



REGION 3

PHILADELPHIA, PA 19103

Report Title: Clean Air Act Inspection of Equinix
Inspection Date(s): 11/28/2023
Regulatory Program(s): NSPS, SIP

Company Name: Equinix LLC
Facility Name: Equinix
Facility Location: 401 N. Broad Street
Philadelphia, PA 19108
Latitude: 39.95958 **Longitude:** -75.16205
County/Parish: Philadelphia County

AFS/ICIS-Air Number: PAPAM0004210110206
Permit Number: N16-000
NAICS Code: 518210 **SIC:** 7376
DSB ID #: ECAD-102

Facility Representatives: **Point of Contact** ☒
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EPA Lead Inspector

Signature

Scott Yanos

Date

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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 Equinix LLC (Equinix or Facility) to verify compliance with applicable Local, State and Federal regulations. The Philadelphia Air Management Services (Philadelphia AMS) was notified of the inspection on November 13, 2023 via email. On November 28, 2023, EPA attempted to notify the Facility of the planned inspection via phone but was unable to get in contact with Equinix.

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 401 North Broad St, Philadelphia, PA. Equinix is a digital infrastructure company providing data storage, networking, computing capabilities and cloud storage.

The Facility received a Natural Minor Operating Permit (N16-000) from Philadelphia AMS issued on December 7, 2023.

Equinix is classified as Natural Minor source for particulate matter (PM), Carbon Monoxide (CO), Hazardous Air Pollutants (HAPs) and Nitrogen Oxides (NOx). The Facility is subject to, or potentially subject to the following federal regulations:

- 40 CFR Part 60 Subpart IIII – Standards of Performance 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 1:35 PM on November 28, 2023, EPA inspectors arrived at the Facility for a CAA Inspection and conducted a brief opening conference. Equinix, LLC was represented by Todd Jordan, Assistant Site Manager. EPA inspectors, Scott Yanos, Bruce Augustine and Alex Everhart 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, Todd Jordan did not claim any photos or documentation as CBI.

II. Site Activity/Process Description

Equinix LLC is a company offering digital infrastructure to their customers and has approximately 50 locations, all providing the same services which is data storage, networking, computing capabilities and cloud storage. Equinix strives to co-locate within other data centers and companies that rely on data centers for co-location communication, allowing for easier networking and providing value to their customers. Equinix provides the space, power and cooling for customer's equipment and for them to do their business. In addition to these basic services, Equinix can also set up the equipment for customers. Equinix staffs the location 24/7 to provide services to their customers.

At the current location, the company, then known as Switch and Data, commenced operation in 1999. Switch and Data was acquired by Equinix in 2010 and has operated under this name since that time. The original space that Equinix leased was 20,000 square feet but expanded to 40,000 square feet in 2015. Equinix leases their space from Netrality, who in addition to providing space, also supplies Equinix with power. There are no current plans for Equinix to expand again.

The emergency diesel generators Equinix operates are onsite to provide emergency power to the servers in the case of power loss. Equinix has a total of three generators, the first was installed in 1999 with the other two generators being installed in 2015 when Equinix expanded. Each has a 100-gallon belly diesel fuel tank that is fed from a 10,000-gallon diesel tank. The fuel is certified from the fuel vendor on delivery receipts as ultra-low sulfur. The Equinix facility maintenance staff perform all small maintenance in house with major overhauls contracted out to a vendor. Equinix does perform annual fuel sampling and catalytic oxidizer samples are also taken every year. The diesel engines use a diesel oxidation catalyst (DOC) for NOx emissions control. The facility performs emissions testing and Todd Jordan indicated the records could be made available once he gets in contact with the maintenance manager. The facility uses an electronic spreadsheet to track hours and all maintenance performed on the generators and Todd Jordan stated this could also be made available.

The opening conference concluded at 2:19 PM.

III. Observations

EPA inspectors were led on a walkthrough of the Facility at 2:27 PM by Todd Jordan of Equinix. EPA inspectors noted photos would be taken during the Facility walkthrough (Attachment 2).

Todd Jordan led the EPA inspection team to the basement to observe the three generators. The two generators known as EGA and EGB within the permit are housed in the same area and cage. Both generators are 2013 Caterpillar 1500 kW engines. The EPA inspection team observed that EGA has operated 123.6 hours and EGB has operated 60.5 hours.

The generator known as EG1 is housed one floor down from the other two in its own cage. It is a 1998 Caterpillar 800 kW engine with 285 hours logged on the hour meter.

The walkthrough concluded at 2:53 PM.

V. Closing Conference

EPA inspectors, and Todd Jordan 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 in 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 2:53 PM.

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 Todd Jordan.

- EPA noted that a review of emission and maintenance records for the generators to ensure compliance with 40 CFR Part 60 Subpart IIII and 40 CFR Part 63 Subpart ZZZZ will be conducted once records are provided.

VI. List of Attachments

Attachment 1: Equinix Inspection Sign-In Sheet

Attachment 2: Photo Log