



REGION 3

PHILADELPHIA, PA 19103

Report Title: Clean Air Act Inspection of Tierpoint Valley Forge
Inspection Date(s): 12/10/2024
Regulatory Program(s): NSPS, NESHAP

Company Name: Tierpoint Pennsylvania Two, LLC
Facility Name: Tierpoint Valley Forge
Facility Location: 1000 Adams Ave
Norristown, PA 19403

Latitude: 40.1240436676778 **Longitude:** -75.41713766

County/Parish: Montgomery County

ICIS-Air Number: PA000752433
Permit Number: 46-00278
NAICS Code: 518210 **SIC:** 4911
DSB ID #: ECAD-107

Facility Representatives:	Point of Contact
Mike Cosgrove, Director of Operations	☒
Phone: 484-238-7081 Email: Mike.cosgrove@tierpoint.com	
Sarah Rose, Site Supervisor	☐
Phone: 484-686-9766 Email: Sarah.rose@tierpoint.com	

EPA Inspectors:

Steve Ott, Life Scientist, 3ED21
Phone: 215-814-2267 Email: Ott.steven@epa.gov
Bruce Augustine, Environmental Scientist, 3ED21
Phone: 215-814-2131 Email: Augustine.bruce@epa.gov
Kyle Krall, Environmental Engineer, 3ED21
Phone: 215-814-2156 Email: Krall.kyle@epa.gov
Owen Ehret, Life Scientist, 3ED21
Phone: 215-814-2129 Email: Ehret.owen@epa.gov

State/Local Inspectors:

Rosalee Jodziewicz, Air Quality Inspector

Phone: 484-250-7510

Email: rjodziewicz@pa.gov

Sean O'Connor

Phone: 484-250-7508

Email: seoconnor@pa.gov

EPA Lead Inspector

Signature

Steve Ott

Date

1600 John F Kennedy Blvd
Philadelphia, PA 19103-2852

Supervisor

Signature

Kristen Hall

Date

Table of Contents

I. Introduction.....	4
A. Summary of the Facility	4
B. Inspection Opening Conference.....	4
II. Site Activity/Process Description	5
III. Observations.....	5
IV. Records Review	6
V. Closing Conference	8
VI. List of Attachments	8

I. Introduction

The United States Environmental Protection Agency (EPA) conducted a Clean Air Act (CAA) inspection at Tierpoint Valley Forge (Tierpoint or Facility) to verify compliance with applicable State and Federal regulations. The Pennsylvania Department of Environmental Protection (PADEP) was notified of the inspection on November 25, 2024 via email. On December 6, 2024, EPA notified the Facility of the planned inspection via phone and email. EPA emailed a list of records for review to Mike Cosgrove, 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 1000 Adams Ave, Norristown, PA. This facility is a data center that stores data for various clients, across various industries. The facility provides space, electricity, and other services to approximately 450 clients. They are classified as a Computing Infrastructure Providers, Data Processing, Web Hosting, and Related Services with a NAICS code of 518210.

The Facility is a synthetic minor and received an operating permit (46-00278) from PADEP with an issuance date of April 4, 2023.

Tierpoint is classified as synthetic minor for Nitrogen oxides (NOx) and a minor source for all other criteria pollutants and hazardous air pollutants. The Facility is subject to, or potentially subject to the following federal regulations:

- 40 CFR Part 60 Subpart IIII: New Source Performance Standards for Stationary Compression Ignition Internal Combustion Engines
- 40 CFR Part 63 Subpart ZZZZ: National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

B. Inspection Opening Conference

At 09:00 on December 10, 2024, EPA inspectors arrived at the Facility for a CAA Inspection and conducted a brief opening conference. Tierpoint was represented by Mike Cosgrove - Director of Operations and Sarah Rose – Site Supervisor . Also, Rosalee Jodziewicz and Sean O'Connor, of PADEP, were present. EPA inspectors, Steve Ott, Bruce Augustine, Kyle Krall, 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, Mike Cosgrove didn't claim any photos or documentation as CBI.

II. Site Activity/Process Description

Tierpoint is a data center that stores data for approximately 450 clients. Tierpoint leases space inside of the data center to its clients, as well as supplying electricity and cooling for client's server racks. Tierpoint is a privately held company, which operates a total of 42 facilities throughout the United States. The property, 1000 Adams Ave, was purchased by DBSi in 2006 and the building was developed into a data center. In 2012 DBSi merged with Xand, and ultimately was purchased by Tierpoint in 2015, which remains the owner/operator of the property. Tierpoint – Valley Forge has approximately 20 employees, with staff onsite 24 hours a day, seven days a week, 365 days a year.

The facility operates six (6) non-emergency generators and three (3) emergency use generators, which are all diesel fired compression ignition engines. In 2019, Tierpoint entered into an agreement with PJM, the local regional electricity transmission organization, and thus permitted six of their engines as non-emergency use. The agreement does not obligate Tierpoint to operate their engines, nor does the Tierpoint sell energy to the energy grid. PJM, during periods of high demand, may request that Tierpoint reduces their load on the grid by operating the non-emergency engines. The agreement does have financial incentive for Tierpoint. The non-emergency generators are not operated for peak shaving purposes.

All engines are certified and are maintained by a third party (Premium Power Services). Additionally, engines are operated on a bi-weekly basis to verify readiness. Engines are not equipped with aftermarket emissions control devices such as Selective Catalytic Reduction to reduce emissions to the atmosphere. Each engine has a day tank, with engines 3-1, 3-2, and 3-3 having day tanks and are manifolded to a 30,000-gallon fixed roof diesel fuel tank located outdoors. Engines 1-1, 1-2, 1-3, 2-1, 2-2, and 2-3 each have a day tank but are not manifolded to the 30,000-gallon tank.

Tierpoint's synthetic minor operating permit (46-00278) limits emissions of nitrogen oxides by limiting the cumulative number of operating hours of all engines to 1,440 hours in any 12-consecutive month period.

The opening conference concluded at 10:00 AM.

III. Observations

EPA inspectors were led on a walkthrough of the Facility at 10:00 AM by Mike Cosgrove and Sarah Rose of Tierpoint and Rosalee Jodziewicz and Sean O'Connor of PADEP were also present for the

walkthrough. EPA inspectors noted photos would be taken during the Facility walkthrough (Attachment 2).

The walkthrough started with observation of a section of the data center that was representative of the facility. The approximately 10,000 ft² room housed several arrays of server racks secured by fencing. Mr. Cosgrove indicated that the facility was “power limited”, meaning the facility cannot expand further without also expanding electrical capacity from the grid. Currently, the facility has three (3) independent power services, which are not redundant and provide around 18,000 kilowatts. Inspectors were then lead through power distribution and uninterruptible power supply areas.

Generators 3-1, 3-2, and 3-3 were observed. The generators model, year, and hours meter are listed in the table below. Each generator’s engine had labels affixed stating “emergency use only” pursuant to 40 CFR § 60.4210(f). None of the engines were operating at the time of the inspection. Additionally, a drill press, chop saw, and grider were observed, although Tierpoint is not “primarily engaged” in metal fabrication activities. Afterwards, inspectors were brought to observe the 30,000 gallon fixed roof diesel tank. EPA inspectors observed multiple flanges on the tank using a FLIR GF320 infrared camera. Emissions were not observed from the tank using the FLIR camera during the inspection.

Generators 1-3, 1-1, 1-2, 2-1, 2-2, and 2-3 were observed and are each installed in their own structures outside of the data center. Additionally, each generator has a dedicated diesel fuel tank with a capacity of 2000 gallons and are not manifolded to the main 30,000 gallon tank. Make, model and hours were recorded from each engine and are included in the table below.

Source	Make	Model	Rating (HP)	Hours	Construction date mm-dd-yyyy
3-1	Cummins	QSK60-G6	2,922	194.1	03-07-2019
3-2	Cummins	QSK60-G6	2,922	496.7	02-27-2013
3-3	Cummins	QSK60-G6	2,922	492.1	02-27-2013
1-3	Cummins	QSKTA60-GE	2,922	760.9	09-04-2007
1-1	Cummins	QSKTA60-GE	2,922	901.2	11-23-2007
1-2	Cummins	QSKTA60-GE	2,922	911.5	11-22-2007
2-1	Cummins	QSKTA60-GE	2,922	803.8	05-08-2008
2-2	Cummins	QSKTA60-GE	2,922	753.7	05-08-2008
2-3	Cummins	QSKTA60-GE	2,922	606.3	05-14-2008

The walkthrough concluded at 11:00 AM.

IV. Records Review

The records review commenced immediately after the plant walkthrough at 11:08. EPA inspectors reviewed documents requested in the December 6, 2024, email to Mike Cosgrove (see Attachment 1).

Records were provided at the time of the inspection by Mike Cosgrove. Below are the records requested and what was provided:

1. Provide a copy of the most recent operating permit issued by PADEP. (Provided during inspection)
The facility provided their most recent PADEP operating permit
2. A list of engines and include: (Provided during inspection)
 - i. Make/model
 - ii. Date of installation;
 - iii. Date of construction;
 - iv. Type of fuel(s) combusted;
 - v. Power rating(HP, KW, MMBTU/hr);
 - vi. Monthly hours of operation for each unit, from January 2021 to present.
 1. Provide reason for engines runtime (i.e. Maintenance/testing, emergency use/power outage, grid power, etc)
 - vii. Make/model of control device, if applicable, including which pollutant is being controlled.
 - b. Fuel usage (gallons) on a monthly basis for any combustion equipment at the Facility (emergency generators, generators, fire pumps, etc.) from January 2021 to present.
 - c. Records of each tune-up conducted at each unit since January 2021.

Facility provided the requested list of engines, fuel consumption, and tune-up records.

3. Provide certificates of analysis for all diesel fuel/ fuel oil deliveries from January 2021 to present.

Fuel receipts were provided for the requested timeframe.

4. Any annual emissions calculations (if applicable) since 2021, including but not limited to:
 - a. Monthly rolling emissions of VOCs, HAPs and NOx for each process unit and facility wide along with supporting calculations for 2021-2024 (lbs/hr).

Facility provided emission statements for calendar years 2021, 2022, and 2023 were provided, as well as calculations.

5. Provide copies of any initial notifications, compliance reports, and/or periodic reports submitted to either EPA or PADEP pursuant to applicable regulations under 40 C.F.R. Part 60 and 63.

Facility provided annual emissions statements were provided for calendar years 2021, 2022, and 2023.

6. If applicable, provide the risk management plan in place for diesel fuel tanks.

A risk management plan was not required, though an SPCC plan was provided.

All physical documents requested were available to review. A GoAnywhere Link was provided to the facility and the following electronic records were also provided:

1. Maintenance records for calendar year 2021 to most recent
2. Emission statements for calendar year 2021-2023
3. Fuel receipts for calendar year 2021 to most recent

All records requested to be submitted electronically were provided.

V. Closing Conference

After the records review, EPA inspectors, Mike Cosgrove, Sarah Rose, and Rosalee Jodziewicz and Sean O'Connor of PADEP 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 11:47AM.

VI. List of Attachments

- | | |
|---------------|--|
| Attachment 1: | Email correspondence to Mike Cosgrove of records requested to review during inspection |
| Attachment 2: | Photo Log |
| Attachment 3: | Sign-in sheet |

