(F)(6)(b) of this section for the entire life of the engine. [40 CFR section 60.4206]

- d) In accordance with section 60.4207 of the 40 CFR, the permittee shall use diesel for the engine that meets the requirements of 40 CFR section 80.510(b). This is,

1. The maximum sulfur content in the fuel shall not exceed 15 ppm or 0.0015% by weight if the engine has a displacement of less than 30 liters per cylinder.
2. A cetane index may not be less than 40 or a maximum aromatic content of 35% by volume.

- e) The permittee shall comply with the applicable monitoring requirements of section 60.4209(a) of the 40 CFR.
- f) The permittee shall comply with the applicable compliance requirements of section 60.4211 (b)(3), (f) and (g) of the 40 CFR.
- g) [Reserved]
- h) The permittee shall comply with the applicable notification, reporting and maintenance requirements of section 60.4214(b) of the 40 CFR.
 - a. The permittee shall document the time (hours) of operation of the engine and the reason why the engine was in operation during that time.
- i) The permittee shall comply with the **General Provisions** in Sections 60.1 through section 60.19 that apply to him, which are included in Table 8 of 40 CFR Subpart III.

G. Internal Combustion Unit: EU-GT500EMGEN-4

The following table contains a summary of the requirements and test methods, operational limits, monitoring, recordkeeping and reporting for emission units identified in Section II of this permit.

Condition	Parameter	Value	Units	Test Method	Method Frequency	Recordkeeping Requirements	Reports Frequency
Visible Emissions Limit	Opacity	20%	Percentage (6 minutes average)	Method 9	Once during the first year of duration of the permit.	Test results	No later than 60 days after the test.
SO ₂ Emission Limit	Sulfur content	0.05	Percentage per weight	Fuel analysis supplier certification	Daily with each fuel (purchase) receipt	Log with each receipt of the fuel sulfur content provided by the supplier	Monthly Semiannual (See General Condition 14)
Fuel Consumption Limit (Combined) EP/1/510F EP/1/510G EP/1/510H	Diésel	According to condition V(G)(3)(a) below	Gallons per year	Consumption through flow meter	Monthly	Consumption log and purchase receipts	Monthly Semiannual (See General Condition 14)

1. Visible Emissions Limits (Opacity):

- a) The permittee shall not exceed the opacity limit of 20% in a 6-minutes average for the unit. However, the permittee shall be able to release to the atmosphere visible

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emissions with an opacity up to 60% for a period no greater than 4 minutes within any consecutive interval of 30 minutes. [Rule 403(A) of the RCAP]

- b) The permittee shall hire an independent opacity reader, certified by a school approved or endorsed by the EPA or the Board to perform an opacity reading on the stack/chimney of the internal combustion unit during the first year of the permit duration using Method 9 described in Appendix A of 40 CFR Part 60. The corresponding internal combustion equipment shall be operating when making the opacity readings.
- c) The permittee shall submit to the Board, at least thirty (30) days prior to the opacity reading, a copy of the format to be used to record the visible emissions readings.
- d) The permittee shall notify in writing to the Board at least 15 days before the initial sampling using Method 9, to allow the Board the opportunity to appoint an observer present. [Rule 106(D) of the RCAP]
- e) The permittee shall submit two copies of the initial sampling results report using Method 9 within 60 days after the tests. This report shall contain the information required under Rule 106(E) of the RCAP.
- f) The Board reserves the right to require additional visible emission readings in order to demonstrate compliance with the opacity limit.

2. Sulfur Content Limit (SO₂):

- a) The permittee shall not burn or allow the use of distilled No. 2 (Diesel) with a sulfur content exceeding 0.05% by weight in emission unit EU-GT500EMGEN-4. [PFE-16-0203-0187-I-II-C].
- b) According to Rule 603(a)(4)(ii) of the RCAP, the permittee shall retain records of all data required monitoring and supporting information for a period of five (5) years from the date of the monitoring sample, measurement, report or application. This includes a record of monthly fuel consumption reports and the sulfur content of fuel burned.
- c) The permittee shall submit a monthly report indicating on a daily basis the sulfur content (percent by weight) in the fuel burned and the amount of fuel burned in the EU-GT500EMGEN-4. This report shall be submitted to the Board to the attention of the Chief of the Division of Data Validation and Mathematical Modeling no later than the next 15 days of the following month for which the report is representative and shall be available at all times in the facility for review of the Board or EPA.
- d) The permittee shall keep a copy of the fuel supplier certification in which the sulfur content is indicated to demonstrate compliance with the requirement of keeping a daily record of the sulfur content in the fuel.

- e) The permittee shall record along with the semi-annual reports required in condition III.14 and the annual compliance certification, a summary of the reports for that period indicating a summary of the sulfur content in percent by weight in the burned fuel or can send a copy of the supplier's fuel certifications for this period.

3. Fuel Consumption Limit:

- a) The maximum consumption allowed (in gallons per year) for this unit shall be determined according to the following equation: [PFE-16-0203-0187-I-II-C]

If the combined consumption in the boilers (LFOBOILER) (EP/1/Boiler5 and EP/1/Boiler201A) is...	Then the maximum consumption allowed in this generators (EU – GT500EMGEN4) is...
> 1,123,574	$100,248 + \frac{(2,242,897 - \text{fuel used in boilers} \times 44.643)}{1,000}$
≤ 1,123,574	150,218

- i) In order to maintain the emergency use category as specified in 40 CFR Part 63 Subpart ZZZZ, each engine subject to this subpart is authorized to operate for a maximum of 100 hours per calendar year for any of the combination of the purposes specified in 40 CFR §63.6640(f)(2)(i) through (iii)¹¹, and up to 50 hours of operation in non-emergency situations, as specified in 40 CFR 63.6640(f)(4). The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in section 63.6640(f)(2) of the 40 CFR, whereas these 100 hours of operation shall be counted as part of the global fuel consumption limit established in the table above and construction permit PFE-16-0203-0187-I-II-C.

- b) Compliance with the fuel limit specified in the condition V(G)(3)(a) shall be determined on a daily rolling period, adding the consumption of that day to the total fuel consumption of the previous 364 days for each boiler and generator, separately and in combination. [PFE-16-0203-0187-I-II-C]

¹¹ See Vacatur on RICE NESHAP and NSPS Provisions for Emergency Engines; Delaware v. EPA785 F. 3d 1(D.C. Cir. 2015). Vacated Paragraphs; 60.4211(f)(2)(ii)-(iii), 60.4243(d)(2)(ii)-(iii), and 63.6640(f)(2)(ii)-(iii). After the vacatur (May 4, 2016), engines operating for Emergency Demand Response and voltage/frequency deviations must comply with the standards for non-emergency engines.

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- c) The engines shall be provided with a non-resettable hour meter so that the hours of operation can be checked and fuel consumption can be calculated. [40 CFR section 63.6625(f)].
- d) The permittee shall maintain monthly records where the monthly fuel consumption in emission unit EU-GT500EMGEN-4. These records must be accessible and available for review by the technical staff of the Board.
- e) The permittee shall submit, along with the semiannual report required in condition III.14. and annual compliance certification, an annual report summary indicating the fuel consumption of internal combustion equipment in monthly and annual terms.

4. National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (40 CFR Part 63 Subpart ZZZZ) (EP/1/510F, EP/1/510G y EP/1/510H)

- a) The existing stationary engines in emission unit GT500EMGEN-4 are affected by 40 CFR, Part 63, Subpart ZZZZ: National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE NESHAP) as defined in section 63.6585(a) of 40 CFR, therefore it shall have met the applicable requirements of this regulation on or before **May 3, 2013**.
- b) According to Table 2 of Subpart ZZZZ the permittee shall:
 - 1. change the engine oil and filter after every 500 hours of operation or annually, whatever is first
 - a. The permittee will have the option to use an oil analysis program as described in section 63.6625(i) of 40 CFR to extend the oil change requirement specified in Table 2d of Subpart ZZZZ.
 - 2. inspect the air filter after every 1,000 hours of use or annually, whichever is first, and replace as necessary, and
 - 3. inspect all hoses and belts after 500 hours of use or annually, whichever is first and replace as necessary.
- c) According to 40 CFR §63.6625, the permittee shall:
 - 1. operate and maintain the engine and control equipment (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which shall provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
 - 2. install a non-resettable hour meter if one is not already installed.

3. minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.
- d) According to 40 CFR §63.6605, the permittee shall operate the engine so that emissions are minimized.
- e) According to 40 CFR §63.6640, the permittee shall operate and demonstrate compliance with the Management and Work Practices in Table 6 of the Subpart.
- f) To keep the emergency engine classification you shall comply with the limitations of use and operation of 40 CFR §63.6640(f). For any engine operation that does not meet with these requirements, the engine will not be considered an emergency engine under this Subpart and shall have to meet all the requirements of non-emergency engines.
- g) The permittee shall maintain all applicable records as established in 40 CFR §63.6655(f).
 1. Shall keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter.
 2. Shall document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.
 3. If the engine is used for the purposes specified in 40 CFR §63.6640(f)(2)(ii) or (iii) or §63.6640(f)(4)(ii), you shall keep a record of the notification of the emergency situation, the date, the time the operation began and ended for such purposes.
- h) The permittee shall comply with the applicable **General Provisions** of sections 63.1 to 63.15 included in Table 8 of Subpart ZZZZ of 40 CFR.

H. Internal Combustion Unit: EU-LT500EMGEN-5

The following table contains a summary of the requirements and test methods, operational limits, monitoring, recordkeeping and reporting for emission units identified in Section II of this permit.

Condition	Parameter	Value	Units	Test Method	Method Frequency	Recordkeeping Requirements	Reports Frequency
Visible Emissions Limit	Opacity	20%	Percentage (6 minutes average)	Method 9	Once during the first year of duration of the permit.	Test results	No later than 60 days after the test.
SO ₂ Emission Limit	Sulfur content	0.05	Percentage per weight	Fuel analysis supplier certification	Daily with each fuel (purchase) receipt	Log with each receipt of the fuel sulfur content provided by the supplier	Monthly Semiannual (See General Condition 14)

Condition	Parameter	Value	Units	Test Method	Method Frequency	Recordkeeping Requirements	Reports Frequency
Fuel Consumption Limit (Combined)	Diésel		Gallons per year	Consumption through flow meter	Monthly	Consumption log and purchase receipts	Monthly
EP/1/510A		3,000					Semiannual (See General Condition 14)
EP/1/510B		2,550					
EP/1/510C		3,300					
EP/1/510D		11,500					
EP/2/511B		34,700					
EP/2/511C		13,500					
EP/5/PR52		22,250					

1. Visible Emissions Limits (Opacity):

- a) The permittee shall not exceed the opacity limit of 20% in a 6-minutes average for the unit. However, the permittee shall be able to release to the atmosphere visible emissions with an opacity up to 60% for a period no greater than 4 minutes within any consecutive interval of 30 minutes. [Rule 403(A) of the RCAP]
- b) The permittee shall hire an independent opacity reader, certified by a school approved or endorsed by the EPA or the Board to perform an opacity reading on the stack/chimney of the internal combustion unit during the first year of the permit duration using Method 9 described in Appendix A of 40 CFR Part 60. The corresponding internal combustion equipment shall be operating when making the opacity readings.
- c) The permittee shall submit to the Board, at least thirty (30) days prior to the opacity reading, a copy of the format to be used to record the visible emissions readings.
- d) The permittee shall notify in writing to the Board at least 15 days before the initial sampling using Method 9, to allow the Board the opportunity to appoint an observer present. [Rule 106(D) of the RCAP]
- e) The permittee shall submit two copies of the initial sampling results report using Method 9 within 60 days after the tests. This report shall contain the information required under Rule 106(E) of the RCAP.
- f) The Board reserves the right to require additional visible emission readings in order to demonstrate compliance with the opacity limit.

2. Sulfur Content Limit (SO₂):

- a) The permittee shall not burn or allow the use of distilled No. 2 (Diesel) with a sulfur content exceeding 0.05% by weight in emission unit EU-GT500EMGEN-5. [PFE-16-0203-0187-I-II-C].

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- b) According to Rule 603(a)(4)(ii) of the RCAP, the permittee shall retain records of all data required monitoring and supporting information for a period of 5 years from the date of the monitoring sample, measurement, report or application. This includes a record of monthly fuel consumption reports and the sulfur content of fuel burned.
- c) The permittee shall submit a monthly report indicating on a daily basis the sulfur content (percent by weight) in the fuel burned and the amount of fuel burned in the EU-GT500EMGEN-5. This report shall be submitted to the Board to the attention of the Chief of the Division of Data Validation and Mathematical Modeling no later than the next 15 days of the following month for which the report is representative and shall be available at all times in the facility for review of the Board or EPA.
- d) The permittee shall keep a copy of the fuel supplier certification in which the sulfur content is indicated to demonstrate compliance with the requirement of keeping a daily record of the sulfur content in the fuel.
- e) The permittee shall record along with the semi-annual reports required in condition III.14 and the annual compliance certification, a summary of the reports for that period indicating a summary of the sulfur content in percent by weight in the burned fuel or can send a copy of the supplier's fuel certifications for this period.

3. Fuel Consumption Limit:

- a) The permittee shall not exceed the limit of total fuel consumption **90,800 gallons** in any period of twelve consecutive months of distillate No. 2 (diesel) in the emission unit EU-LT500EMGEN-5. Fuel consumption for any period of 12 consecutive months shall be calculated by adding the monthly consumption of the unit to the total fuel consumption of the unit during the previous 11 months.
 - i) In order to maintain the emergency use category as specified in 40 CFR Part 63 Subpart ZZZZ, each engine subject to this subpart is authorized to operate for a maximum of 100 hours per calendar year for any of the combination of the purposes specified in 40 CFR §63.6640(f)(2)(i) through (iii)¹², and up to 50 hours of operation in non-emergency situations, as specified in 40 CFR 63.6640(f)(4). The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in section 63.6640(f)(2) of the 40 CFR, whereas these 100 hours of operation shall be counted as part of the global fuel consumption limit

¹² See Vacatur on RICE NESHAP and NSPS Provisions for Emergency Engines; Delaware v. EPA 785 F. 3d 1(D.C. Cir. 2015). Vacated Paragraphs; 60.4211(f)(2)(ii)-(iii), 60.4243(d)(2)(ii)-(iii), and 63.6640(f)(2)(ii)-(iii). After the vacatur (May 4, 2016), engines operating for Emergency Demand Response and voltage/frequency deviations must comply with the standards for non-emergency engines.

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established in the table above and construction permit PFE-16-0203-0187-I-II-C.

- b) Compliance with the fuel limit specified in the condition V(H)(3)(a) shall be determined on a daily rolling period, adding the consumption of that day to the total fuel consumption of the previous 364 days for each boiler and generator, separately and in combination. [PFE-16-0203-0187-I-II-C]
 - c) The engines shall be provided with a non-resettable hour meter so that times of operation can be checked and fuel consumption can be calculated. [40 CFR section 63.6625(f)].
 - d) The permittee shall maintain monthly records where the monthly fuel consumption in emission unit EU-GT500EMGEN-5. These records must be accessible and available for review by the technical staff of the Board.
 - e) The permittee shall submit, along with the semiannual report required in condition III.14. and annual compliance certification, an annual report summary indicating the fuel consumption of internal combustion equipment in monthly and annual terms.
4. **National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (40 CFR Part 63 Subpart ZZZZ) (EP/1/510A, EP/1/510B, EP/1/510C, EP/1/510D, EP/2/511B, EP/2/511C y EP/5/PR52)**
- a) The existing stationary engines in emission unit GT500EMGEN-5 are affected by 40 CFR, Part 63, Subpart ZZZZ: National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE NESHAP) as defined in section 63.6585(a) of 40 CFR, therefore it shall have met the applicable requirements of this regulation on or before **May 3, 2013**.
 - b) According to Table 2 of Subpart ZZZZ the permittee shall:
 - 1. change the engine oil and filter after every 500 hours of operation or annually, whatever is first
 - a. The permittee will have the option to use an oil analysis program as described in section 63.6625(i) of 40 CFR to extend the oil change requirement specified in Table 2d of Subpart ZZZZ.
 - 2. inspect the air filter after every 1,000 hours of use or annually, whichever is first, and replace as necessary, and
 - 3. inspect all hoses and belts after 500 hours of use or annually, whichever is first and replace as necessary.

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- b. The permittee must be presented in the semiannual report in accordance with general condition III.14 and a summary of the batches processed in this emission unit.

J. Emission Unit: EU-FERMENTATION

Condition	Parameter	Value	Units	Test Method	Method Frequency	Recordkeeping Requirements	Reports Frequency
H ₂ S Emission Limit	Ground Level Concentration	0.1	ppm/hr	Dispersion Model (AERMOD)	If changes to the fermentation unit are made that requires a construction permit or a modification to the construction permit.	Recordkeeping for five (5) years	Semiannual (See General Condition 14)
		0.03	ppm/day				

1. PR05 Operating Requirements

- a) According to Rule 411 of RCAP, the permittee shall not cause or permit the emissions of hydrogen sulfide (H₂S), which would cause ground level concentrations equal to or greater than 0.1 ppm in any one hour or 0.03 ppm in any 24-hour period. [PFE-16-0111-0030-I-C]
- b) The permittee demonstrated to the satisfaction of the Board that the concentration of H₂S at ground level will not exceed 0.1 ppm in any one-hour period or 0.03 ppm in any 24-hour period through a dispersion modeling (AERMOD). [PFE-16-0111-0030-I-C]
- c) If changes to the fermentation units that require a construction permit or a modification to the existing construction permit is made, the permittee shall submit evidence that the concentration of H₂S at ground level will not exceed 0.1 ppm in any period of one hour or 0.03 ppm in any 24-hour period at ground level. [PFE-16-0111-0030-I-C]
- d) In accordance with Rule 603(a)(4)(ii) of the RCAP, the permittee shall retain records of the modeling made and any supporting information for a period of 5 years from the date of the modeling. [PFE-16-0111-0030-I-C]
- e) The six (6) Pilot Plants are allowed to ferment 250 batches per year per plant nutrient up to a maximum of 1,000 combined lots. [PFE-16-0111-0030-I-C]
- f) The permittee shall not exceed the emission limits included in permit [PFE-16-0111-0030-I-C]

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1. The authorized emissions for biotechnology process of Humalog, PTH (Parathyroid Hormone) and HGH (Human Growth Hormone) are those from a maximum output of 1,000 runs per year of nutrients.
- g) The permittee shall keep a monthly record of runs made by each pilot plant. This record shall be available at all times at the facility for review by technical staff of the Board. [PFE-16-0111-0030-I-C]
- h) The permittee shall keep at the facility, the records required by this permit for a period of five (5) years and shall keep them available to the technical staff of the Board when requested. [PFE-16-0111-0030-I-C]
- i) The permittee shall be subject to consume a maximum of 52 drums of 55 gallons a year of ammonium hydroxide with an average concentration of 30%. [PFE-16-0111-0030-I-C]
- j) The permittee shall prepare and maintain a monthly record of the amount of ammonia drums used. This record shall be available for technical staff of the Board. [PFE-16-0111-0030-I-C]
- k) Risk Management Plan: If during the term of this permit, the permittee is subject to 40 CFR Part 68 must submit a Risk Management Plan according with the compliance schedule in the 40 CFR part 68.10. If during the term of this permit the permittee is subject to 40 CFR part 68, as part of the annual compliance certification required under 40 CFR part 70, the permittee shall include a certification of compliance with the requirements of Part 68, including the registration and the Risk Management Plan. [PFE-16-0111-0030-I-C]
- l) The nominal capacity of the tank is 500 L and is authorized to a maximum of 110 runs of nutrients per year. [PFE-16-0111-0030-I-C]
- m) The permittee shall prepare and maintain a monthly record of runs of nutrients in the tank. This record shall be available at all times at the facility for review by technical staff of the Board. [PFE-16-0111-0030-I-C]

K. Emission Unit: EU-TANKS

Condition	Parameter	Value	Units	Test Method	Method Frequency	Recordkeeping Requirements	Reports Frequency
VOC Emission Limit	VOC Emissions	< 40,000	Gallons	Install and efficiently operate the control device	During the operation of the unit	Preventive Maintenance Activities	Semianual

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1. Requirements for tanks that emit VOC (state-enforceable condition)

- a) Under Rule 419(F)(6) of the RCAP, the permittee shall install safety valves, flame arrestors or other equipment whose effect in emission control is equivalent to the previous on any VOC storage tank whose capacity is less than 40,000 gallons, to be excluded from compliance with such rule.
- b) The permittee shall install and operate a vent condenser according to the manufacturer's specifications in tanks TK-8490, TK-8500, TK-8510, TK-8560.¹³ [PFE-16-0203-0187-I-II-C]
- c) The permittee shall provide preventive maintenance to the control devices at least once a year. [PFE-16-0203-0187-I-II-C]
- d) The permittee will install ventilation condensers, equalization lines and "conservation vents" to control the volatile organic compounds (VOC's) emissions from the solvent storage tanks TK-8490, TK-8500, TK-8510, TK-8560, TK-8310, TK-8230 and TK-8450, as well as the Solvent Recovery Unit (X-8520) to reduce by 82% the aggregate emissions of uncontrolled VOCs entering these units. The permittee shall operate and maintain the condensers in accordance with the instructions and operation and maintenance manuals of the vendor.¹⁴ [Clarification of the PSD Non-Applicability Determination of November 3, 2005]
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¹³ Due to the construction of a project subsequent to the issuance of this Title V Permit and the reconsideration submitted, this condition has undergone changes not covered by the permit modification procedures of Rule 606 of the RCAP and will be incorporated into the Title V Permit through a significant modification to the permit. The significant modification to a permit procedure will include the new Lilly project and the conditions established by the federal Environmental Protection Agency (EPA) in the communication dated March 16, 2017. The EPA communication establishes that a ventilation condenser is not required in the waste storage tank TK-8470; however, Lilly must employ work practices that minimize emissions from this tank. Lilly must operate and maintain the condensers in accordance with the manufacturer's instructions and the Operation and Maintenance Manuals. The TK-8470 tank will vent to the atmosphere through a pressure relief valve (conservation vent) set to open at no less than 10 inches of pressure (water column). According to the new project and the EPA communication, tanks TK-8500, TK-8510, and TK-8560 will be connected to the new steam balance system. These and the included changes of the communication dated March 16, 2017 were submitted as a significant modification to the Title V Permit on February 7, 2018 and are covered by the permit application shield issued on March 27, 2018.



¹⁴ Due to the construction of a project subsequent to the issuance of this Title V Permit and the reconsideration submitted, this condition has undergone changes not covered by the permit modification procedures of Rule 606 of the RCAP and will be incorporated into the Title V Permit through a significant modification to the permit. The significant modification to a permit procedure will include the new Lilly project and the conditions established by the federal Environmental Protection Agency (EPA) in the communication dated March 16, 2017. The EPA communication establishes that a ventilation condenser is not required in the waste storage tank TK-8470; however, Lilly must employ work practices that minimize emissions from this tank. Lilly must operate and maintain the condensers in accordance with the manufacturer's instructions and the Operation and Maintenance Manuals. The TK-8470 tank will vent to the atmosphere through a pressure relief valve (conservation vent) set to open at no less than 10 inches of pressure (water column). According to the new project and the EPA communication, tanks TK-8500, TK-8510, and TK-8560 will be connected to the new steam balance system. These and the included changes of the communication dated March 16, 2017 were submitted as a significant modification to the Title V Permit on February 7, 2018 and are covered by the permit application shield issued on March 27, 2018.

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- e) The permittee shall maintain at all times a record indicating: the identification of the tank, product or substance that is stored in each tank and the date starts to store. [PFE-16-0111-0030-I-C]
- f) The permittee shall keep a record of the size and capacity of tanks for the life of these. [PFE-16-0111-0030-I-C]
- g) The permittee shall keep a monthly record of the amount of acetonitrile (ACN) it is in the TK-8310, TK-8450 and TK-8230 tanks. This record shall be available at all times at the facility for review by technical staff of the Board. [PFE-16-0111-0030-I-C]
- h) Units of pharmaceutical processes shall operate in accordance with the limits and with their respective control devices established in construction permit PFE-16-0203-0187-I-II-C.

2. Other operational requirements of the control equipment

- a) The permittee shall use the air pollution control device, condensers, and scrubbers, at all times while storage tanks (including solvent recovery tank) containing liquid wastes and fermenters are operational. [PFE-16-0203-0187-I-II-C]
- b) For EU-VOCUNITS-1, the permittee shall establish the maximum temperature of the refrigerant at the entrance of the condenser and the maximum temperature of the refrigerant at the exit of the condenser that are correlated with the minimum efficiency used in the calculations to determine the allowable emissions for the worst case operating scenario that can be attained. The permittee must perform the monitoring to establish these parameters according to Rule 106 of the RCAP, no later than 180 days after the modification to construction permit PFE-16-0203-0187-I-II-C of March 28, 2017 is final.
- c) For EU-VOCUNITS-1, to demonstrate compliance with the temperatures of the refrigerant of the condenser:
 - i. The temperatures of the refrigerant at the entrance and exit of the condenser shall be monitored and compared with the temperatures of the refrigerant established according to condition 2(b) of this section.
 - ii. The permittee shall provide indicators of the temperatures of the refrigerant at the entrance and exit of the condenser, which shall be available at all times for inspection from the Board's technical personnel.
 - iii. The refrigerant temperatures at the entrance and exit of the condenser shall be monitored and registered every 15 minutes, but no less than 4 times during the operation of the unit. The measured values shall be averaged for a 24-hour

period (starting at midnight) to establish a daily average value to be compared with the temperatures established in condition 2(b) of this section.

- iv. Measures of the refrigerant temperature at the entrance and exit of the condenser shall not be required during the periods when the emission equipment is not operating (for example, maintenance and/or out of service). The measures of the refrigerant temperature taken during such periods shall not be considered to determine the daily average values of the temperature. The permittee shall maintain a registry of the dates and the period of time the emission equipment is not in operation. The permittee shall maintain a registry for the out of operation periods, which shall indicate the reasons why the equipment is not in operation and the registry shall be at, all times, available for review from the technical personnel of the Board.
- d) The condensers temperature indicators shall be calibrated every twelve (12) months. The permittee shall keep records or calibration results available for review by our technical staff. [PFE-16-0203-0187-I-II-C]

L. Emission Unit: EU-DUSTUNITS

Condition	Parameter	Value	Units	Test Method	Method Frequency	Recordkeeping Requirements	Reports Frequency
PM Emission Limit	PM	0.05	Lbs / Lbs of uncontrolled emissions	Operate the control device according to manufacturer's specifications	See table below	Registry of preventive maintenance of the device	Semiannual

1. Requirements for non-process sources

- a) Under Rule 409 of the RCAP, no person shall cause or permit the emission of particulate matter at any time in excess of 0.05 pounds per pound of uncontrolled emissions from any source of non-process. [PFE-16-0904-1461-I-C].
- b) The permittee shall comply with the requirements set out in the table below to control emissions of particulate matter according to the control device being used. [PFE-16-0904-1461-I-C]

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Emission Unit	Primary Control Device	Control Device Efficiency	Alternate Control Device	Alternate Control Device Efficiency	Compliance Method	Methods Frequency
Described in Attachment I	Dust Collector	≥ 95%	HEPA Filter	≥ 99%	Examine the compartments to determine if the socks are in good conditions	Quarterly
					Or instead, install, operate and calibrate pressure drop meters.	Semiannual
					Or instead, inspect the control device outlet using a dust detector calibrated according to the manufacturer's recommendations.	Quarterly or according to the manufacturer's recommendation, whatever is less.
Described in Attachment I	Filters (non HEPA)	≥ 99%	Dust Collectors	≥ 99%	Visual Inspections to the dust collector discharge points	Monthly

- c) Pharmaceutical processing units shall operate in accordance as established in Attachment II of this permit.
- d) Record Keeping and Reports:
 - i. The permittee shall keep a monthly record of the batches processed in this emission unit.
 - ii. The permittee must submit the semiannual report in accordance with general condition III.14 with a summary of the batches processed in this emission unit.

M. Unidad de emisión: EU-VOCUNITS-2

Condition	Parameter	Value	Units	Test Method	Method Frequency	Recordkeeping Requirements	Reports Frequency
VOC Emission Limit	VOC Emissions	< 3	Lbs/hr	Emission Calculations	Initially and reevaluate each year	Registry of calculations results	Semiannual
		<15	Lbs/day				

1. Requirements for sources that emit VOC (State enforceable condition)

- a) The permittee shall keep records of the emission calculations to demonstrate that emissions of these activities (including the activities of cleaning with organic solvents)

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do not reach the limits of 3 lbs/hr or 15 lbs/day, which are not required to comply with Rule 419 of the RCAP.

- b) The solution used in the preparation of Cymbalta® (Duloxetine) is composed of 28% ammonia and 72% of tri-ethylcitrate and water. [PFE-16-0904-1461-I-C]
- c) Units of pharmaceutical processes shall operate in accordance with the limits established in Attachment III and the control devices requirements established in the condition V(I)(1) of the emission unit EU-AMMONIAUNITS-2.
- d) The permittee shall submit to the Board a semiannual report of VOC emissions from EU-VOCUNITS-2 in pounds per hour and pounds per day to demonstrate compliance with the VOC emission limit of Rule 419 of the RCAP. The report that covers the period from January to June shall be submitted no later than October 1 of the same year and the report covering the period from July to December shall be submitted no later than April 1 of next year.
- e) If the permittee needs to increase the consumption of VOC substances within this unit that may affect these values or any unit using VOCs, the permittee shall apply for, and obtain a revision to the construction permit, along with a demonstration of compliance with the VOC limit for said emission unit before performing the increase.

N. Emission Unit: EU-VOCUNITS-1

1. Requirements for sources that emit VOC (State enforceable condition)

- a) The EU-VOCUNITS-1 unit shall operate in accordance with the limits established in Attachment III.
-  b) Under Rule 419 (A) of the RCAP, no person shall cause or permit the emission of more than 1.36 kg (3 pounds) of volatile organic compounds at any time, or more than 6.8 kg (15 pounds) per day on any item machine, equipment or any other contrivance that such equipment is provided with an acceptable control system, pollution prevention and reductions mechanism or both, as approved or required by the Board. [State-only enforceable condition]
- c) [Reserved]
- d) If the permittee needs to increase the consumption of substances VOC within this unit that may affect these values or any unit using VOCs, the permittee shall apply for and obtain a revision to the construction permit, along with a demonstration of compliance or exemption with the VOC limit for such emission unit before making the increase.

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2. Control equipment requirements:

- a) The permittee shall use the air pollution control equipment, the condensers, at all times while the storage tanks contain liquid waste. [PFE-16-0203-0187-I-II-C]
- b) For EU-VOCUNITS-1, the permittee shall establish the maximum temperature of the refrigerant at the entrance of the condenser and the maximum temperature of the refrigerant at the exit of the condenser that are correlated with the minimum efficiency used in the calculations to determine the allowable emissions for the worst case operating scenario that can be attained. The permittee must perform the monitoring to establish these parameters according to Rule 106 of the RCAP, no later than 180 days after the modification to construction permit PFE-16-0203-0187-I-II-C of March 28, 2017 is final.
- c) For EU-VOCUNITS-1, to demonstrate compliance with the temperatures of the refrigerant of the condenser:
- i. The temperatures of the refrigerant at the entrance and exit of the condenser shall be monitored and compared with the temperatures of the refrigerant established according to condition 2(b) of this section.
 - ii. The permittee shall provide indicators of the temperatures of the refrigerant at the entrance and exit of the condenser, which shall be available at all times for inspection from Board's of technical personnel.
 - iii. The refrigerant temperatures at the entrance and exit of the condenser shall be monitored and registered every 15 minutes, but no less than 4 times during the operation of the unit. The measured values shall be averaged for 24-hour period (starting at midnight) to establish a daily average value to be compared with the temperatures established in condition 2(b) of this section.
 - iv. Measures of the refrigerant temperature at the entrance and exit of the condenser shall not be required during the periods when the emission equipment is not operating (for example, maintenance and/or out of service). The measures of the refrigerant temperature taken during such periods shall not be considered to determine the daily average values of the temperature. The permittee shall maintain a registry of the dates and the period of time the emission equipment is not in operation. The permittee shall maintain a registry for the out of operation periods, which shall indicate the reasons why the equipment is not in operation and the registry shall be available at all times for review from the technical personnel of the Board.
- d) The condensers temperature indicators shall be calibrated every twelve (12) months. The permittee shall keep records or calibration results available for review by our technical staff. [PFE-16-0203-0187-I-II-C]

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O. Emission Unit: EU-VOCEMISSIONS

1. Requirements for fugitive emissions

- a) The permittee shall implement a program to detect and repair leaks (Leak Detection and Repair Program) consistent with the Standards of Maximum Achievable Control Technology for the Pharmaceutical Industry (Pharma MACT) of 40 CFR, Part 63, Subpart GGG, to control and minimize fugitive emissions of volatile organic compounds from the PR05 plant, except for the provisions of reports, which will be required as provided in Rule 603 of Regulation for the Control of Atmospheric Pollution. [Clarification of the PSD Non Applicability Determination of November 3, 2005]
- b) As part of the Leak Detection and Repair Program of PR05, the permittee shall maintain the necessary records according to the requirements of the National Emission Standards for Pharmaceuticals Production (specified in 40 CFR, Part 63.1255(g)). [PFE-16-0203-0187-I-II-C]
- c) Lilly shall ensure that the pipes that serve pure volatile organic compounds (VOCs) in the PR05 plant, have welded connections where design, quality and operational safety and maintenance requirements allow these connections. The pumps in service of pure VOC in plant PR05 shall be seal less (i.e., diaphragm pumps) or leak less technology (i.e., double mechanical seals). All pumps, pipes and other components serving VOCs that are not pure will, however, be subject to other provisions of the Leak Detection and Repair (LDAR) Program. Pumps containing VOC in PR05 shall be seal less or use leak less technology. [Clarification of the PDS Non Applicability Determination of November 3, 2005]

2. Requirements for storage tanks

- b) The permittee shall install vent condensers to control emissions of volatile organic compounds (VOCs) in solvent storing tanks TK-8490, TK-8500, TK-8510 and TK-8560 and Solvent Recovery Unit to reduce by 82% the aggregate of uncontrolled VOC emissions entering these units. TK-8470 tank that stores waste, is not required a condenser vent, however. Lilly shall use work practices to minimize emissions of this tank. Lilly shall operate and maintain the condensers according to the instructions and manuals of operation and maintenance of the seller. [Clarification of the PSD Non Applicability Determination of November 3, 2005]
- c) The EU-VOCEMISSIONS units shall operate in accordance with the limits established in Attachment III.

AA. Alternate Operating Scenarios

The implementation of the following alternate operating scenarios is authorized without a revision to this permit. These operating scenarios need to be authorized by a construction permit under Rule 203 of the RCAP.

a) AOS-GT500EMGEN-2 (1), AOS-GT500EMGEN-3 (1) and AOS-GT500EMGEN-4 (1)

The following alternate operating scenarios includes the use of three (3) emergency generators included in the construction permit PFE-16-0203-0187-I-II-C with amendments adopted on February 11, 2014. The requirements for these emergency generators are described below.

Condition	Parameter	Value	Units	Test Method	Method Frequency	Recordkeeping Requirements	Reports Frequency
Visible Emission Limits	Opacity	20%	Percent (6 minutes average)	Method 9	Once during the first year of the permit effective date.	Test Results	Within 60 days of test completion.
SO ₂ Emission Limit	Sulfur Content	0.05	Percent by weight	Analysis Certification from the fuel supplier.	With every (purchase) receipt of fuel	Registry with every delivery of fuel sulfur content from the supplier.	Monthly Semiannual (See General Condition 14)
Fuel Consumption Limit EP/2/512A EP/5/512B EP/1/512C	Diesel Fuel	≤ 167,215	Gallones per year	Consumption through flow meter	Monthly	Consumption Registry and purchase receipts.	Monthly Semiannual (See General Condition 14)

1. General and Operating Requirements:

- VM*
- a) The permittee shall determine the applicability of federal regulation described in 40 CFR Part 60 Subpart IIII (Standards of Performance for Stationary Compression Ignition Internal Combustion Engines) for the three generators and send a copy to the Board of such determination identifying the requirements if any, within 10 days of renting said electricity generator. If this regulation is applicable, it must meet the requirements of the regulation that applies to rented equipment. [PFE-16-0203-0187-I-II-C]
 - b) Electricity generators 512A, 512B and 512C should not be in the facility for more than twelve (12) months, otherwise, must come into compliance from the first day after the twelve (12) months of its installation with the applicable requirements of NSPS and NESHAP contained in Part 60 Subpart IIII and Part 63 Subpart ZZZZ of 40 CFR,

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respectively. The permittee shall furnish to the Board a notice within ninety (90) days before the end of the twelve (12) months that the aforementioned electric generators have been installed, reporting what the intentions will be, whether to stay or not with the equipment installed, and submit their schedule of compliance with the applicable federal requirements. The time of the engines in the facility of the engines replaced that serve the same purpose in the facility, will count for the 12 months period of the engine that was replaced or has been used for the same purpose.

- c) Electricity generators 512A, 512B and 512C shall be installed and configured according to the manufacturer's specifications. The engines shall operate and maintain the engine of each electric generator in accordance with the written instructions of the manufacturer or in accordance with procedures developed by the owner or operator are approved by the engine manufacturer. Only changes to generator engine that are authorized by the manufacturer are allowed. [PFE-16-0203-0187-I-II-C]
- d) The permittee shall notify the Board no later than 5 days of installation or removal of each electricity generator 512A, 512B and 512C which is installed to operate under the limits established in the table below. [PFE-16-0203-0187-I-II-C]

IF the combined consumption of boilers (EU-LFOBOILER) (EP/1/Boiler5 and EP/1/Boiler201A) is...	Then the maximum allowed consumption for the generators (AOS-GT500EMGEN-2 (1), AOS-GT500EMGEN-3 (1) and AOS-GT500EMGEN-4 (1)) is...
> 1,123,574	$100,248 + \frac{(2,242,897 - \text{fuel used in the boilers}) \times 44.643}{1,000}$
≤ 1,123,574	150,218

- e) Electricity generators affected by the regulation described in 40 CFR Part 60, Subpart IIII listed in Section II of this authorization shall comply with the applicable compliance requirements, test methods, recordkeeping and reporting. [PFE-16-0203-0187-I-II-C]
- f) The permittee shall identify electricity generators with the numbers established in this permit. Also, the permittee shall identify electricity generators that can be replaced under this permit. The emergency power generators included in Section II and authorized in the permit will only be allowed to replace existing generators, as shown in the following table: [PFE-16-0203-0187-I-II-C]

<i>New Emergency Electric Generators to be acquired</i>	Existing Emergency Electric Generators that can be replaced in emergency cases
Emergency Electric Generator 512A	511D
Emergency Electric Generator 512B	Y-SG-101, Y-SG-102, and Y-SG-103
Emergency Electric Generator 512C	510F, 510G, and 510H

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2. Visible Emissions Limits (Opacity):

- a) The permittee shall not exceed the opacity limit of 20% in a 6-minutes average for the unit. However, the permittee shall be able to release to the atmosphere visible emissions with an opacity up to 60% for a period no greater than 4 minutes within any consecutive interval of 30 minutes. [Rule 403(A) of the RCAP]
- b) The permittee shall hire an independent opacity reader, certified by a school approved or endorsed by the EPA or the Board to perform an opacity reading on the stack/chimney of the internal combustion unit during the first year of the permit duration using Method 9 described in Appendix A of 40 CFR Part 60. The corresponding internal combustion equipment shall be operating when making the opacity readings.
- c) The permittee shall submit to the Board, at least 30 days prior to the opacity reading, a copy of the format to be used to record the visible emissions readings.
- d) The permittee shall notify in writing to the Board at least 15 days before the initial sampling using Method 9, to allow the Board the opportunity to appoint an observer present. [Rule 106(D) of the RCAP]
- e) The permittee shall submit two copies of the initial sampling results report using Method 9 within 60 days after the tests. This report shall contain the information required under Rule 106(E) of the RCAP.
- f) The Board reserves the right to require additional visible emission readings in order to demonstrate compliance with the opacity limit.

3. Sulfur Content Limit (SO₂):

- a) The permittee shall not burn or allow the use of distilled No. 2 (Diesel) with a sulfur content exceeding 0.05% by weight in emergency electric generators 512A, 512B and 512C. [PFE-16-0203-0187-I-II-C].
- b) The electric generators 512A, 512B and 512C shall only consume diesel (fuel oil light no. 2) as fuel with a maximum sulfur content of 0.05% by weight. The maximum sulfur content in diesel fuel to be oxidized in electricity generators affected by 40 CFR Part 60 Subpart IIII shall not exceed 15 ppm or 0.0015% by weight for electric generators whose engines have a displacement of less than 30 liters per cylinder. [40 CFR 60.4207(b) and 40 CFR 80.510(b) and PFE-16-0203-0187-I-II-C]
- c) According to Rule 603(a)(4)(ii) of the RCAP, the permittee shall retain records of all data required monitoring and supporting information for a period of five (5) years from the date of the monitoring sample, measurement, report or application. This includes a record of monthly fuel consumption reports and the sulfur content of fuel burned.

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- d) The permittee shall submit a monthly report indicating on a daily basis the sulfur content (percent by weight) in the fuel burned and the amount of fuel burned in emission unit AOS-GT500EMGEN-2 (1), AOS-GT500EMGEN-3 (1) y AOS-GT500EMGEN-4 (1). This report shall be submitted to the Board to the attention of the Chief of the Division of Data Validation and Mathematical Modeling no later than the next 15 days of the following month for which the report is representative and shall be available at all times in the facility for review of the Board or EPA.
- e) The permittee shall keep a copy of the fuel supplier certification in which the sulfur content is indicated to demonstrate compliance with the requirement of keeping a daily record of the sulfur content in the fuel.
- f) The permittee shall submit each year with the semiannual reports required by condition III.14. and annual compliance certification, a summary of the reports for that year indicating the sulfur content in weight percent in the fuel burned. The permittee shall also file monitoring reports, which must contain the following:
1. the date, place (as defined in the permit) and time of sampling;
 2. the date on which analysis were performed;
 3. the company or entity that performed the analysis;
 4. methods or analytical techniques used;
 5. the results of these analysis; and
 6. operating conditions at the time of sampling.

4. Fuel Consumption Limit:

- a) The consumption of each electric generator 512A, 512B and 512C will count towards the consumption limit of **167,215 gallons** per year. Lilly del Caribe, Inc. shall clearly keep the records of fuel consumption where the consumption of electricity generators 512A, 512B and 512C are established in the existing consumption records for the other generators whose consumption limit is used. [PFE-16-0203-0187-I-II-C]
- i) In order to maintain the emergency use category as specified in 40 CFR Part 63 Subpart ZZZZ, each engine subject to this subpart is authorized to operate for a maximum of 100 hours per calendar year for any of the combination of the

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purposes specified in 40 CFR §63.6640(f)(2)(i) through (iii)¹⁵, and up to 50 hours of operation in non-emergency situations, as specified in 40 CFR 63.6640(f)(4). The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in section 63.6640(f)(2) of the 40 CFR, whereas these 100 hours of operation shall be counted as part of the global fuel consumption limit established in the table above and construction permit PFE-16-0203-0187-I-II-C.

ii) In order to maintain the emergency use category as specified in 40 CFR Part 60 Subpart IIII, each engine subject to this subpart is authorized to operate for a maximum of 100 hours per calendar year for any of the combination of the purposes specified in 40 CFR §60.4211(f)(2)(i) through (iii)¹⁶, and up to 50 hours of operation in non-emergency situations, as specified in 40 CFR 60.4211(f)(4). The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in section 60.4211(f)(2) of the 40 CFR, whereas these 100 hours of operation shall be counted as part of the 100 hours of operation shall be counted as part of the global fuel consumption limit established in the table above and construction permit PFE-16-0203-0187-I-II-C.

- 
- b) Each engine of electric generators 512A, 512B and 512C shall be provided with a non-resettable hour meter so that hours of operation can be checked and fuel consumption can be calculated. [40 CFR section 63.6625(f)].
- c) Compliance with the fuel limit specified in V(AA)(3)(a) status shall be determined on a daily rolling period, adding consumption of that day to the total fuel consumption of 364 days for each boiler and generator, separately and in combination.
- d) The permittee shall submit, along with the semiannual report required in condition III.14. and annual compliance certification, an annual report summary indicating the fuel consumption of internal combustion equipment in monthly and annual terms.

¹⁵ See Vacatur on RICE NESHAP and NSPS Provisions for Emergency Engines; Delaware v. EPA785 F. 3d 1(D.C. Cir. 2015). Vacated Paragraphs; 60.4211(f)(2)(ii)-(iii), 60.4243(d)(2)(ii)-(iii), and 63.6640(f)(2)(ii)-(iii). After the vacatur (May 4, 2016), engines operating for Emergency Demand Response and voltage/frequency deviations must comply with the standards for non-emergency engines.

¹⁶ See Vacatur on RICE NESHAP and NSPS Provisions for Emergency Engines; Delaware v. EPA785 F. 3d 1(D.C. Cir. 2015). Vacated Paragraphs; 60.4211(f)(2)(ii)-(iii), 60.4243(d)(2)(ii)-(iii), and 63.6640(f)(2)(ii)-(iii). After the vacatur (May 4, 2016), engines operating for Emergency Demand Response and voltage/frequency deviations must comply with the standards for non-emergency engines.

Section VI - Insignificant Emission Units

- A. This list includes insignificant activities that are exempt by size or production rate. Only those exempt activities and emission sources that require and have a construction permit under Rule 203 of the RCAP are included. The following activities will be considered insignificant as long as the permit holder meets the descriptions listed below.

Emission Unit Identification	Description (Base of exemption)
Salt Storage Tank EU/1/TK508	Appendix B: (3)(ii)(P) – Emits less than 2 ton/year of TSP and less than 1 ton/year of PM ₁₀ .
Aboveground Fuel Oil Storage Tank EU/1/HFOSettlingTNK	Appendix B: (3)(ii)(P) - Emit less than 1 ton/year VOC.
Aboveground Fuel Oil Storage Tank EU/1/HFODayTNK	Appendix B: 3(ii)(P), 3(ii)(N) y 3(xi) – Capacidad menor de 10,000 galones y emite menos de 1 ton/year de VOC.
Tank EU/1/TK-607 <i>Aboveground Fuel Oil Storage Tank</i>	Appendix B: 3(ii)(P) – Emit less than 1 ton/year of VOC. Based on a maximum throughput of 2,500,000 gallons per year. Capacity: 15,000 gallons Construction year: 2004 Storage: Diesel or kerosene
Aboveground Fuel Oil Storage Tank EU/1/KERODayTNK	Appendix B: (3)(ii)(P) - Emit less than 1 ton/year VOC.
Tank EU/1/TK-608 <i>Aboveground Fuel Oil Storage Tank</i>	Appendix B: 3(ii)(P) – Emit less than 1 ton/year of VOC. Based on a maximum throughput of 2,500,000 gallons per year. Capacity: 15,000 gallons Construction year: 2004 Storage: Diesel or kerosene
Aboveground Fuel Sludge Storage Tank EU/1/SludgeTNK	Appendix B: 3(ii)(P), 3(ii)(N) and 3(xi) – Capacity less than 10,000 gallons and emit less than 1 ton/year VOC.
Light Fuel Oil day tanks for Emergency Generators EU-DAYTANKS	Appendix B: 3(ii)(P), 3(ii)(N) and 3(xi) – Capacity less than 10,000 gallons and emit less than 1 ton/year VOC.
Aboveground Fuel Oil Storage Tank EU/2/HFOTNK	Appendix B: 3(ii)(P) – Emit less than 1 ton/year VOC.
Tanque EU/2/TK-505 Aboveground Fuel Oil Storage Tank	Appendix B: 3(ii)(P) – Emit less than 1 ton/year of VOC. Based on a maximum throughput of 4,500,000 gallons per year. Capacity: 80,000 gallons Construction year: 1994 Storage: Diesel or kerosene
Tank EU/2/TK-504 Aboveground Fuel Oil Storage Tank	Appendix B: 3(ii)(P) – Emit less than 1 ton/year of VOC. Based on a maximum throughput of 4,500,000 gallons per year. Capacity: 20,000 gallons Construction year: 2003 Storage: Diesel or kerosene

Emission Unit Identification	Description (Base of exemption)
Tanque EU/2/TK-503 Aboveground Fuel Oil Storage Tank	Appendix B: 3(ii)(P) – Emit less than 1 ton/year of VOC. Based on a maximum throughput of 4,500,000 gallons per year. Capacity: 250,000 gallons Construction year: 1975 Storage: Diesel or kerosene

Section VII - Permit Shield

- A. According to Rule 603(D) of the RCAP, compliance with the conditions of the permit shall be deemed as the compliance with any applicable requirement to the date of issuance, provided that the requirement is specifically identified in the permit. Similarly, it is considered in compliance with any requirement specifically identified as "Non Applicable" in the permit.

Non Applicable Requirements

Non Applicable Requirements		
Federal	State	Reason for Non Applicability
All - Facility Wide		
	Rule 105 of RCAP	This rule does not applies to major source permits (Title V).
-	Rule 204 of RCAP	Under Rule 204 (A)(4), any source of emission submit a Title V permit application will be exempt from the requirements of the operating permit required under this Rule.
-	Rule 407 of RCAP	The facility does not operates process sources as defined in Rule 102 of RCAP.
-	Rule 412 of RCAP	SO ₂ emissions are covered by Rule 410 of RCAP.
-	Rule 423 of RCAP	The facility is not located within the boundaries of any non-attainment area for PM ₁₀ or cause a significant air quality impact.
40 CFR Part 68, Subpart G	-	Do not apply a Risk Management Plan (RMP) because the amount of stored ammonia is less than 10,000 lb.
40 CFR Part 60, Subpart K	-	The facility does not operate any storage tank of volatile organic liquids, built, rebuilt or modified after June 11, 1973 and before May 19, 1978.

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Non Applicable Requirements		
Federal	State	Reason for Non Applicability
40 CFR Part 60, Subpart Ka	-	The facility does not operate any liquid storage tank of oil, built, rebuilt, or modified after May 18, 1978 and before July 23, 1984.
40 CFR Part 60, Subpart Kb	-	Tanks with storage capacity between 10,566 and 19,811 gallon tanks with capacities between 19,812 and 39,888 gallons containing volatile organic liquids with vapor pressure less than 2.2 psi, and tanks with capacity greater than 39,889 gallons containing volatile organic liquids with vapor pressure less than 0.5 psia are exempt from this section even if they have been built, rebuilt or modified after the July 23, 1984.
40 CFR Part 60, Subpart NNN	-	The facility does not produce any of the chemicals listed in Section 60.667.
40 CFR Part 60, Subpart RRR	-	The facility does not produce any of the chemicals listed in Section 60.707.
40 CFR Part 61, Subpart FF	-	The facility does not perform operations that produce benzene waste.
40 CFR Part 63, Subpart B	-	The facility is not a major source of HAPs.
40 CFR Part 63, Subpart F	-	The facility does not manufactures any of the compounds listed in Table 1 of this section.
40 CFR Part 63, Subpart G	-	The facility does not manufacture or use any of the compounds listed in Table 1 or CAPs in Table 2 of this section.
40 CFR Part 63, Subpart Q	-	The facility does not use chromium-based water treatment in cooling towers and does not include contact with process water.
40 CFR Part 63, Subpart T	-	The facility does not use halogenated solvents in cleaning operations.

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Non Applicable Requirements		
Federal	State	Reason for Non Applicability
40 CFR Part 63, Subpart GGG	-	The facility does not have the potential to emit 10 tons per year of a HAP or 25 tons per year of total HAPs.
40 CFR Part 63, Subparts H e I	-	The facility does not use methylene chloride or carbon tetrachloride as a component in its manufacturing operations.
40 CFR Part 63, Subpart VVVVVV	-	The facility does not use the compounds listed in Table 1 of this Subpart.
EU-LFO-BOILER-2, EU-HFOBOILER-2, EU-NSPSBOILER and EU-NSPSBOILER-2		
40 CFR, Part 60, Subpart D	-	Not applicable for steam generating units using fossil fuel burned that commenced construction after 17 August 1971. This subpart does not apply to external combustion equipment built at the facility since the heat input rate is less than 73 MW (250 MMBtu/hr). All boilers built at the facility are less than 100 MMBtu/hr.
40 CFR, Part 60, Subpart Da	-	It is not applicable for steam generating units used for electricity production and that commenced construction after September 18, 1978. This subpart does not apply to external combustion equipment constructed in the facility because the heat rate supplied is less than 73 MW (250 MMBtu/hr). In addition, the facility is not an "electric utility", which by definition refers to any boiler that will supply electricity to a facility whose primary purpose is to supply electricity to its distribution system for selling energy.

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Non Applicable Requirements		
Federal	State	Reason for Non Applicability
40 CFR, Part 60, Subpart Db	-	It is not applicable for sources constructed, modified or rebuilt before June 19, 1984 and that has a capacity greater than 29 MW (100 MMBtu/hr). All boilers built at the facility are less than 100 MMBtu/hr.
40 CFR Part 63, Subpart DDDDD	-	This subpart does not apply to the facility because it is not a major source of Hazardous Air Pollutants (HAPs).
EU-GT500EMGEN-2, EU-GT500EMGEN-3 (Y-SG-101 y Y-SG-102), EU-GT500EMGEN-4 and EU-LT500EMGEN-5		
-	Rule 406 of RCAP	Not considered Fuel Burning Equipment under Rule 102 of the RCAP.
40 CFR Part 60, Subpart IIII	-	Does not apply to internal combustion units, as (CI ICE) were built on or before July 11, 2005, except the electricity generator identified as the emission point (EP / 5 / Y-SG-103) which is affected by the regulation.
40 CFR Part 60, Subpart JJJJ	-	Internal combustion equipment approved here does not use gasoline fuel for operation.
EU-DUSTUNITS		
-	Rule 403 of RCAP	The equipment does not emit visible emissions.
-	Rule 407 of RCAP	Equipment are not process sources according to Rule 102 of RCAP.
EU-VOCEMISSIONS, EU-VOCUNITS-1, EU-VOCUNITS-2 and EU-TANKS		
-	Rule 417 of RCAP	The capacity of the storage tanks is less than 40,000 gallons

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Non Applicable Requirements		
Federal	State	Reason for Non Applicability
EU-VOCUNITS-2 and EU-TANKS		
40 CFR Part 60, Subpart K	-	All tanks in the emission unit EU-TANKS have a capacity of less than 19,812 gallons (75 m ³). All tanks in the emission unit EU-TANKS have a capacity of less than 19,812 gallons (75 m ³).

Section VIII - Permit Approval

Pursuant to the powers granted by the Environmental Public Policy Act, Public Law Number 416 of September 22 of 2004, as amended, and after verifying the administrative file and compliance with the Uniform Administrative Procedures Act, Public Law Number 38 of June 30, 2017, as amended, the US Clean Air Act, the Puerto Rico Environmental Public Policy Act and the Regulations for the Control of Atmospheric Pollution, the permit is approved subject to the terms and conditions stated therein.

In San Juan, Puerto Rico, August 12, 2019.

Tania Vázquez Rivera
Secretary

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APPENDICES

TM

Appendix I - Definitions and Abbreviations

A. Definitions:

1. Administrator - Refers to the Administrator of the Federal Environmental Protection Agency and its authorized representative or the Administrator of a State Agency for Air Pollution Control.
2. Law - Federal Clean Air Act, as amended, 42 U.S.7401, et seq.
3. Responsible Officer - See the definition of Responsible Officer as established under the Regulation for the Control of Atmospheric Pollution of the Environmental Quality Board (1995).
4. Regulation - Regulation for the Control of Atmospheric Pollution of the Environmental Quality Board.
5. Permittee - Person and entity to which the Environmental Quality Board of Puerto Rico issues an Operation Permit for a Covered Emission Source under Title V.
6. Title V - Title V of the Federal Clean Air Act (42 U.S.C. 7661).

B. Abbreviations:

AP-42	EPA Compilation of Air Pollutant Emission Factors
Btu	British thermal unit
CAP	Hazardous Air Pollutants
CDX	Central Data Exchange
CEDRI	Compliance and Emissions Data Reporting Interface
CFR	Code of Federal Regulations
CI ICE	Compression Ignition Internal Combustion Engine
CO	Carbon Monoxide
CO _{2e}	Carbon Dioxide Equivalent
EPA	Environmental Protection Agency
EQB/Board	Environmental Quality Board of Puerto Rico

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GHG's	Greenhouse Gases
HCl	Hydrochloric acid
hp	horsepower
H ₂ S	Hydrogen sulfide
Lbs	Pounds
MMBtu	million Btu
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emission Standards for Hazardous Air Pollutants
NSPS	New Source Performance Standards
NO _x	Nitrogen Oxides
Pb	Lead
PM	Particulate matter
PM ₁₀	Particulate Matter with a size less than or equal to 10 micrometers in aerodynamic mass media diameter
RCA\P	Regulations for the Control of Atmospheric Pollution of the Environmental Quality Board
RICE	Reciprocating Internal Combusting Engine
RMP	Risk Management Plan
SIC	Standard Industrial Classification
SO _x	Sulfur Oxide
SO ₂	Sulfur Dioxide
VOC	Volatile Organic Compounds

C. Notification Address

Compliance and Revision Notifications Address

Environmental Quality Board
Air Quality Area
Box 11488 San Juan, P.R. 00910



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ATTACHMENTS



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Attachment I – Emission Points and Control Equipment

Emission Units	Emission Point	Control Equipment
EU-AMMONIAUNITS-2	EP/1/WT1, EP/1/WT2, EP/1/WT3, EP/1/DP-8	None
	EP/5/TK-3300	Closed tank
	EP/1/SP-2A, EP/1/SP-2B, EP/1/SP-2C, EP/1/SP-2D, EP/1/SP-2E EP/1/DP-10	Does not have control equipment for ammonia. HEPA filter for particulate matter. Does not have control equipment for ammonia. Dust collector for particulate matter.
EU-FERMENTATION	EP/5/TK-1200, EP/5/TK-1300, EP/5/TK- 1400, EP/5/TK-1050, EP/5/TK-1055, EP/5/TK-1770, EP/5/TK-1780, EP/5/TK- 2620, EP/5/Pilots Plants	None
EU-TANKS	EP/5/TK8470, EP/5/TK8490, EP/5/TK3690, EP/5/TK8560, EP/5/TK8500, EP/5/TK8510, EP/5/TK8450, EP/5/TK8230, EP/5/COL- 8520 y EP/5/TK-8310	See Attachment II
EU-DUSTUNITS	EP/1/DP-1, EP/1/DP-2, EP/1/DP-3, EP/1/DP-9, EP/5/DPSALT, EP/5/DPUREA, EP/1/TK/508, EP/1/SPA- 1, EP/1/DP-PP-1, EP/1/GC-PP1, EP/1/MT-PP1, EP/1/VP-1, EP/1/VP-2, EP/1/VP-3, EP/1/VP-4(MX250), EP/1/VP-5(MX135), EP/1/VP-5, EP/1/VP-6, EP/1/VP-7, EP/1/VP-8, EP/1/VP-9, EP/1/VP-10, EP/1/VP-11, EP/1/VP-3, EP/1/GDP-3, EP/1/GDP-4, EP/1/CDG-1, EP/1/CDG-2, EP/1/CF-1, EP/1/CF-2, EP/1/CF-3, EP/1/CF9A, EP/1/CF9B, EP/1/CTP-1, EP/1/CTP-2, EP/1/CTP-3, EP/1/CTP-4, EP/1/CTP-5, EP/1/CTP-6, EP/1/CTP-7 y EP/1/CP-1, EP/5/DP-07	See Attachment II

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Emission Units	Emission Point	Control Equipment
<p>EU-VOCUNITS-2</p>	<p>EP/1/TPP-1, EP/1/DP-1, EP/1/DP-8, EP/1/DP-10, EP/1/CDG-1, EP/1/CDG-2, EP/1/SP-2A, EP/1/SP-2B, EP/1/SP-2C, EP/1/SP-2D, EP/1/SP-2E, EP/1/WT1, EP/1/WT2, EP/1/WT3, EP/5/TK3620, EP/5/TK3130, EP/5/TK3180, EP/5/TK3190, EP/5/TK3200, EP/5/TK3210, EP/5/TK3230, EP/5/TK3240, EP/5/TK3260, EP/5/TK3270, EP/5/TK3290, EP/5/TK3370, EP/5/TK3410, EP/5/TK3470, EP/5/TK3600, EP/5/TK3640, EP/5/TK3645, EP/5/TK3740, EP/5/3745, EP/5/TK3750, EP/5/TK3760, EP/5/TK3780, EP/5/TK4100, EP/5/TK4110, EP/5/TK4220, EP/5/TK4230, EP/5/TK4250, EP/5/TK4410, EP/5/TK4420, EP/5/TK4430, EP/5/TK4440, EP/5/TK4500, EP/5/TK4600, EP/5/TK4620, EP/5/TK4640, EP/5/TK4660, EP/5/TK4900, EP/5/TK5000, EP/5/TK5010, EP/5/TK5130, EP/5/TK5140, EP/5/TK5150, EP/5/TK5200, EP/5/TK5210, EP/5/TK5220, EP/5/TK5240, EP/5/TK5260, EP/5/TK5320, EP/5/TK5330, EP/5/TK5340, EP/5/TK5350, EP/5/TK5380, EP/5/TK5390, EP/5/TK5400, EP/5/TK5410, EP/5/TK5420, EP/5/TK5430, EP/5/TK5440, EP/5/TK5460, EP/5/TK5482, EP/5/TK5484, EP/5/TK5500, EP/5/TK5600, EP/5/TK5640, EP/5/TK5630, EP/5/TK5670, EP/5/TK5700, EP/5/TK5710, and EP/5/VD/5800</p>	<p>None</p>

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Emission Units	Emission Point	Control Equipment
EU-VOCEMISSIONS	EP/5/TK3620, EP/5/TK3130, EP/5/TK3180, EP/5/TK3190, EP/5/TK3200, EP/5/TK3210, EP/5/TK3230, EP/5/TK3240, EP/5/TK3260, EP/5/TK3270, EP/5/TK3290, EP/5/TK3370, EP/5/TK3410, EP/5/TK3470, EP/5/TK3600, EP/5/TK3640, EP/5/TK3645, EP/5/TK3740, EP/5/3745, EP/5/TK3750, EP/5/TK3760, EP/5/TK3780, EP/5/TK4100, EP/5/TK4110, EP/5/TK4220, EP/5/TK4230, EP/5/TK4250, EP/5/TK4410, EP/5/TK4420, EP/5/TK4430, EP/5/TK4440, EP/5/TK4500, EP/5/TK4600, EP/5/TK4620, EP/5/TK4640, EP/5/TK4660, EP/5/TK4900, EP/5/TK5000, EP/5/TK5010, EP/5/TK5130, EP/5/TK5140, EP/5/TK5150, EP/5/TK5200, EP/5/TK5210, EP/5/TK5220, EP/5/TK5240, EP/5/TK5260, EP/5/TK5320, EP/5/TK5330, EP/5/TK5340, EP/5/TK5350, EP/5/TK5380, EP/5/TK5390, EP/5/TK5400, EP/5/TK5410, EP/5/TK5420, EP/5/TK5430, EP/5/TK5440, EP/5/TK5460, EP/5/TK5482, EP/5/TK5484, EP/5/TK5500, EP/5/TK5600, EP/5/TK5640, EP/5/TK5630, EP/5/TK5670, EP/5/TK5700, EP/5/TK5710, EP/5/TK-8560, EP/5/TK- 8500, EP/5/TK-8510, EP/5/TK-8450, EP/5/TK-8230, y EP/5/TK-8310, EP/5/TK-8470, EP/5/TK-8490, EP/5/COL-8520, EP/5/TK-3690	Leak Detection and Repair Program

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Attachment II: Control Equipments

A. EU – DUSTUNITS

PROCESS	EMISSION SOURCE	CONTROL EQUIPMENT	CONTROL EQUIPMENT ID
DISPENSING (CYMBALTA®)	RM17301	HEPA filter	CD/EF-8433
DISPENSING (OTHER DRY PRODUCTS)	M201	Dust Collector	CD/DC-215
	RM657	Dust Collector	CD/DC-657
	RM658	Dust Collector	CD/DC-658
	RM657	HEPA filter	CD/EF-657
	RM658	HEPA filter	CD/EF-658
	TK-508	Dust Collector	CD/DC-508
	TK-6423	Non HEPA filter	CD/FLT-6423
	TK-8400	Non HEPA filter	CD/FLT-8000V
SOLUTION PREPARATION AREA (CYMBALTA®)	Weighing Area PR05 EP/5/DP-07	Dust Collector	DC-9105
	TK-8501(SP-2A)	HEPA filter	CD/EF-8430
	TK-8502(SP-2B)	HEPA filter	CD/EF-8430
	TK-8503(SP-2C)	HEPA filter	CD/EF-8430
	TK-8504(SP-2D)	HEPA filter	CD/EF-8430
SOLUTION PREPARATION AREA (OTHER DRYPRODUCTS)	TK-8505(SP-2E)	HEPA filter	CD/EF-8430
	RM883	Dust Collector	CD/DC-01
	RM884	Dust Collector	
	RM885	Dust Collector	
RM887	Dust Collector		
SOLUTION PREPARATION, GRANULATION/ COATING AND MATERIALTRANSFER (PILOT KIT)	RM 240	HEPA filter	CD/EF216B
MATERIAL TRANSFER (CYMBALTA®)	XP-8551-A	HEPA filter	CD/EF8430
	XP-8552-A	HEPA filter	CD/EF8430
	XP-8553-A	HEPA filter	CD/EF8430
MATERIAL TRANSFER (OTHER DRY PRODUCTS)	RM 887	VAC-U-MAX HEPA	CD/VP819
	RM603	VAC-U-MAX HEPA	CD/VP603
	RM602	VAC-U-MAX HEPA	CD/VP602
	RM861	VAC-U-MAX HEPA	CD/VP861-1 CD/VP861-2
	RM8229	VAC-U-MAX HEPA	CD/VP627
	RM874	VAC-U-MAX HEPA	CD/VP-MIXER 135-1
	RM861	HEPA filter	CD/EF861
GRANULATION/DRYING (OTHER DRY PRODUCTS)	RM861	HEPA filter	CD/HFBGLATT#4
	RM861	Dust Collector	CD/DC-01
	RM829	FILTROS HEPA	CD/HFBGLATT#3
	RM829	FILTROS HEPA	CD/HFBGLATT#3
PELLET COATING CDG-1 (CYMBALTA®)	CDG1	Dust Collector HEPA FILTER	CD/HF-CDG1KIT3
PELLET COATING CDG-2 (CYMBALTA®)	RM886	Dust Collector	CD/DCNIROKITS
		HEPA FILTER BANK	CD/HFNIRO
	RM886	HEPA filter	CD/EF819A
CAPSULE FILLING (CYMBALTA®)	RM17218	VACUUM HEPA FILTER	CD/VP17218
	RM17223	VACUUM HEPA FILTER	CD/VP17223
CAPSULE FILLING (OTHER DRY PRODUCTS)	RM223	HEPA FILTER BANK	CD/EF8440
	RM218		

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PROCESS	EMISSION SOURCE	CONTROL EQUIPMENT	CONTROL EQUIPMENT ID
COATING (OTHER DRY PRODUCTS)	RM801	Dust Collector	CD/DC809
		Dust Collector	CD/DC810
		Dust Collector	CD/DC811
	RM834	Dust Collector	CD/DC812
		Dust Collector	CD/DC813
	RM826	Dust Collector	CD/DC826-1
		HEPA filter	CD/DC826-1 HEPA
		Dust Collector	CD/DC826-2
		HEPA filter	CD/DC826-2 HEPA
	RM245	Dust Collector	CD/DC245
COMPRESSION (OTHER DRY PRODUCTS)	Fete 3090I	Dust Collector	CD/DC-CTP1

B. EU - TANKS

PROCESS	EMISSION SOURCE	CONTROL EQUIPMENT	CONTROL EQUIPMENT ID
SOLVENT AND PROCESS WASTE STORAGE	TK-8470	Conservation vent	CVV-8470A
	TK-3690	Conservation vent	CVV-3690A
	TK-8490	Condenser	HE-8490
	TK-8560	Condenser	HE-8560
	TK-8500	Condenser	HE-8500
	TK-8510	Condenser	HE-8510
	TK-8450	Condenser	HE-8450
	TK-8310	Conservation vent Equalization line	CVV-8310
SOLVENT RECOVERY	COL-8520 and TK-8530	Condenser	HE-8231
		Condenser	HE-8531

C. EU-VOCUNITS-1

PROCESS	EMISSION SOURCE	CONTROL EQUIPMENT ID
PORTABLE BREAK TANKS	TK-5740	HE-5760
	TK-5750	

D. PSD REQUIREMENTS

PROCESS	EMISSION SOURCE	CONTROL EQUIPMENT ID
PROCESS AND SOLVENT WASTE	TK-8490	Vent Condensers Recovery Unit with 82% efficiency
	TK-8500	
	TK-8510	
	TK-8560	

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Attachment III: Operational limits per emission unit

A. EU – DUSTUNITS

PROCESS	EMISSION POINT ID	MATERIAL DESCRIPTION	LIMIT
DISPENSING (CYMBALTA®)	EP/1/DP-9	Raw material to support the manufacture of solutions for Cymbalta products	3,018 ton/year particulate matter [PFE-16-0694-1461-I-C, 13-dec-2006]
DISPENSING (OTHER DRY PRODUCTS)	EP/1/DP-1	Raw material to support manufacturing equivalent to 365 lots per year of tablets and / or capsules per dispatch room	705,000 tablets /hr (Cialis, Evista and Zyprexa) and 240,000 capsules/hr (Symbyax and Strattera) [PFE-16-0203-0187-I-II-C]
	EP/1/DP-2		
	EP/1/DP-3		
	EP/5/DPSALT	Tanque de sal, procesa Particulate matter.	65,000 L 40,000 lb/discharge [PFE-16-0203-0187-I-II-C]
	EP/5/DPUREA	Tanque de urea, procesa Particulate matter.	10,000 gal 60,000 lb/discharge [PFE-16-0203-0187-I-II-C]
SOLUTION PREPARATION AREA (OTHER DRY PRODUCTS)	EP/1/508	Tanque de sal (<i>Brine</i>), procesa Particulate matter.	4,300 gal 40,000 lb/lot [PFE-16-0606-0968-I- C]
	EP/1/SPA-1	Raw material for tablet coating	722,700 kg/year 365 lots/year [PFE-16-0697-0727-I-C]
SOLUTION PREPARATION GRANULATION/ COATING AND MATERIAL TRANSFER (PILOT KIT)	EP/1/DP-PP-1	Raw material for pilot plant operation	49,056 kg/year [PFE-16-0103-0002-I-C]
	EP/1/GC-PP1		
	EP/1/MT-PP1		
MATERIAL TRANSFER (CYMBALTA®)	EP/VP-8	Particulate matter from material transfer	Process a maximum of 1,006 ton/year per emission point. [PFE-16-0694-1461-I-C, 13-dec-2006]
	EP/VP-9		
	EP/VP-10		
	EP/VP-11		
MATERIAL TRANSFER (OTHER DRY PRODUCTS)	EP/1/VP-1	Raw material to support the manufacture of tablets and capsules	705,000 tablets /hr (Cialis, Evista and Zyprexa) and 240,000 capsules/hr (Symbyax and Strattera) [PFE-16-0692-0843-I-II-C and PFE-16-0601-1224-I-C]
	EP/1/VP-2		
	EP/1/VP-3		
	EP/1/VP-4 (MX250)		
	EP/1/VP5 (MX135)		
GRANULATION/ DRYING (OTHER DRY PRODUCTS)	EP/1/GDP-3	Tablets granulation	(600 kg/lot, 722,700 kg/year per granulation unit) [PFE-16-0692-0843-I-II-C]
	EP/1/GDP-4		
PELLET COATING (CYMBALTA)	EP/1/CDG-1	Particulate matter	1,006 ton/year [PFE-16-0694-1461-I-C]
PELLET COATING (CYMBALTA)	EP/1/CDG-2	Particulate matter	1,006 ton/year [PFE-16-0694-1461-I-C]
CAPSULE FILLING	EP/1/CF-9A EP/1/CF-9B	Particulate matter	1,006 ton/year/unit [PFE-16-0694-1461-I-C]

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PROCESS	EMISSION POINT ID	MATERIAL DESCRIPTION	LIMIT
CAPSULE FILLING (OTHER DRY PRODUCTS)	EP/1/CF-1 EP/1/CF-2 EP/1/CF-3 EP/1/VP-5 EP/1/VP-6 EP/1/VP-7	Capsules Fill	590,000,000 capsules/year (Based in 118 runs of 5,000,000 capsules) [PFE-16-1001-2190-I-C]
COATING (OTHER DRY PRODUCTS)	EP/1/CTP-1 EP/1/CTP-2 EP/1/CTP-3 EP/1/CTP-4 EP/1/CTP-5 EP/1/CTP-6 EP/1/CTP-7	Tablet coating	722,700 kg/year [PFE-16-0692-0843-I-II-C]
TABLETS COMPRESSION (OTHER DRY PRODUCTS)	EP/1/CP-1	Tablet compression	480,000 tablets/hr 365 lots/year [PFE-16-0697-0727-I-C]

B. EU-AMMONIAUNITS-2

PROCESS	EMISSION POINT ID	MATERIAL DESCRIPTION	LIMIT
	EP/1/DP-8		Uses 1.7 tons per year of ammonium hydroxide per unit [PFE-16-0694-1461-I-C, December 13, 2006]
	EP/1/DP-10		6.4 tons per year of ammonium hydroxide.
	EP/1/SP-2A EP/1/SP-2B EP/1/SP-2C EP/1/SP-2D EP/1/SP-2E		6.4 ton/year of ammonium hydroxide. [PFE-16-0694-1461-I-C, December 13, 2006]
WASTEWATER TANKS	WT-1	Waste water from the process of manufacturing products with traces of ammonia [PFE-16-0904-1461-I-C]	5.2 ton/year [PFE-16-0694-1461-I-C, December 13, 2006]
	WT-2		96.7 ton/year [PFE-16-0904-1461-I-C, December 13, 2006]
	WT-3		193.4 ton/year [PFE-16-0904-1461-I-C, December 13, 2006]
MANUFACTURA DE HUMALOG®	EU/5/TK-3300	Ammonia	Maximum of 1,519,050 liters per year [PFE-16-0203-0187-I-II-C, October 9, 2003]

C. EU – VOCUNITS – 2

PROCESS	EMISSION POINT ID	MATERIAL DESCRIPTION	LIMIT
TABLET IMPRINTING	TPP-1	Processing of particulates with Alcohol	40,040 kg alcohol/year [PFE-16-1295-1620-I-C]
PUNCHES AND DIE CLEANING	PD-1	Processing of particulates with Alcohol	182.5 kg alcohol/year [PFE-16-0697-0706-I-C]

STORAGE AND PROCESS TANKS IN EU-VOCUNITS-2

EMISSION POINT ID	CAPACITY LIMIT (L)	EMISSION POINT ID	CAPACITY LIMIT (L)
TK-3620	2,460	TK-4600	1,500
TK-3130	56,781	TK-4620	2,000
TK-3180	6,523	TK-4640	1,500
TK-3190	3,631	TK-4660	2,000
TK-3200	3,075	TK-4900	1,000
TK-3210	407	TK-5000	3,000
TK-3230	6,123	TK-5010	3,000
TK-3240	3,543	TK-5130	3,700
TK-3260	3,631	TK-5140	3,700
TK-3270	630	TK-5150	3,700
TK-3290	6,123	TK-5200	2,400
TK-3370	6,123	TK-5210	2,400
TK-3410	3,453	TK-5220	1,000
TK-3470	6,123	TK-5240	1,000
TK-3600	630	TK-5260	1,000
TK-3640	2,000	TK-5320	660
TK-3645	2,000	TK-5330	660
TK-3740	6,523	TK-5340	660
TK-3745	6,523	TK-5350	660
TK-3750	6,523	TK-5380	3,300
TK-3760	9,551	TK-5390	3,300
TK-3780	3,631	TK-5400	380
TK-4100	5,000	TK-5410	380
TK-4110	5,000	TK-5484	300
TK-4220	4,000	TK-5420	380
TK-4230	4,000	TK-5430	3,000
TK-4250	6,000	TK-5440	3,000
TK-4410	15,000	TK-5460	450
TK-4420	15,000	TK-5482	300
TK-4430	15,000	TK-5484	300
TK-4440	15,000	TK-5500	160
TK-4500	1,000	TK-5710	5,700
TK-3780	3,631	TK-5400	380
		TK-5600	250
		TK-5630	2,000
		TK-5640	250
		TK-5670	2,000
		TK-5700	5,700

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STORAGE AND PROCESS TANKS IN EU-VOCUNITS-2	
EMISSION POINT ID	CAPACITY LIMIT (L)
EP/1/DP-8, EP/1/DP-10, EP/1/SP-2A, EP/1/SP-2B, EP/1/SP-2C, EP/1/SP-2D, EP/1/SP-2E, EP/1/WT1, EP/1/WT2, and EP/1/WT3	See Attachment III (B)
EP/1/CDG-1 EP/1/CDG-2	See Attachment III (A)

D. EU-FERMENTATION

STORAGE AND PROCESS TANKS IN EU-FERMENTATION	
EMISSION POINT ID	LIMIT (L)
TK-2550 TK-2560 TK-2570 TK-2580 TK-1770 TK-1780	120 L 250 lots/year/plant Maximum 1,000 lots/year combined [PFE-16-0111-0030-I-C]
TK-2620	500 L 110 lots/year [PFE-16-0111-0030-I-C]
TK-1200 TK-1300 TK-1400 (Fermenters)	42,000 L c/u [PFE-16-0203-0187-I-II-C]
TK-1050 TK-1055 (Complex Feed Tanks)	8,000 L c/u [PFE-16-0203-0187-I-II-C]

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E. EU-TANKS

STORAGE AND PROCESS TANKS IN EU-TANKS		
EMISSION POINT ID	CAPACITY LIMIT (L)	LIMIT (Gal)
TK-8470	1,423.3	376 gal Throughput: 1,519,541.77 gal/year [PFE-16-0203-0187-I-II-C]
TK-8490	7,286	1,924.76 Throughput: 1,519,541.77 gal/year [PFE-16-0203-0187-I-II-C]
TK-8560	29,484	7,788.89 [PFE-16-0203-0187-I-II-C]
TK-8500	66,541.7	17,578.52 [PFE-16-0203-0187-I-II-C]
TK-8510	62,365.3	16,475.22 [PFE-16-0203-0187-I-II-C]
TK-8450	1,892.7	9,500 gal (35,961.3 L) Throughput: 300,000 gal/year [PFE-16-0111-0030-I-C]
TK-8230	73,815.3	19,500 [PFE-16-0111-0030-I-C]
COL-8520 and TK-8530 (solvent recovery unit)	20 liters per minute	20 liters per minute
TK-8310	9,500 gal	Throughput: 300,000 gal/year [PFE-16-0111-0030-I-C]
TK-3690	15,000 gal	Throughput: 300,000 gal/year [PFE-16-0508-0268-I-C]

F. EU-VOCEMISSIONS

STORAGE AND PROCESS TANKS IN EU-VOCEMISSIONS	
EMISSION POINT ID	LIMIT (L)
EU-VOCEMISSIONS	Leak Detection and Repair Program

