



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 1

**5 POST OFFICE SQUARE, SUITE 100
BOSTON, MASSACHUSETTS 02109-3912**

Clean Air Act Inspection Report

Drafted: October 3, 2023

Finalized: October 16, 2023

EPA Inspector: Davianna Vasconcelos, Environmental Engineer, Air Compliance Section /DMV/

EPA Reviewer: Darren Fortescue, Manager, Air Compliance Section /DEF/

Date of Inspection: September 14, 2023

Facility Name: OFS Fitel LLC, d/b/a Optical Fiber Solutions "OFS"

ICISAir ID#: MA0000002511800199

Facility Location: 50 Hall Road Sturbridge, MA 01566

Mailing Address: Same as physical address

Disclaimer:

Unless otherwise noted, this report describes conditions at the facility/property as observed by EPA inspector(s), and/or through records provided to and/or information reported to EPA inspector(s) by facility representatives and as understood by the inspector(s). This report may not capture all operations or activities ongoing at the time of the inspection. This report does not make final determinations on potential areas of concern. Nothing in this report affects EPA's authorities under federal statutes and regulations to pursue further investigation or action.

Inspection Attendees:

Name	Title	Organization
Davianna Vasconcelos	Environmental Engineer	EPA R1
Paul Watson	Environmental Regulatory Compliance Engineer	OFS
Matt Tebo	Maintenance Trades Supervisor	OFS
Mark Trumbull	Plant Service Manager	OFS

Facility/Process Description:

OFS Fitel LLC, (“OFS”), located at 50 Hall Road Sturbridge, Massachusetts was established in approximately 1986 as SpecTran, transitioned to Lucent Tech in approximately 2000, and transitioned to OFS in approximately 2002. OFS is currently owned by Furukawa Electric Company (FEC) based in Japan.

The facility manufactures glass optical fibers using a process flow of modified chemical vapor deposition, glass assembly, fiber draw, and quality control. The facility also houses office and warehouse space.

OFS operates a Caterpillar emergency generator and a Clarke Detroit Diesel fire pump engine at the facility (See Table 1). Both engines are compression ignition and are fueled with ultra-low sulfur diesel.

OFS operates two Cleaver Brooks boilers at the facility (See Table 2). Both boilers are fueled with propane.

Number of Employees and Working Hours:

OFS has approximately 90 to 100 employees.

The facility is staffed 24 hours a day, 7 days a week. The facility shuts down for select holidays and semi-annual maintenance events.

Potentially Applicable Clean Air Act Requirements:

- 40 CFR Part 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
- 40 CFR Part 60, Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
- 40 CFR Part 63, Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (“Subpart 4Z”)
- 40 CFR Part 63, Subpart JJJJJ – National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources

Previous Enforcement Actions:

A “Detailed Facility Report” from EPA’s Enforcement and Compliance History Online database indicates that there have been no informal or formal enforcement actions with respect to the Clean Air Act taken against OFS with respect to this facility in the past five years.

Opening Conference:

On September 14, 2023, at 8:55 am, Davianna Vasconcelos arrived at the facility located at 50 Hall Road Sturbridge Massachusetts and met with Paul Watson. Mr. Watson led Ms. Vasconcelos to a conference room and met Matt Tebo. Ms. Vasconcelos initiated an opening

conference by presenting her credentials and explaining the purpose of the inspection was to review stationary source at the facility, specifically the engines and boilers. Mark Trumbull joined the opening conference.

Mr. Trumbull said the emergency generator is used for the safety systems in the building and is not rated to power the entire building. Mr. Trumbull said that the generator is for emergency use. Mr. Trumbull said the facility does participate in a demand response program by shedding part of the power load being pulled from the grid. Mr. Trumbull said the use of the generator to provide power is not included in the demand response contract. Mr. Trumbull explained OFS receives an email, typically 24 hours in advance, to reduce the power being used in the facility. Mr. Trumbull explained that OFS does receive financial compensation for this process.

Facility Tour:

Mr. Watson and Mr. Tebo led Ms. Vasconcelos through the facility to the following areas:

- Office space,
- Manufacturing areas,
- Removed boilers area,
- Warehouse area,
- Fiber sizing and cutting area,
- Fiber testing area,
- Fiber coating area,
- Fiber inking area,
- Scrubbers,
- Fire Pump,
- Emergency Generator, and
- Boilers.

Ms. Vasconcelos viewed and recorded the information for the generator engine and fire pump engine which can be found in Table 1. Ms. Vasconcelos viewed and recorded the information for the boilers which can be found in Table 2.

Records Reviewed:

Ms. Vasconcelos reviewed the following records onsite:

- Diesel fuel delivery records for the generator engine and fire pump engine. Ms. Vasconcelos noted the records described that the delivered diesel had a sulfur content of 15ppm and was described as ultra-low sulfur diesel.
- Maintenance records for the Caterpillar engine. Ms. Vasconcelos noted that Caterpillar was responsible for maintenance events occurring twice a year. Ms. Vasconcelos noted that oil and filters are replaced once a year. Ms. Vasconcelos noted monthly test runs are performed on the Caterpillar engine.

- Maintenance records for the fire pump engine. Ms. Vasconcelos noted OFS was responsible for a yearly maintenance event which included oil and filter replacement. Ms. Vasconcelos noted weekly test runs are performed for the fire pump engine.
- Emissions tracking spreadsheet for boiler use.

Additional Records Received and Reviewed:

Ms. Vasconcelos received the following records prior to inspection via email from Mr. Watson:

- Fuel Records including diesel delivery receipt and invoice;
- Engine Nameplate Photos - Fire pump engine and Generator engine;
- Massachusetts Office of Technical Assistance and Technology (OTA) Report dated May 6, 2015; and
- MassDEP Air Quality Plan Approval dated June 12, 2018.

Ms. Vasconcelos received the following records during inspection via hard copy from Mr. Trumbull:

- List of equipment powered by the emergency generator during an emergency event; and
- Overhead photo of building with phases and years identified.

Ms. Vasconcelos received the following records following inspection via email from Mr. Watson:

- Demand Response Contract (email attachment); and
- Facility Square Footage and Breakdown (email content).

Closing Conference:

Ms. Vasconcelos, Mr. Watson, Mr. Tebo, and Mr. Trumbull reviewed records. Ms. Vasconcelos asked to review run logs for the generators to which Mr. Tebo said run logs are not kept. Mr. Watson said run hours are noted during each maintenance event. Ms. Vasconcelos recommended OFS keep run logs for the engines as the method is a typically standard practice.

Ms. Vasconcelos requested a copy of the demand response contract be shared to ensure the generator was not included. Mr. Watson said he will send a copy via email after the inspection.

Ms. Vasconcelos recommended OFS review potentially applicable regulations, including Subpart 4Z and be aware of the associated requirements. Ms. Vasconcelos recommended OFS review the manufacture maintenance requirements for their emissions sources.

Post-Inspection:

Mr. Watson emailed Ms. Vasconcelos following the inspection and said he tried to get the Certificates of Conformity for the generator engine through the “EPRC Request Portal/Emissions Regulations and Conformance” website. Mr. Watson forwarded Ms. Vasconcelos an emailed response from the website which stated the following:

“According to our records, 3412 engine serial number 81Z25466 was manufactured in 2000. US EPA stationary requirements do not apply to engines built before April 1, 2006. Engine is not EPA certified, therefore Emission certificate & Emission details are not available.”

Mr. Watson included in his email that he called the Clarke Engine Company, and they offered to do some research on if they can locate a copy of the Certificate of Conformity for the fire pump engine. Mr. Watson said that because the fire pump engine was built before April 1, 2006, that there may not be an emission certificate available. Ms. Vasconcelos thanked Mr. Watson for his efforts and noted in the Table 1 that Certificates of Conformity were not applicable.

Table 1: Engine Information

	Generator Engine	Fire Pump Engine
Manufacturer	Caterpillar	Clarke Detroit Diesel – Allison, Inc
Model Number	3412	PDFP06YT L1212F
Serial Number	81Z25466	U744383G
Manufacture Date	11/2000	11/2000
Installation Date	2001	2001
Power	896 HP	133 HP
Fuel Type	Diesel	Diesel
Hour Meter (Type and Reading)	Y – digital – 210 hr	Y – ticker – 327.55 hr
Certificates of Conformity	Not Applicable	Not Applicable
Emergency Engine (Y/N)	Y	Y
Demand Response (Y/N)	N	N
Purpose and Equipment	Emergency Equipment	Fire Suppression System

Table 2: Boiler Information

	Boiler_01	Boiler_02
Manufacturer	Cleaver Brooks	Cleaver Brooks
Model Number	CB1700400125	CB1700400125
Serial Number	OL00395	OL100396
Manufacture Date	2000	2000
Installation Date	2001	2001
Size/Rating	16,329,300 Btu	16,329,300 Btu
Fuel Type	Propane	Propane
Purpose (Domestic, Heating, Other)	Heating	Heating