



REGION 3

PHILADELPHIA, PA 19103

Report Title: Clean Air Act Inspection of Jefferson Frankford Hospital
Inspection Date(s): November 14, 2024
Regulatory Program(s): SIP, NESHAP, NSPS

Company Name: Same as below
Facility Name: Jefferson Frankford Hospital
Facility Location: 4900 Frankford Avenue
Philadelphia, PA 19124
Latitude: 40.020291 **Longitude:** -75.08043
County/Parish: Philadelphia

AFS/ICIS-Air Number: AIR PAPAM0004210108046
Permit Number: OP17-000023
NAICS Code: 622110 **SIC:** 8062
DSB ID #: ECAD-6142

Facility Representatives: Timothy Mang, Facilities Manager **Point of Contact** ☒
Phone: 267-809-5567 Email: Timothy.Mang@jefferson.edu
See Attachment 2 for other Facility Representatives

EPA Inspectors:

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Phone: 304-234-0264 Email: Deluca.Dean@epa.gov
Stafford Stewart, Environmental Engineer, 3ED21
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State/Local Inspectors:

Amanda Tan, Environmental Engineer
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EPA Lead Inspector

Signature

Dean Deluca

Date

1060 Chapline Street, Suite 303
Wheeling, WV 26003-2995

Supervisor
Signature

Kristen Hall

Date

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I. Introduction

The United States Environmental Protection Agency (EPA) conducted a Clean Air Act (CAA) inspection at Jefferson Frankford Hospital (Frankford or Facility) to verify compliance with applicable State and Federal regulations. The Philadelphia Air Management Services (AMS) was notified of the inspection on October 29, 2024, via email. On November 8, 2024, EPA notified the Facility of the planned inspection via phone and email. EPA emailed a list of records for review to Timothy Mang, prior to the inspection (see Attachment 1). These records are listed in the Records Review section of the report.

The inspection included an evaluation of the Facility's processes and its compliance with the CAA. All information included in this report is the result of statements by the Facility representatives, materials shown to the inspectors by the Facility representatives, and/or documents provided by the Facility representatives to the inspectors at the time of, or subsequent to, the inspection. In addition, information gathered prior to the inspection from a review of EPA and State records may be included in Section A. Summary of the Facility.

A. Summary of the Facility

The Facility is located at 4900 Frankford Avenue, Philadelphia, PA 19124. The Facility is a hospital which operates under the NAICS Code 622110: General Medical and Surgical Hospitals (SIC Code 8062). It merged with the Jefferson Health System and currently operates under its umbrella. They do not manufacture anything on site but have diesel emergency generators and boilers to provide emergency backup power and comfort heat and hot water.

The Facility received a Natural Minor Operating Permit (OP17-000023) from AMS issued on June 25, 2018. This issued permit has an expiration date of June 25, 2023. The Facility submitted a renewal application on December 22, 2023.

Frankford is classified as minor for all criteria pollutants and hazardous air pollutants. The Facility is subject to, or potentially subject to the following federal regulations:

- 40 CFR Part 63 Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
- 40 CFR Part 63 Subpart JJJJJ – National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources
- 40 CFR Part 60 Subpart IIII – New Source Performance Standards for Stationary Compression Ignition Internal Combustion Engines

B. Inspection Opening Conference

At 8:25 AM on November 14, 2024, EPA inspectors arrived at the Facility for a CAA Inspection and conducted a brief opening conference. Frankford was represented by Timothy Mang (Facilities

Manager) and Jennifer Miller (Director of Facilities). Also, Amanda Tan (AMS) was present. EPA inspectors, Dean DeLuca and Stafford Stewart and Owen Ehret, presented their credentials and explained the purpose of the visit was to conduct a CAA inspection to determine compliance with their permit and any applicable regulations. Additionally, EPA informed the facility representatives of their right to claim any confidential business information (CBI). At that time, Frankford did not claim any photos or documentation as CBI.

II. Site Activity/Process Description

A hospital began operating at this location in the late 1800's but the current hospital was built in 1986. The hospital used to be owned by Aria, but it is currently owned by Jefferson Health as Frankford Hospital merged with Jefferson Health System in 2016 and is currently operating under their umbrella. The hospital operates twenty-four hours a day and seven days a week and has approximately 260,000 interior sq. ft. Frankford stated they have approximately 1,500 full time employees while Jefferson Health now has approximately 65,000 employees after a recent acquisition.

The Facility operates two 10.461 MMBtu/hour Cleaver Brooks boilers built in 1987 for comfort heat and hot water. The boilers are permitted to combust both natural gas and #2 fuel oil. However, based on operation, they are gas-fired boilers as defined in Section 63.11237 of 40 CFR Part 63 Subpart JJJJJ and would have to comply with the applicable requirements of 40 CFR Part 63 Subpart JJJJJ if Frankford used #2 fuel oil more than forty-eight hours in a year. The Facility conducts annual maintenance testing using both fuel types for a small amount of time each year. The Facility also currently operates two 750-kW diesel fired emergency generators to provide emergency power to the Facility in the event of a loss of utility power. One of the generators was installed in 1990 and the other was installed in 2011. The Facility also decommissioned a 250-kW emergency generator in July 2024 which is still on the property and removed an incinerator from the property in October 2022 which hadn't been used since at least 2009.

The Facility has two separate incoming electricity lines that provide power from the local utility. If one of the lines fails, electrical load automatically transfers almost instantly to the other line. In this scenario, the second utility line provides power to the Facility and the generators are not required to operate. Currently, the emergency generators have only been used for maintenance and testing. Frankford operates the generators for approximately thirty to sixty minutes every month and has a third party, Foley Caterpillar, conduct their annual testing. Foley Caterpillar also conducts the preventative and unscheduled maintenance on the generators. In addition, the Facility conducts a four-hour test every three years to ensure proper operation in the event of an emergency. Frankford does not conduct emissions testing on the generators.

Frankford also has three underground fuel storage tanks: two 10,000-gallon #2 fuel oil tanks and a 3,000-gallon diesel tank. The Facility stated they have not had a #2 fuel oil delivery in at least fifteen

years due to their low usage. The Facility stated they do not have any operations that fall under 40 CFR Part 82 Subpart F for refrigerants. The Facility also stated they do not have any paint booths, ethylene oxide sterilizers, or welding supplies.

The opening conference concluded at 9:08 AM.

III. Observations

EPA inspectors were led on a walkthrough of the Facility at 9:10 AM by Timothy Mang (Facilities Manager) and Jennifer Miller (Director of Facilities) of Frankford and Amanda Tan (AMS) was also present for the walkthrough. EPA inspectors noted photos would be taken during the Facility walkthrough (Attachment 2).

The inspection team first went to the two boilers located in the basement. On the way to the boilers, the inspection team quickly observed the area in which Frankford stores chemicals used to fight Legionella in the cooling tower water. These chemicals were stored in three closed containers of approximately fifty-five-gallons. The boilers are both Cleaver Brooks Model CB-200-250 boilers dated July 22, 1987, with an input rating of 10,461,000 BTU/hour for natural gas and 74.5 gallons per hour for oil. The Facility stated they only operate one boiler at a time. At the time of the inspection, Boiler #1 was operating at 70psi and approximately 300°F and Boiler #2 was not operating.

The inspection team then proceeded to the rooftop to observe the main emergency generator and observed the permanent nameplate which showed the following information: 750 kW Kohler model 750ROZ71 with a Cummins engine #33113025 which was manufactured in October 1987. At the time of the inspection, the emergency generator showed 1,252.0 total hours of operation.

Following the rooftop, the inspection team observed the location of the underground storage tanks. The three storage tanks were located under a loading ramp. The inspection team did not observe any spill buckets or fill pipe caps for the #2 fuel oil tanks, only the diesel tank. The Facility stated that would have to drill through the concrete if they were to ever need a delivery of #2 fuel oil.

Lastly, the inspection team observed the decommissioned Onan emergency generator and the garage Caterpillar emergency generator. The Onan generator was in a white shed adjacent to the Caterpillar generator. The inspection team observed the cut power lines on the Onan generator indicating it had been decommissioned. The Caterpillar generator had a taped-on label indicating it was 905 kW (1214 Hp), had a displacement of 27.0L, and was in the ACPXL27.0ESW engine family from 2010. The inspection team also observed other labels (one was taped-on, and one was a hard plate) showing the Caterpillar engine was model C27 serial #MJE01900 with 797.2 kW (1,069 Hp). At the time of the inspection, the digital screen showed there were a total of 485.3 hours of operation.

The walkthrough concluded at 10:29 AM.

IV. Records Review

EPA did not conduct a records review while onsite. EPA requested the below documents in the November 8, 2024, email to Frankford (see Attachment 1). Records were provided on November 15, 2024, the day after the inspection, by Timothy Mang. Below are the records requested:

1. Provide a plot plan of the facility available in hardcopy for the inspection opening conference which identifies each processing unit, control device, engine, tank, etc. for the facility.
2. Provide facility-wide potential to emit for NO_x, CO, and PM emissions.
3. Provide the date the facility commenced operations and the date(s) of any ownership change (s), if applicable.
4. Provide the address of any other locations owned and/or operated by Frankford Hospital, if any, or any parent company.
5. Provide a description of any process, equipment, or material changes which may have increased or decreased emissions since the last permit issuance in June 2018.
6. Provide records of any visible emission observations for the boilers and generators from January 2021 – October 2024.
7. For each fire pump, generator, or engine located onsite, provide:
 - The make and model of the unit;
 - The size of the unit (HP and displacement (L));
 - Fuel amount and type combusted monthly from January 2021 - October 2024;
 - Hours of operation monthly from January 2021 - October 2024 along with the reason for usage.

In addition, EPA requested the following records or information while onsite and did not collect any hard copy records.

1. Emergency generator hours of operation from January 2021 – October 2024.
2. Most recent ULSD (ultra-low sulfur diesel) delivery and any sampling tickets.
3. Picture of the most recent maintenance record sheet located at the boilers for each of the two boilers.
4. Additional unit specifications information from the purchase of the garage emergency generator.

V. Closing Conference

At 10:43 AM, EPA inspectors, Timothy Mang (Facilities Manager), Jennifer Miller (Director of Facilities), Cindy Derry (Facilities Compliance Manager), and Amanda Tan (AMS Environmental Engineer) had a brief closing conference to ask additional questions and discuss observations. The EPA inspectors noted that the investigation is on-going, and any areas of concern identified in the final report do not necessarily reflect a violation or deviation, rather, they are areas that will require further investigation. EPA also noted that they would issue an inspection report within 60 days, with a copy to the State. Simultaneously, EPA will perform a detailed review of records and may have additional questions. The inspection concluded at 10:53 AM.

The following have been identified as potential issues during the inspection. They are issues that require either further investigation by EPA or additional information or explanation by Frankford.

- The emissions control label on the Caterpillar garage emergency generator was not a permanent label as stated in 40 CFR Part 60 Subpart IIII.
- The Caterpillar garage emergency generator could potentially be of a different size than that listed in the Philadelphia AMS air permit for the Facility as one temporary label on the generator shows 905kW, another removable label on the generator shows 797.2kW, and the permit states 750kW.

VI. List of Attachments

- | | |
|---------------|---|
| Attachment 1: | Email correspondence to Timothy Mang of records requested to review during inspection |
| Attachment 2: | Inspection Sign-In Sheet |
| Attachment 3: | Photo Log |

DeLuca, Dean

From: Deluca, Dean
Sent: Friday, November 8, 2024 10:11 AM
To: timothy.mang@jefferson.edu
Subject: EPA CAA Inspection of Jefferson Frankford Hospital

Mr. Mang,

Per our conversation this morning, EPA is going to conduct a Clean Air Act (CAA) inspection of Jefferson Frankford Hospital on November 14, 2024. EPA will have three inspectors onsite to conduct the inspection, which will include an opening conference, site walkthrough (including photos and potentially FLIR monitoring), and record review/closing conference. AMS also plans to have an inspector onsite for the inspection. EPA should arrive at the facility on the morning of Thursday, November 14, 2024 at 8:15AM. Please see the below list of records EPA would like Frankford Hospital to provide. I will include a separate email with an optional link for Frankford Hospital to upload documents using EPA's goanywhere file sharing site. As I mentioned on the phone, I would like to have a hardcopy of the facility plot plan available at the time of the inspection. You indicated that the required PPE for the facility includes safety glasses and hearing protection. Let me know if you have any questions about the inspection or record request.

1. Provide a plot plan of the facility available in hardcopy for the inspection opening conference which identifies each processing unit, control device, engine, tank, etc. for the facility.
2. Provide facility-wide potential to emit for NO_x, CO, and PM emissions.
3. Provide the date the facility commenced operations and the date(s) of any ownership change (s), if applicable.
4. Provide the address of any other locations owned and/or operated by Frankford Hospital, if any, or any parent company.
5. Provide a description of any process, equipment, or material changes which may have increased or decreased emissions since the last permit issuance in June 2018.
6. Provide records of any visible emission observations for the boilers and generators from January 2021 – October 2024.
7. For each fire pump, generator, or engine located onsite, provide:
 - The make and model of the unit;
 - The size of the unit (HP and displacement (L));
 - Fuel amount and type combusted monthly from January 2021 - October 2024;
 - Hours of operation monthly from January 2021 - October 2024 along with the reason for usage.

Thanks, Dean

Dean DeLuca
Physical Scientist, Air & RCRA Branch
Enforcement & Compliance Assurance Division (ECAD)
U.S. Environmental Protection Agency, Region III
DeLuca.Dean@epa.gov

Facility: Frankford Hospital

Facility: Frankford

Date: 11/14/2024

[illegible]

Attachment 3:

PHOTO LOG

Facility: Frankford Hospital

Location: 4900 Frankford Ave Philadelphia, PA 19124

Inspection Date: November 14, 2024

EPA Inspector(s): Dean DeLuca, Stafford Stewart, Owen Ehret

Photographer: Owen Ehret



Photo Number: 28

Photo Description: Chemical Storage



Photo Number: 29

Photo Description: Boilers #1 and #2

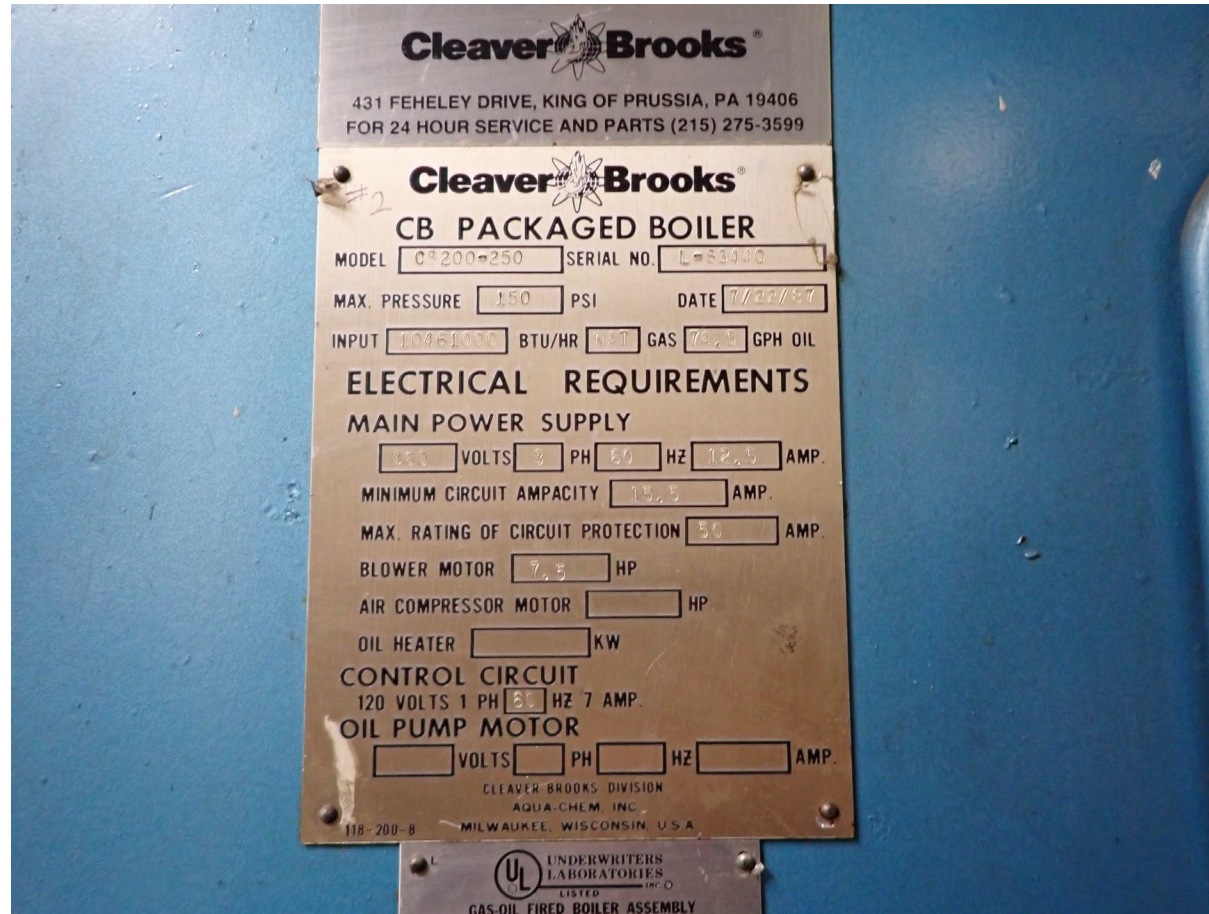


Photo Number: 30

Photo Description: Boiler #1 Name Plate



Photo Number: 31

Photo Description: Boiler #2 Name Plate



Photo Number: 32

Photo Description: 750 kW Kohler Generator



Photo Number: 33

Photo Description: Non-resettable hour-meter on Kohler Generator



Photo Number: 34

Photo Description: Nameplate on Kohler Generator



Photo Number: 35

Photo Description: Engine Nameplate for Kohler Generator



Photo Number: 36

Photo Description: Underground Storage Tank A



Photo Number: 37

Photo Description: Underground Storage Tank Tank B



Photo Number: 38

Photo Description: Fill Tank



Photo Number: 39

Photo Description: Underground Storage Tank Diesel



Photo Number: 40

Photo Description: Onan Generator in White Trailer (disconnected) and Operational Caterpillar Generator



Photo Number: 41

Photo Description: Disconnected lines of Onan Generator



Photo Number: 42

Photo Description: Nameplate on Caterpillar Generator



Photo Number: 43

Photo Description: Another picture of nameplate on Caterpillar Generator



Photo Number: 44

Photo Description: Labels on Caterpillar Generator

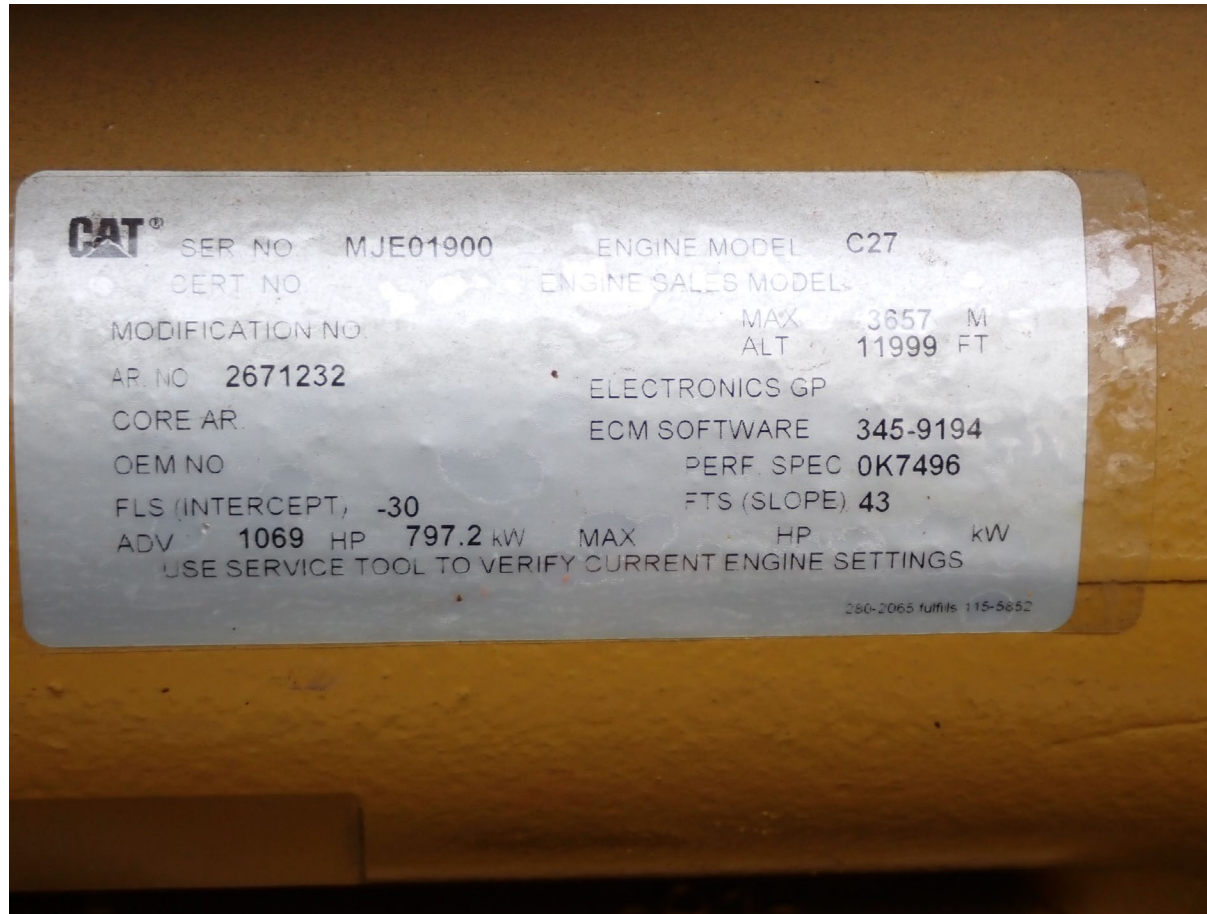


Photo Number: 45

Photo Description: Close-up Picture of Label on Caterpillar Generator

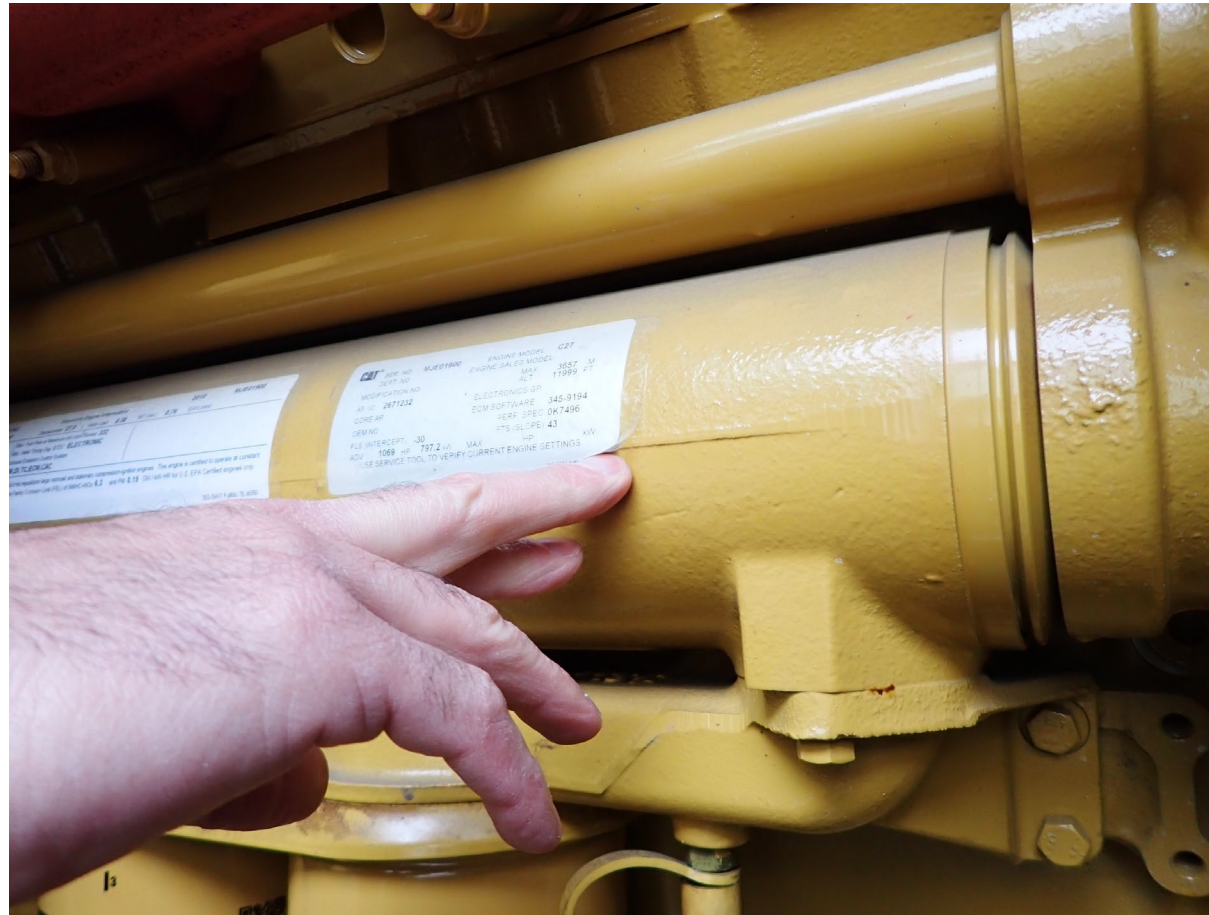


Photo Number: 46

Photo Description: Removable Emission Control Label



Photo Number: 47

Photo Description: Hard plate label on Caterpillar Generator