

- iv. The electricity generators shall only operate in cases that the electric energy service is interrupted caused by natural or technological (e.g., hurricanes, storm, drought, soil collapse and/or breakdown of the electrical service), also during maintenance (programed startup) recommended by the manufacturer.

b. **Fuel sulfur limit**

- i. The fuel sulfur limit in the diesel used in the engines of these units shall not exceed 0.5% weight (according to the construction permits) except for the following engines:
 - a. EU-12 that shall comply with 0.0015% weight [40 CFR section 63.6604(a)]
 - b. EU-26-13 that shall comply with 0.0015% weight [40 CFR section 60.4207(b)]
- ii. AbbVie shall keep a copy of the diesel supplier certification each time the fuel is received in the facility. Such certification shall indicate the fuel sulfur content, to demonstrate compliance with the previous condition.
- iii. AbbVie shall submit a report every six months, indicating on a monthly basis the sulfur content (weight percent) in the fuel burned and the amount of fuel burned in the generators and the fire pumps. This report shall be sent to the EQB for the attention of the chief of the Data Validation and Mathematical Modeling Division of the Air Quality Area no later than the next 15 days after ending the six months period for which the report is representative. The report that covers the period from January through June shall be submitted no later than July 15 of the same year and the report that covers the period from July through December shall be submitted no later than January 15 of the next year. You shall keep a copy of this report at the facility available for inspection to EQB's technical personnel.
- iv. AbbVie shall submit a summary with the information included in these reports in the annual compliance certification.
- v. In the event that the internal combustion engines were modified or reconstructed, they shall comply with the applicable requirements in the 40



CFR, Part 60, Subpart IIII. This could imply more stringent limits in the sulfur content in the fuel.

c. **Operation limit for the electricity generator EU-12**

- i. The generator must be operated at all times at a capacity no greater than 1,730 bKW. [PFE-09-0492-0527-II-C, 9-21-99]
- ii. The permittee must prepare a logbook to record the hours per day, days of operation and fuel use for the electricity generator. It shall be available for inspection and review by EQB's technical personnel. [PFE-09-0492-0527-I-C, 9-21-99]
- iii. AbbVie must keep a daily logbook to record the initial and final capacity of the generator in each operation interval. It shall be available for inspection at the facility for review and inspection by EQB's technical personnel. [PFE-09-0492-0527-I-C, 9-21-99]

 d. **Visible emission limits**

- i. The electricity generators and the fire pumps shall not exceed the opacity limit of 20% in a 6 minute average. Nevertheless, and according to Rule 403 (A) of the RCAP, you may discharge visible emissions of an opacity up to 60% for a period of no more than 4 minutes in any consecutive 30 minutes interval. [Rule 403(A) of the RCAP]
 - ii. AbbVie shall hire an independent opacity reader, certified in a school endorsed by the EPA to make one opacity reading on each generator and the fire pumps, during the first year of the permit using Method 9 described in Appendix A of the 40 CFR Part 60 The equipment shall be operating at the time of the opacity reading.
 - iii. The permittee shall submit a testing protocol at least 30 days prior to the test for approval by the Board. This protocol must contain the information described in Rule 106(C) of the RCAP. AbbVie shall include a copy of the format that will be used to record the visible emissions readings.
- 

- iv. The permittee shall notify in writing to the Board at least 15 days prior to the test to allow the Board the opportunity to have an observer present. [Rule 106 (D) of the RCAP]
- v. The permittee shall submit two copies of the tests report within 60 days after the test. This report shall contain the information required under Rule 106(E) of the RCAP.
- vi. [Applicable only to EU-12] AbbVie shall conduct weekly visual opacity inspections (when using the equipment) during daylight hours in the stack of each equipment or in a common stack, as applicable, using a Visible Emissions Reader certified by a program endorsed by the EPA or the Board. When the certified reader establishes that the opacity limit under RCAP Rule 403 is being exceeded, AbbVie shall verify that the equipment causing the visible emissions is operating in accordance with the manufacturer's specifications and permit conditions. If the unit is not working properly, you shall take immediate corrective actions in order to eliminate the excess opacity and shall document the steps taken to correct any deficiencies.
 - a. The weekly visible emission tests shall be performed according to Method 9 of the 40 CFR Part 60, Appendix A, for at least 6 minutes, and according to the following requirements:
 - (1) The permittee shall conduct weekly opacity observations for a minimum of 8 consecutive weeks. If no emissions are observed above the established limit, then -
 - (2) The permittee may perform the opacity readings once every two weeks, for a period of 8 consecutive weeks. If emissions are observed above what is established in Rule 403 of the RCAP, you shall revert the observations to a weekly frequency (according to the previous item (1)), If no emissions are observed above the limit established in Rule 203 of the RCAP, then-
 - (3) The opacity observations may be performed once per month. If emissions are observed above what is established in Rule 403



of the RCAP, you shall revert the observations to a weekly frequency (according to the item (1) above).

- (4) If the facility reverts to a weekly frequency at any moment, the frequency of the tests shall progress in the same manner as the initial frequency. This means that, once step (1) is completed, you can continue to step (2) and subsequently to step (3), if no emissions are observed above what's established in Rule 403 of the RCAP and so on.

b. All the visible emissions observations must be recorded according to Method 9. You shall prepare and maintain a record with the observation dates and results of the observations available at the facility at all times for review by the Board's technical personnel.

c. If the unit is not in operation or the conditions in Method 9 are not met on the day that the observation was going to be carried out, the permittee must document this situation in the records of the observations and must inform this situation in the visible emissions summary that will be submitted to the Board with the semiannual reports required by this permit.

vii. The permittee must submit a summary with the visible emissions observations together with the semiannual reports required by this permit. This report must include a summary with the results of the readings and the beginning and ending time and the dates when the visible emissions observations were made. The report must also include the total number of observations carried out in that period for the units subject to this requirement. The permittee must retain a copy of the visible emissions reading report that includes the date and time of the reading for at least five years, in compliance with Rule 603(A)(4)(ii) of the RCAP.

viii. The Board reserves the right to require additional visible emission readings in order to demonstrate compliance with the opacity limit.

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- e. **Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, 40 CFR Part 60 Subpart IIII**
- i. The internal combustion engine EU26-P13 is subject to the 40 CFR, Part 60, Subpart IIII. It shall operate in compliance with the applicable requirements in the regulation.
 - ii. According to section 63.6590(c) of the 40 CFR, the engine EU26-P13 must comply with the Subpart ZZZZ requirements by complying with the requirements of the 40 CFR, Part 60 Subpart IIII.
 - a. According to section 60.4205(b) of the 40 CFR, the engine must comply with all applicable emission standards of section 60.4202 for all pollutants, corresponding to the same year, model and maximum engine power as established in sections 89.112 and 89.113 of the 40 CFR.
 - b. The engine EU26-10 must not exceed the Tier 2 emission limits:
 - i. 6.4 g/kW-hr for NMHC + NO_x,
 - ii. 3.5 g/kW-hr for CO, and
 - iii. 0.20 g/kW-hr for PM.
 - iv. Opacity according to the limits in 89.113 of the 40 CFR.
 - c. The permittee should have obtained the manufacturer certification that the engine complies with the emission standards specified for the same year, model and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants. [40 CFR section 60.4202(b)(2)]
 - d. The permittee must operate and maintain this engine in a manner to comply with the emission standards required by item b. of this condition in this section for the life of the engine. [40 CFR section 60.4206]



- e. According to la section 60.4207(b) of the 40 CFR, the permittee must use diesel for this engine that meets the requirements of the 40 CFR section 80.510(b). This is,
 - i. The sulfur content in the fuel shall not exceed 15 ppm or 0.0015% weight.
 - ii. The fuel must comply with a minimum cetane index of 40 or the aromatic content shall not exceed 35% per volume.
- f. The permittee shall comply this the applicable monitoring requirements in section 60.4209 of the 40 CFR.
- g. The permittee should have demonstrated compliance by buying a certified engine for the standards in section 60.4205(b) of the 40 CFR and item b. in this condition for the same year, model and maximum engine power. The engine must be installed and configured according to the manufacturer's emission-related written instructions, except as provided in paragraph (g) of section 60.4211. [40 CFR section 60.4211(c)]
- h. The permittee must operate this engine according to the requirements established in paragraph (f) of section 60.4211, in order for the engine to be considered an emergency engine under this subpart. If you do not operate the engine according to the requirements of paragraph (f) of section 60.4211, the engine will not be considered an emergency engine under this subpart and must meet all applicable requirements under the same subpart for non-emergency engines.
 - i. The permittee must comply with all test methods and other procedures in 60.4212 of the 40 CFR, as applicable.
 - j. The permittee must comply with the applicable notification, reporting and recordkeeping requirements of section 60.4214 of the 40 CFR.
- k. The permittee must comply with the General Provisions in sections 60.1 through 60.19 as applicable, which are included in Table of Subpart IIII of the 40 CFR.



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

i. The engines in the emission units EU-12 and EU-26 are subject to the 40 CFR, Parte 63, Subpart ZZZZ, therefore you shall comply with all applicable requirements of such regulation on or before **May 3, 2013**.

ii. **Requirements for EU-26 (all engines except EU26-P13):** All engines in this unit EU-26 must comply with the following requirements, except the engine EU26-P13 that must comply with the requirements in Subpart ZZZZ by complying with the requirements of the 40 CFR Part 60, Subpart IIII . (EU26-P13 does not have to comply with the following requirements under this item).

a. According to Table 2d of Subpart ZZZZ, the permittee shall:

(1) Change oil and filter every 500 hours of operation or annually, whichever comes first;

(a) The permittee have the option to utilize an oil analysis program as described in §63.6625(i) of the 40 CFR in order to extend the specified oil change requirement in Table 2d of Subpart ZZZZ.

(2) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and

(3) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

b. In order to maintain the emergency engine category, the engines must comply with the use and operation limitations contained in the 40 CFR §63.6640(f)(1). If you do not operate the engine according to such requirements, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

c. According to §63.6605 of the 40 CFR you must operate the engine in a manner for minimizing emissions.



- d. According to the 40 CFR §63.6640 you must operate and continuously comply with the Work or Management Practices contained in Table 6 of the Subpart.
- e. The permittee must comply with the monitoring, installation, collection, operation and maintenance requirements of the 40 CFR sections 63.6625(e), (f) (h), and (i), as applicable.
- f. According to the 40 CFR section 63.6625, the permittee must:
- (1) operate and maintain the engine and the control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must 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.
- g. The permittee must demonstrate continuous compliance according to the applicable requirements included in the 40 CFR sections 63.6605 and 63.6640.
- h. The permittee must keep applicable records according to the 40 CFR section 63.6655, except with §63.6655(c).
- (1) The permittee must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter.
 - (2) The permittee must 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 the 40 CFR §63.6640(f)(2)(ii) or (iii) or §63.6640(f)(4)(ii), the permittee must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.

- i. The permittee must comply with the reporting requirements according to the footnote #2 of the Table 2d of the 40 CFR.
- j. The permittee must keep records of all the information (including all reports and notifications) required by Subpart ZZZZ, in a form suitable and readily available for expeditious review. The permittee must keep the records for at least 60 months following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent 24 months of data shall be retained on site. The remaining 36 months of data may be retained offsite. Offsite records shall be available to the Board within 5 working days, upon request (40 CFR Part 63 General Provisions §63.10(b) and 40 CFR section 63.6655(a) and section 63.6655(e)).
- k. The permittee must submit a semiannual compliance report to record each instance when the facility did not comply with the requirements in Table 2d of the 40 CFR Part 63 Subpart ZZZZ. [40 CFR section 63.6640 (a-b)]
- l. For purposes of deviation for this unit, it shall have the same meaning as the 40 CFR Part 63 Subpart ZZZZ. Generally it means any moment in which the owner or operator fails to comply with any requirement of the 40 CFR Part 63 Subpart ZZZZ included in this permit, including the general obligation to minimize emissions at all times as required by the 40 CFR section 63.6(e)(1)(i). [40 CFR 63 Subpart ZZZZ and 40 CFR 63.6(e)(1)(i)]



- m. The permittee must comply with the applicable General Provisions of sections 63.1 through section 63.15 which are included in Table 8 of the Subpart ZZZZ of the 40 CFR.
- iii. **Requirements applicable only to the EU-12 (Non-Emergency, Non-Black Start engine)**
- a. The unit EU-12 is subject to the 40 CFR Part 63 Subpart ZZZZ therefore it shall comply with all applicable requirements of the regulations on or before May 3, 2013.
- b. According to the 40 CFR section 63.6603 and according to the Table 2d of Subpart ZZZZ you must:
- (1) Limit concentration of CO to 23 ppmvd at 15% oxygen; or
 - (2) Reduce CO emissions by 70% or more.
- c. According to the 40 CFR section 63.6604(a), the permittee must use fuel diesel for this engine that meets the requirements of the 40 CFR section 80.510(b). This is,
- (1) The sulfur content in the fuel shall not exceed 15 ppm or 0.0015% weight.
 - (2) The fuel must comply with a minimum cetane index of 40 or the aromatic content shall not exceed 35% per volume.
- d. According to the 40 CFR section 63.6605 you must operate the engine in a manner for minimizing emissions.
- e. According to the 40 CFR section 63.6640 you must operate and continuously comply with the Work or Management Practices contained in Table 6 of the Subpart.
- f. You must comply with the monitoring, installation, collection, operation and maintenance requirements of the 40 CFR sections 63.6625(e), (f) (h), and (i), as applicable.



- g. According to the 40 CFR section 63.6625, you must:
- (1) operate and maintain the engine and the control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must 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) You must 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.
- h. The permittee must demonstrate continuous compliance according to the applicable requirements established in 40 CFR sections 63.6605 and 63.6640.
- i. The permittee must keep applicable records according to the 40 CFR section 63.6655, except with §63.6655(c).
- j. The permittee must comply with the reporting requirements according to the footnote #2 of the Table 2d of the 40 CFR.
- k. The permittee must keep records of all the information (including all reports and notifications) required by Subpart ZZZZ, in a form suitable and readily available for expeditious review. The permittee must keep the records for at least 60 months following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent 24 months of data shall be retained on site. The remaining 36 months of data may be retained offsite. Offsite records shall be available to the Board within 5 working days, upon request (40 CFR Part 63 General Provisions §63.10(b) and 40 CFR section 63.6655(a) and section 63.6655(e)).



- l. The permittee must submit a semiannual compliance report where each record when the facility did not comply with the requirements in Table 2d of the 40 CFR Part 63 Subpart ZZZZ is recorded. [40 CFR section 63.6640 (a-b)]
- m. For purposes of deviation for this unit, it shall have the same meaning as the 40 CFR Part 63 Subpart ZZZZ. Generally it means any moment in which the owner or operator fails to comply with any requirement of the 40 CFR Part 63 Subpart ZZZZ included in this permit, including the general obligation to minimize emissions at all times as required by the 40 CFR section 63.6(e)(1)(i). [40 CFR 63 Subpart ZZZZ and 40 CFR 63.6(e)(1)(i)]
- n. The permittee must comply with the applicable General Provisions of sections 63.1 through section 63.15 which are included in Table 8 of the Subpart ZZZZ of the 40 CFR.

Other Requirements (all engines, except EU12):

- iv. According to the 40 CFR § 63.6625, the permittee must:
 - a. Operate and maintain the engine and the control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must 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.
 - b. The permittee must install a non-resettable hour meter if one is not already installed.
 - c. 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.
- v. According to the 40 CFR §63.6605 you must operate the engine in a manner for minimizing emissions.



- vi. According to the 40 CFR §63.6640, the permittee must operate and continuously comply with the emissions and operating limitations and work or management practices contained in Table 6 of the Subpart.
- vii. In order to maintain the emergency engine category, the engines must comply with the use and operation limitations contained in the 40 CFR §63.6640(f)(1). If the permittee does not operate the engine according to such requirements, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.
- viii. The permittee shall keep the applicable records according to the 40 CFR §63.6655(f).
 - a. The permittee must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter.
 - b. The permittee must 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.
 - c. If the engine is used for the purposes specified in the 40 CFR §63.6640(f)(2)(ii) or (iii) or §63.6640(f)(4)(ii), the permittee must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.
- ix. The permittee must comply with the applicable General Provisions of sections 63.1 through section 63.15 which are included in Table 8 of the Subpart ZZZZ of the 40 CFR.

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7. EU-16- Loading, Unloading and Storage of Chemicals - 3 ethanol tanks [PFE-09-0496-0435-I-II-C, 7-12-12]

Condition	Parameter	Value	Units	Test Method	Method Frequency	Recordkeeping Requirements	Reports Frequency
Stationary Tanks	N/A	N/A	N/A	Design or control equipment	N/A	Maintenance, repairs	Semiannual

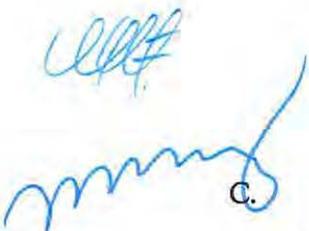
a. **Limitations for the Ethanol Tanks**

- i. The ethanol storage tanks (three tanks) shall be limited to a maximum raw material use of 2,399,620 pounds/year ethanol. [PFE-09-0496-0435-I-C, 7-12-12]
- ii. AbbVie shall keep a monthly record with the amount of ethanol handled by the three tanks. It shall be available for inspection by EQB's technical personnel.

8. **EU-24 - Process Fugitive Emissions**

a. Rule 419 of the RCAP [State enforceable only]

- i. The permittee shall prepare and implement a reasonable program of leak detection and repair or a preventive maintenance program, to minimize emissions from equipment leaks. Otherwise, it may be subject to the provisions included in Rule 419 of the RCAP.
- ii. The permittee shall have available the leak detection and repair program or the preventive maintenance program, as applicable, for inspection by EQB's technical personnel.

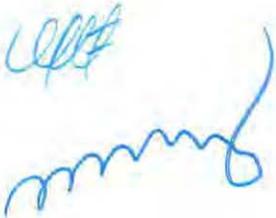
 C. **Compliance with the 40 CFR Part 63 Subpart JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources [Applicable to the boilers in the emission units EU-8 (existing), EU-10 (existing), EU-10a (new) and EU-11 (existing)]**

For the boilers EU-8, EU-10 and EU-11 (existing):

1. The permittee must comply with all applicable requirements of the National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources included in Part 63 Subpart JJJJJJ of Title V of the Code of Federal Regulations (40 CFR).
2. The compliance date with the provisions in Subpart JJJJJJ for the boilers EU-8, EU-10 and EU-11, will depend on the applicable requirements, as described in

section 63.11196 of the 40 CFR. The boilers EU-8, EU-10, and EU-11 must be in compliance with the applicable requirements no later than March 21, 2014.

3. The compliance dates with Subpart JJJJJJ provisions for boilers EU-8, EU-10 and EU-11, will depend on the applicable requirements, as described in section 63.11196 of the 40 CFR.
4. The permittee must comply with each work practice standard, emission reduction measure, and management practice specified in Table 2 of subpart JJJJJJ respectively that applies to the boilers EU-8, EU-10 and EU-11. [Section 63.11201(b) of the 40 CFR]
 - a. The permittee must conduct an initial tune-up and then a tune-up biennially (every two years) as specified in section 63.11223 of the 40 CFR.
 - b. Must have a one-time energy assessment performed by a qualified energy assessor. An energy assessment must be completed on or after **January 1, 2008**, that meets or is amended to meet the energy assessment requirements in Table 2 of Subpart JJJJJJ. A facility that operates under an energy management program compatible with ISO 50001 that includes the affected units also satisfies the energy assessment requirement. [Section 63.11201(b) of the 40 CFR].
5. The standards in Subpart JJJJJJ apply at all times the affected boiler is operating, except during periods of startup and shutdown as defined in section 63.11237 of the 40 CFR. During periods of startup and shutdown the facility must comply only with Table 2 of Subpart JJJJJJ. [Section 63.11201(d) of the 40 CFR]
6. The permittee shall comply with the applicable **General Compliance Requirements** as described in section 63.11205(a) of the 40 CFR.
7. The permittee shall comply with the applicable **Initial Compliance Requirements** as specified in sections 63.1121 (c) and (h) and 63.11214(b) and (c) of the 40 CFR.



8. The permittee shall comply with the applicable **Continuous Compliance Requirements** of section 63.11223 of the 40 CFR and with the applicable requirements in sections 63.11225 and 63.11226 of the 40 CFR.
9. The owner or operators of **existing** affected boilers that have not operated between the effective date of the rule and the compliance date that is specified in section 63.11196 of the 40 CFR, and that are subject to the tune-up required by section 63.11223 of the 40 CFR, **must complete** the initial performance tune-up no later than 30 days after the restart of the affected boiler following the procedures in section 63.11223(b) of the 40 CFR. [Section 63.11210(j) of the 40 CFR]
10. The owner or operator 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 (NCS) that an energy assessment of the boiler and its energy used systems was completed according to Table of Subpart JJJJJJ. [Section 63.11214(c) of the 40 CFR]
11. The owner or operator of the affected boilers must make notifications, reports and must keep records following the requirements in section 63.11225 of the 40 CFR.
 - a. Must submit an **Initial Notification** no later than January 20, 2014 or within 120 days after the source becomes subject to Subpart JJJJJJ. [Section 63.11225(a)(2) of the 40 CFR]
 - b. Must submit a **Notification of Compliance Status (NCS)** no later than 120 days after the compliance date specified in section 63.11196 of the 40 CFR, unless you must conduct a performance stack test. The owner or operator that must conduct a performance stack test must submit the NCS 60 days after completing the performance test. [Section 63.11225(a)(4) of the 40 CFR]
 - c. 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). The application may be accessed under the address (www.epa.gov/cdx).



However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written notification must be submitted at the appropriate address listed in section 63.13 of the 40 CFR. [Section 63.11225(a)(4)(vi) of the 40 CFR]

- d. The permittee must prepare, by **March 1 of each year**, and submit an Annual Compliance Certification report containing the information specified in sections 63.11225(b)(1) through (b)(4) of the 40 CFR. Only when requested, you must submit the report to the EQB for review. You must submit the report by March 15 if you had any deviation from the applicable requirements of Subpart JJJJJJ. [Section 63.11225(b) of the 40 CFR]
- e. All reports required by Subpart JJJJJJ must be accessible and ready for review by the EPA or EQB personnel. You must keep the records for 5 years. You must keep each record on-site or in electronic form for the first two years. You may keep the records off site for the remaining 3 years. [Section 63.11225(d) of the 40 CFR]

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- 12. The permittee must comply with the applicable General Provisions of sections 63.1 through section 63.15 which are included in Table 8 of the Subpart ZZZZ of the 40 CFR.

For the boilers EU-10a (new ones):

- 13a. Operating scenario burning diesel and propane: The 300 hp (each one) steam generating boilers identified as 1, 2 and 3, shall comply with all applicable requirements of the National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources contained in the 40 CFR Part 63 Subpart JJJJJJ. The permittee shall demonstrate compliance with, but not limited to the following:
 - a. The compliance date with the provisions of Subpart JJJJJJ for the affected boiler(s) included under this emission unit will depend on the applicable requirements as described in section 63.11196 of 40 CFR.
 - b. The standards of Subpart JJJJJJ apply at all times that each boiler is operating, except during periods of startup and shutdown as defined

in section 63.11237, during which time you must comply only with Table 2 to subpart JJJJJJ. [Section 63.11201(d) of the 40 CFR]

- c. The affected boiler(s) included in this permit shall comply, but not limited to the following requirements, as applicable:

Requirements	Reference
Applicable General Compliance Requirements	Section 63.11205(a), (b) and (c) of the 40 CFR
Initial Compliance Requirements	Sections 63.11210, 63.11211, 63.11212, 63.11213 and 63.11214 of the 40 CFR
Other Requirements	Sections 63.11220, 63.11221, 63.11222, 63.11223, 63.11224 and 63.11226 of the 40 CFR

- d. The permittee shall comply with the applicable General Provisions in sections 63.1 through section 63.16, which are included in Table 8 of Subpart JJJJJJ of the 40 CFR.
- e. You must comply with each operating limit specified in Table 3 of Subpart JJJJJJ that applies to the affected boiler(s) and included under this emission unit. [Section 63.11201(c) of the 40 CFR]
- f. The permittee must submit a modification to the construction permit if it wishes to consume other type of fuel or mixture of fuels in the boilers according to the requirements in Rule 203 of the RCAP. The changes authorized in the construction permit will be incorporated to this Title V permit by the procedures included in Rules 606 or 607 of the RCAP.
- g. You must comply with each work practice standard, emission reduction measure and management practice specified in Table 2 respectively that apply to the affected boiler included in this emission unit. [Section 63.11201(b) of the 40 CFR]
- i. For the boilers > 5 MMBtu/hr, you must conduct a tune up of the boiler biennially (every two years), as specified in section



63.11223 of the 40 CFR. Must submit a statement signed by the Responsible Officer in the Notification of Compliance Status report that indicates that you conducted a tune-up of the boiler.

13b. Alternate Operating Scenario burning propane under the gas-fired boiler category:

a. Each boiler that changes to the gas-fired boiler category will not be subject to the requirements of condition 13a (applicable requirements of the National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources included in the 40 CFR Part 63, Subpart JJJJJJ) while it complies with such criteria.

i. A gas-fired boiler (as defined in the 40 CFR section 63.11237), includes any boiler that burns gaseous fuels not combined with any solid fuels, and burns liquid fuel only during periods of gas curtailment¹⁵, gas supply interruption, startups or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year.

ii. If diesel is used for more than 48 hours during any calendar year, other than periods of gas curtailing, or other than periods of gas supply interruption, then such boiler will be subject to the applicable requirements of Subpart JJJJJJ (condition 13a of this permit) and must demonstrate compliance with such requirements.

b. Under this scenario, the permittee must maintain a monthly record indicating the diesel use (if any), the purpose for the diesel use (periods of gas curtailment, gas supply interruption), if any, and the hours in which the boiler burns diesel during the periodic tests. This record shall be available at the facility when required and submitted to the EQB when required.

¹⁵ Subpart JJJJJJ, 60.11237 defines “period of natural gas curtailment or supply interruption” to mean a “period of time during which the supply of natural gas to an affected facility is halted for reasons beyond the control of the facility. The act of entering a contractual agreement with a supplier of natural gas established for curtailment processes does not constitute a reason that is under the control of a facility for the purposes of this definition. An increase in the cost or unit price of natural gas does not constitute a period of natural gas curtailment or supply interruption.”



- 13c. Changes in fuel that result in a change of subcategory under the 40 CFR Part 63 Subpart JJJJJJ
- a. The owners or operators of affected boilers under subpart JJJJJJ, that change subcategories under JJJJJJ, must demonstrate compliance within 180 days of the effective date of the fuel switch or the physical change. Also, must submit to the Board a notification with the changes, according to section 63.11225(g) of the 40 CFR. [Section 63.11210(h) of the 40 CFR]
 - b. According to the 40 CFR, section 63.11225(g), within 30 days after a fuel switch, (this is, change of oil-fired category to gas-fired category and vice versa) the permittee must submit a notice identifying the following:
 - i. The name of the owner or operator of the affected source, the location of the source, the boiler(s) that have switched fuels, and the date of the notice. [40 CFR 63.11225(g)(1)]
 - ii. The date upon which the fuel switch occurred. [40 CFR 63.11225 (g) (2)]
14. The owner or operators of the affected boilers must make notifications, reports and keep records following the requirements of section 63.11225 of the 40 CFR.
- a. You must prepare, by **March 1 of each year**, an annual compliance certification report containing the information specified in sections 63.11225(b)(1) through (b)(4) of the 40 CFR. Upon request, you must submit the report to the EQB. You must submit the report by March 15 if the source experiences any deviations from the applicable requirements of Subpart JJJJJJ [Section 63.11225(b) of the 40 CFR]
 - b. All reports required by Subpart JJJJJJ must be accessible and ready for review by the EPA or EQB personnel. You must keep the records for 5 years. You must keep each record on-site or in electronic form for the first two years. You may keep the records off site for the remaining 3 years. [Section 63.11225(d) of the 40 CFR]



Section VI. Alternate Operating Scenarios

Under this permit, the following alternate operating scenarios is authorized

A. AOS-2

This scenario considers the execution of pollutant emitting activities of temporary and experimental nature and pharmaceutical business operation such as trial runs at existing process equipment in order to validate new products, conduct pilot manufacturing research trial runs and conduct engineering/technical assessments of existing manufacturing processes. This scenario is subject to the following conditions:

1. The operation of this scenario does not authorize construction or modification, as defined in Rule 102 of the RCAP, without first obtaining a construction permit under Rule 203 of the RCAP.
2. The activities under this operating scenario shall be subject to the same applicable requirements of the emission units EU-5, EU-6 and EU-7. Operation under this scenario is not authorized if it is subject to new applicable requirements not included for these emission units. For those changes, you must comply with the requirements established in Rule 606 or 607 of the RCAP.
3. The activities under this scenario will be temporary (period no more than 2 years) and will use existing equipment corresponding to the emission units EU-5, EU-6 and EU-7.
4. You shall keep records of the nature of the activities performed under this alternative operating scenario, quantity and type of pollutants emitted, and the equipment used. It shall be made available for inspection by EQB's technical personnel.

- B.** According to Rule 603(a)(10) of the RCAP, the permittee shall, contemporaneously with making a change from one scenario to another, keep a record of the scenario under which it is operating. The record shall be kept at the facility at all times.

Section VII – Insignificant Emission Units

- In this list are included the exempt activities and those emission sources that require and have a construction permit under Rule 203 of the RCAP. The following activities are exempt as long as AbbVie complies with the descriptions indicated below.

Emission Unit Identification	Capacity	Description (Basis for Exemption)
PDM Room (EU5-P7)	---	Appendix B.2 of the RCAP (Emits 0.039 tpy VOC)
Compressing Fette (EU5-P11)	---	Appendix B.2 of the RCAP (Emits 0.0356 tpy PM)
Bohle Blender (EU5-P15)	---	Appendix B.2 of the RCAP (Emits 0.0094 tpy PM)
Alpine Mill (EU5-P16)	---	Appendix B.2 of the RCAP (Emits 0.0359 tpy PM)
Day Mixer Room (EU6-P4)	---	Appendix B.2 of the RCAP (Emits 0.005 tpy VOC)
Gral 1200 (EU6-P2)	---	Appendix B.2 of the RCAP (Emits 0.024 tpy de VOC)
Fluid Bed Dryer T-8 (EU7-P10)	---	Appendix B.2 of the RCAP (Emits 0.235 tpy VOC)
30 solution tanks (EU-7-P13) and solution preparations tanks room (EU7-P14)	---	Appendix B.2 of the RCAP (Emits 0.997tpy VOC)
Cooling Towers as long as it does not include contact with process water or water treated with chromium based chemicals.	---	Appendix 3.xxxiii of the RCAP

Emission Unit Identification	Capacity	Description (Basis for Exemption)
EU-23 – Biotechnology Plant Based in the HUMIRA E2D7 manufacturing with a maximum production of 637 kg/year of raw material, 6.33 lb/lot of VOC and 0.03 lb/batch of HCl. [PFE-09-0902-1501-I-II-C]	---	Appendix B.2 of the RCAP
Diesel Storage Tank 102	147,000 gal	Rule 206(F)(3) of the RCAP
Diesel Storage Tank 100	12,000 gal	Rule 206(F)(3) of the RCAP
Fuel Oil #6 Tank 108	800,000 gal	Rule 206(F)(3) of the RCAP
Fuel Oil #6 Tank H	500,000 gal	Rule 206(F)(3) of the RCAP
Fuel Oil #6 Tank 109	200,000 gal	Rule 206(F)(3) of the RCAP
Fuel Oil #6 Storage Day Tank 111	7,000 gal	Rule 206(F)(3) of the RCAP Appendix 3.ii.(N) of the RCAP
Fuel Oil #6 Storage Day Tank 112	14,000 gal	Rule 206(F)(3) of the RCAP
Fuel Oil #6 Storage Head Tank	1,500 gal	Rule 206(F)(3) of the RCAP Appendix 3.ii.(N) of the RCAP
Fuel Oil #6 Storage Head Tank	6,000 gal	Rule 206(F)(3) of the RCAP Appendix 3.ii.(N) of the RCAP
Storage Tank 134	6,000 gal	Rule 206(F)(3) of the RCAP Appendix 3.ii.(N) of the RCAP
Storage Tank 114	1,860 gal	Rule 206(F)(3) of the RCAP Appendix 3.ii.(N) of the RCAP
Head Tank	1,500 gal.	Rule 206(F)(3) of the RCAP Appendix 3.ii.(N) of the RCAP
Storage Tank 301	100,000 gal.	Rule 206(F)(3) of the RCAP
Fuel #2 Day Tank 302	20,000 gal.	Rule 206(F)(3) of the RCAP
Fuel #2 Day Tank 300	6,000 gal.	Rule 206(F)(3) of the RCAP
Fuel #2 Day Tank 200	4,000 gal	Rule 206(F)(3) of the RCAP
Fuel #2 Day Tank 115	1,585 gal	Rule 206(F)(3) of the RCAP

Emission Unit Identification	Capacity	Description (Basis for Exemption)
Fuel #2 Day Tank 304	570 gal	Rule 206(F)(3) of the RCAP
Fuel #3 Day Tank 305	570 gal	Rule 206(F)(3) of the RCAP
Fuel #2 Day Tank 115	150 gal	Rule 206(F)(3) of the RCAP
Tanks, containers and pumping equipment used exclusively for the storage or supply of nitric acid in a concentration of 70 % or less by weight.	N/A	Rule 206(B)(12)(c) of the RCAP

Section VIII - Permit Shield

- A. In accordance with RCAP Rule 603(D), compliance with permit conditions shall be deemed as compliance with any requirement applicable at the date of issuance, provided that this requirement is included and specifically identified in the permit. Similarly, it is considered in compliance with any requirement specifically identified as "Not Applicable" in the permit.
1. Non-Applicable Requirements



Non-Applicable Requirement	Regulation	Basis
Facility		
National Emission Standards for Hazardous Air Pollutants for Pharmaceutical Production	Federal 40 CFR Part 63 Subpart GGG	Does not apply because AbbVie does not have pharmaceutical manufacturing operations, as defined in §63.1251, that comply with the criteria in sections 60.1250(a)(1)(i) through (iii) of the 40 CFR Part 63.
National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources	40 CRF Part 63 Subpart VVVVVV	The facility is not authorized to use none of the compounds listed in Table 1 of this subpart.

Non-Applicable Requirement	Regulation	Basis
Boilers EU-8, EU-10, EU-11		
National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters	Federal 40 CFR Part 63 Subpart DDDDD	Does not apply because the boilers are not located at a major source for HAPs according to §63.7485 of the 40 CFR.
Boiler EU-10		
Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	Federal 40 CFR Part 60 Subpart Dc	Does not apply to because the boiler was not constructed, modified or reconstructed after June 9, 1989.
EU-21		
Chemical Accident Prevention Provisions: Risk Management Program	Federal 40 CFR Part 68	AbbVie does not store chlorine in excess of 2,500 pounds in any moment, threshold included in the regulation. ¹⁶
EU-9, EU-12 and EU-26		
Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	Federal 40 CFR Part 60 Subpart IIII	Does not apply to internal combustion engines that were ordered, modified or reconstructed on or before July 11, 2005 and manufactured on or before April 11, 2006, except the engine EU26-P13, which is subject to this regulation. The order and manufacturing date was provided by the permittee.

¹⁶ AbbVie (previously Abbott Laboratories) was subject to the Risk Management Program Regulations. It was deregistered on 10-25-06.

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BARCELONETA, P.R.
PFE-TV-2833-09-1096-0011-A
PAGE 93 OF 103

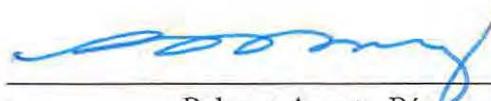
Non-Applicable Requirement	Regulation	Basis
Standards of Performance for Stationary Spark Ignition Internal Combustion Engines	Federal 40 CFR, Part 60, Subpart JJJJ	These are not spark ignition internal combustion engines

Section IX - Permit Approval

By virtue of the authority conferred upon the Environmental Quality Board by the Environmental Public Policy Act, Law No. 416 of September 22, 2004, as amended, and after verifying the administrative record and compliance with the Uniform Administrative Procedure Law, Law No. 170 of August 12, 1988, as amended, the Clean Air Act, Environmental Public Policy Act and the Regulation for the Control of Atmospheric Pollution of Puerto Rico, the Environmental Quality Board approves the permit subject to the terms and conditions herein established.

In San Juan, Puerto Rico, today, July 15, 2016.

ENVIRONMENTAL QUALITY BOARD



Rebeca Acosta Pérez
Vice President



Weldin F. Ortiz Franco
President

ABBVIE, LTD.
BARCELONETA, P.R.
PFE-TV-2833-09-1096-0011-A
PAGE 94 OF 103

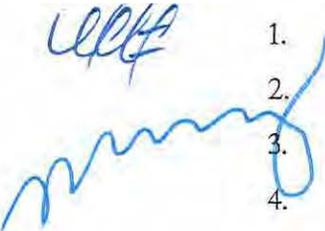
APPENDIXES

Appendix I - Definitions y Abbreviations

I. Definitions:

1. **Act** - Clean Air Act, as amended, *42 U.S.7401, et seq.*
2. **Administrator** - Administrator of the Federal Environmental Protection Agency and its authorized representative or the Administrator of a State Agency for Air Pollution Control.
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/or entity to which the Environmental Quality Board of Puerto Rico has issued an Operating Permit for an Emission Source covered under Title V.
6. **Title V** - Title V of the Federal Clean Air Act (*42 U.S.C. 7661*).

II. ABBREVIATIONS

- 
1. **ASTM** - American Society for Testing and Materials
 2. **BACT** - Best Available Control Technology
 3. **bkW** - brake kilowatts
 4. **Btu** - British Thermal Unit
 5. **CAM** - Compliance Assurance Monitoring
 6. **CC** - Comparable Fuel
 7. **CFR** - Code of Federal Regulations
 8. **CO**-Carbon Monoxide
 9. **CO₂** - Carbon Dioxide
 10. **CO₂e** - Carbon Dioxide Equivalent
 11. **EPA**-Environmental Protection Agency
 12. **EQB** - Puerto Rico Environmental Quality Board

13. **EU** – Emission Unit
14. **g** – grams
15. **gal** – gallons
16. **gph** – gallons per hour
17. **hr** – hour
18. **HAP** – Hazardous Air Pollutants
19. **HC** – Hydrocarbons
20. **hp** – horsepower
21. **l** – liter
22. **lb** – pounds
23. **LPG** – Liquid Petroleum Gas
24. **MMBtu** –Millions Btu
25. **NAAQS**- National Ambient Air Quality Standards
26. **NESHAP** – National Emission Standards for Hazardous Air Pollutants
27. **NO_x** –Nitrogen Oxides
28. **PM** – particulate matter
29. **PM₁₀**- Particulate matter with a particle which diameter has an aerodynamic mass size equal to or less than (10) microns
30. **ppm** – parts per million
31. **PSD** – Prevention of Significant Deterioration
32. **RCAP**-Regulations for the Control of Atmospheric Pollution of the Environmental Quality Board
33. **RI** – Interpretative Resolution
34. **RICE** –Reciprocating Internal Combustion Engine
35. **SIC**- Standard Industrial Classification
36. **SO₂** – Sulfur Dioxide
37. **ton** – ton
38. **tpa** – tons per year
39. **VOC**-Volatile Organic Compound
40. **wt** – weight

alt
my

Appendix II – Emission Units with their respective emission points

A. Pharmaceutical Plant

Description	Characteristic	Emission Point	Control Device
EU-5			
<i>Fluid Bed Dryer T-6</i>	Capacity of 600L	EU5-P1	Scrubber SC-25-9 with an efficiency of 99% for ethanol
Gral 600	Capacity of 600 L	EU5-P2	Scrubber SC-25-2 with an efficiency of 95% for ethanol
<i>Potent Drug Module</i>	Process 8,200 lbs/year of ethanol	EU5-P7	Rotoclone Scrubber (SC-25-3)
<i>Compressing Fette (3090)</i>	1,396.8 kg/batch and 697 batch/year	EU5-P12	DC-14C-4801
<i>Bohle Blender</i>	1,350.2 kg/batch and 697 batches/year	EU5-P15	Rotoclone Scrubber with a PM removal efficiency of 95%
<i>Alpine Mill</i>	1,409.5 kg/batch and 697 batches/year	EU5-P16	Rotoclone Scrubber with a PM removal efficiency of 95%
EU-6			
Day Mixer	Capacity of 200 gallons	EU-6-P4	SC-25 and SC-25-B with a 95% efficiency for ethanol
Tunnel Dryers	Process 204,186 lbs/year of ethanol	EU6-P7	SC-6 with a 95% efficiency for ethanol
13 Solution Tanks	Used for tablet coatings (Pressure Vessels)	EU6-P-8 & 9	N/A ¹⁷
Two accelacotas 60" (previously 48")	N/A	EU6-P10	SC-48 ¹⁸

¹⁷ Pressure vessels

¹⁸ Efficiency of 99% for ethanol (Coating products that do not contain acetone) and 67% for ethanol (Products

Description	Characteristic	Emission Point	Control Device
Two accelacotas 60" (previously 48")	1,581 kg/batch and 697 batches/year	EU6-P11 EU6-P12	DC-38 DC-39 (95% efficiency)
Two accelacotas 60"(PR-14)	Process a maximum of 1,581.8 kg/batch and 697 batches/year.	EU6-P13 EU6-P16	DC-16 DC-18
Two Accelacotas 60"(PR14)	N/A	EU6-P14 and P15	SC-16 and SC-18 ¹⁹
EU-7			
Gral 1200	Capacity of 1,200 l	EU7-P2	SC-20 (95%)
Two Accelacotas 60"(PR-14A)	N/A	EU7-P4 EU7-P5	SC-27 ²⁰ SC-28
<i>Particle Coater</i>	Process 447,346 lbs/year of ethanol	EU7-P9	SC-25 and SC-25B with a 93% efficiency for ethanol
<i>Fluid Bed Dryer T-8</i>	Capacity of 1,200 L	EU7-P10	SC-22 and SC-22B (99% efficiency for ethanol)
48 solution tanks in PR-14 ²¹	<i>Pressure Vessel</i>	EU7-P13	N/A

6212, 6214, 6215)

¹⁹ 99% efficiency for ethanol (Coating products that do not contain acetone) and 67% for ethanol (Products 6212, 6214, 6215)

²⁰ 99% efficiency for ethanol (Coating products that do not contain acetone) and 67% for ethanol (Products 6212, 6214, 6215)

²¹ The construction permit includes 48 solution tanks. However, the Title V permit application only included 30 tanks.

B. Combustion units

1. Boilers

Emission Unit	Emission Point	Boiler ID	Capacity (MMBtu/hr)	Applicable Regulation		
				PSD	40 CFR Part 60 Subpart Dc	40 CFR Part 63 Subpart JJJJJ
EU-8	EU8-P1	101	50.8	No	Yes	Yes
EU-8	EU8-P2	102	50.8	No	Yes	Yes
EU-10	EU10-P1	1	50	Yes	No	Yes
EU-10	EU10-P2	4	59	No	Yes	Yes
EU-10a	EU10a-P1	1a	10.03 (300 hp)	No	Yes	Yes
EU-10a	EU10a-P2	2a	10.03 (300 hp)	No	Yes	Yes
EU-10a	EU10a-P3	3a	10.03 (300 hp)	No	Yes	Yes

Legend: D = Diesel

2. Internal Combustion Engine

Emission Unit	Engines	ID	Capacity (hp)	Fuel Consumption (gph)	Type
EU-9	EU-9	--	28,463	1,200	Cogen
EU-12	EU-12	--	2319 ²²	131	G
EU-26	EU26-P1	PR64	1093	55	G
	EU26-P2	AB07	2,520	120	G
	EU26-P3	PR14	350	15.4	G
	EU26-P4	PR25	590	29.2	G
	EU26-P5	PR22	670	37	G
	EU26-P6	#1 PR8	320	16	FP
	EU26-P7	#2 PR8	320	16	FP
	EU26-P8	AB12	481	22.4	FP
	EU26-P9	PR35 (84225)	670	37	G
	EU26-P10	PR22 (84226)	670	37	G
	EU26-P11	ABL#1	2,682	135.6	G

²² 1,730 bKW

	EU26-P12	ABL#2	402	22.7	G
	EU26-P13	ABL#3	2937	138.9	G
	EU26-P14	--	67	3.9	G
	EU26-P15	--	50	3.3	G

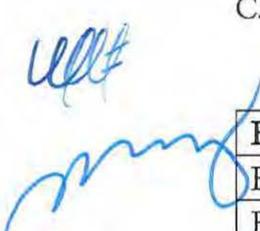
Legend:

FP - Fire Pump

G - Electricity Generator

Cogen - Steam and Electricity cogeneration unit

C. Storage Tanks, EU-16



Emission Unit	Emission Point	Capacity (gallons)
EU-16	EU16-P1	11,300
EU-16	EU16-P2	7,500
EU-16	EU16-P3	7,500

Appendix III - Pollutants subject to the PSD permit and BACT summary for AbbVie, Ltd., Cogeneration Facility

Emission Facility	PSD affected pollutant	BACT Limitations	BACT
Diesel Engine (20.2 MW)	NOx	Emissions shall not exceed the level proposed in the New Source Performance Standards (NSPS) for stationary internal combustion engines (40 CFR Subpart FF). Water to fuel ratio shall be at least 0.32.	Redesign of fuel injector nozzle; reduce turbo-charger output; manifold air cooling; and water injection.
	PM	Emissions shall not exceed 0.56 grams per horsepower hour (g/hp/hr)	Utilization of proper design and maintenance
<i>UEB</i> <i>smf</i>	HC	Emissions shall not exceed 0.7 (g/hr/hr)	Utilization of proper design and maintenance
	CO	Emissions shall not exceed 0.6 (g/hp/hr)	Utilization of proper design and maintenance
	SO ₂	Use of fuel oil containing no greater than 2.0% ²³ sulfur by weight.	Use low sulfur fuel oil
	Visible emissions	Opacity shall not exceed 20%	---

²³ The permit PFE-09-1110-0587-I-II-C requires a fuel with a maximum sulfur content of 1.0% by weight.