



**AIR AND RADIATION ADMINISTRATION
DRAFT PART 70 OPERATING PERMIT**

DOCKET # 24-510-0651

COMPANY: Vicinity Energy Baltimore Heating LLP
Central Avenue Steam Plant

LOCATION: 201 North Central Avenue
Baltimore, MD 21202

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**MARYLAND DEPARTMENT OF THE ENVIRONMENT
AIR AND RADIATION ADMINISTRATION
AIR QUALITY PERMITS PROGRAM
TITLE V – PART 70 OPERATING PERMIT PROGRAM OVERVIEW**

Title V of the Clean Air Act (amended) requires each state to implement a federally enforceable operating permit program for major sources of air pollution. This program, the Part 70 Permit Program, also known as the Title V Permit Program, is designed to provide a comprehensive administrative document (a Part 70 Operating Permit) that identifies all air emissions sources at a given facility and the federal air quality regulations applicable to those sources. The permit establishes the methodology by which the owner/operator will demonstrate compliance, and includes testing, monitoring, record-keeping, and reporting requirements for each emissions source.

A Part 70 Operating Permit does not authorize new construction, and does not add any new emissions limitations, standards, or work practices on an affected facility. There may, however, be additional testing, record keeping, monitoring, and reporting requirements. A Part 70 Operating Permit is a five-year renewable permit. A responsible official for each facility subject to a Part 70 Operating Permit is required to annually certify compliance with each applicable requirement for that facility.

When an application for a Part 70 Operating Permit is received, the Department will complete a technical review of the application and will prepare a draft Part 70 Operating Permit and Fact Sheet. The Fact Sheet will explain the basis and technical analysis used by the Department to develop the federally enforceable permit conditions, including the required testing, monitoring, record keeping, and reporting provisions for each emissions unit at the permitted facility. The Fact Sheet will also include a description of the facility operations and the current compliance status with applicable requirements. If there are any discrepancies between the Part 70 Operating Permit application and the draft permit, the Fact Sheet will contain a discussion of the inconsistencies and the final resolution.

Public Participation Process

The Part 70 Operating Permit Program provides the public, adjacent states, and EPA the opportunity to review and submit comments on draft permits. The public may also request a public hearing on the draft permit.

The purpose of a public hearing is to give interested parties the opportunity to submit comments for the record which are germane to the draft federally enforceable permit conditions. Comments made at the hearing, or in writing to the Department during the comment period, should address errors and deficiencies in the permit such as unidentified emissions units, incorrect or deficient regulation citation, deficient record keeping, monitoring, reporting or testing requirements and unresolved compliance issues. After the public comment period has closed, the Department will review the formal testimony as part of the final review and prepare a Response to Comments document which will be sent to the EPA along with the draft Part 70 Operating Permit and Fact Sheet.

Testimony on state-only requirements will be kept on file at the Department as part of the formal record, however, state-only rules and regulations are not federally enforceable, and therefore are not within the scope of the EPA review. The Department will keep a record of the identity of the commenters, their statements, a summary of the issues raised during the public comment period, and the Response to Comments document for at least five years.

Citizen Petition to EPA to Object to Permit Issuance

Interested parties may petition the EPA to object to the Part 70 Permit if the EPA has not already objected, within 60 days after the 45-day EPA review period has ended. The petition period will be posted on the EPA website. The EPA will only consider objections to the federally enforceable provisions of the draft permit which were raised with reasonable specificity during the public comment period, unless: (1) the petitioner demonstrates that it was impractical to raise the objections within the public comment period, or (2) the grounds for the objection arose after the comment period. If the EPA agrees with the petition, the Department will reopen, revise, or revoke the permit as determined.

Applicant Objection to Permit Issuance and Recourse

If the applicant objects to the federally enforceable permit conditions contained in the issued Part 70 Operating permit, the applicant has 15 days from receipt of the issued permit to request a contested case hearing. More information on that can be found in 40 CFR, Part 70, and COMAR 26.11.03.11.

**MARYLAND DEPARTMENT OF THE ENVIRONMENT
AIR AND RADIATION ADMINISTRATION**

**NOTICE OF INTENT TO ISSUE PART 70 OPERATING PERMIT, OPPORTUNITY TO SUBMIT
WRITTEN COMMENTS OR TO REQUEST A PUBLIC HEARING**

The Department of the Environment, Air and Radiation Administration (ARA) has completed its review of the application for a renewal Part 70 Operating Permit submitted by Vicinity Energy Baltimore Heating, LLP for the Central Avenue Steam Plant. The facility includes two boilers rated at 156 MMBTU and two low- NOX boilers rated at 913.4 MMBTU.

The applicant is represented by: Mr. Michael Pierorazio
 Vice President, Operations
 Vicinity Energy Baltimore Heating, LLP
 6 South Frederick Street
 Baltimore, MD 21202

The Department has prepared a draft Part 70 Operating Permit for review and is now ready to receive public comment. A docket containing the application, draft permit, and supporting documentation is available for review on the Department's website, under the Air Quality Permitting Page's Title V link under "Draft Title V Permits" and may be viewed here:

<https://tinyurl.com/DraftTitleV>

Interested persons may submit written comments or request a public hearing on the draft permit. Written comments must be received by the Department no later than 30 days from the date of this notice. Requests for a public hearing must be submitted in writing and must also be received by the Department no later than 30 days from the date of this notice.

Comments and requests for a public hearing will be accepted by the Department if they raise issues of law or material fact regarding applicable requirements of Title V of the Clean Air Act, and/or regulations implementing the Title V Program in Maryland found in COMAR.

A Request for public hearing shall include the following:

- 1) The name, mailing address, and telephone number of the person making the request;
- 2) The names and addresses of any other persons for whom the person making the request is representing; and
- 3) The reason why a hearing is requested, including the air quality concern that forms the basis for the request and how this concern relates to the person making the request.

All written comments and requests for a public hearing should be directed to the attention of Ms. Shannon Heafey via email at Shannon.heafey@maryland.gov or by post at Air Quality Permits Program, Air and Radiation Administration, 1800 Washington Boulevard Suite 720, Baltimore, Maryland 21230-1720. Further information may be obtained by calling Ms. Shannon Heafey at (410) 537-4433.

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BACKGROUND

Vicinity Energy is a Boston-based Energy Company owned by Antin Infrastructure Partners (Antin). Antin is a global infrastructure fund based in Paris, London and New York. Vicinity Energy is comprised of central heating plants and associated distribution networks that supply steam or hot water, chilled water and electricity across 19 networks in 12 major cities. It is the largest district energy provider in North America.

In December 2019, Vicinity Energy purchased Veolia North America's district energy assets in the United States, including Veolia Energy Baltimore Heating, LLP and its Central Avenue Steam Plant (Central Avenue), and became Vicinity Energy Baltimore Heating, LLP (Vicinity). Central Avenue is located at 201 North Central Avenue in Baltimore, Maryland. This change of ownership necessitated the reissuance of Central Avenue's Title V Permit and Factsheet. Central Avenue generates and distributes steam, which is primarily used for space heating in major buildings in the downtown Baltimore area. The SIC code for this facility is 4911.

Central Avenue consists of two (2) Erie City Boilers, each rated at 156 MMBtu/hr, and two (2) Zurn Industries Model Keystone Low NOx Boilers, each rated at 91.4 MMBtu/hr. Both boilers are dual-fuel fired. The predominant fuel consumed by the boilers is natural gas.

Table 1 summarizes the reported actual emissions listed in the most recent Annual Emissions Certification reports for the calendar years 2018 through 2024. These represent the five years preceding the re-issued permit expiration date to the most recent year for which data is available.

Table 1: Actual Emissions

Year	NO_x (TPY)	SO_x (TPY)	PM₁₀ (TPY)	CO (TPY)	VOC (TPY)	Total HAP (TPY)
2024	18.63	0.12	0.35	15.55	1.02	0.02
2023	15.05	0.09	0.27	11.77	0.77	0.54
2022	18.39	0.09	0.27	11.82	0.77	0.01
2021	23.92	0.10	0.29	12.86	0.84	0.01
2020	21.56	0.09	0.28	12.24	0.80	<0.01
2019	32.36	0.21	0.30	13.08	0.84	<0.01
2018	38.40	0.35	0.34	15.63	1.02	<0.01

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The Zurn Low NOx boilers are subject to the New Source Performance Standards (NSPS) found in 40 CFR Subpart Dc, since the boilers' capacities are between 10 and 100 MMBtu/hr and since they were constructed after the June 9, 1989, applicability date. The Erie City Boilers, which were installed in 1954, are not subject to NSPS.

The facility-wide emissions from the four boilers are greater than 25 tons per year for nitrogen oxides (NOx), an ozone precursor. The facility is located in Baltimore City which is an area designated as moderate nonattainment for ozone. For this reason, the facility is classified as a major source of NOx subject to the Title V Operating Permit Program (**COMAR 26.11.03**).

A permit application [Form # MDE/ARMA/PER.O21 - Part 70 Permit Application for Administrative Amendment for Change of Ownership] was received at the Department on January 30, 2020, for a change of ownership of Central Avenue from Veolia to Vicinity. A permit was issued September 30, 2020, and expired on September 30, 2023. No changes have occurred at the facility since the issuance of its most recent Part 70 permit.

Pursuant to COMAR 26.11.03, Central Avenue submitted a Part 70 Operating Permit renewal application on September 22, 2022. However, a letter was not sent to the Permittee within 60 calendar days of receipt of application. As such the Department deemed the permit application complete and as a result an application shield is automatically granted (COMAR 26.11.03).

Permit Updates

On March 26, 2024, Vicinity Energy submitted a permit deviation letter to MDE indicating that EU-1, EU-2, and EU-3 had not met the definition of a "space heater" for the period October 1, 2022 through September 30, 2023. Defined in COMAR 26.11.09.01B(15), "Space heater" means fuel-burning equipment that consumes more than 60 percent of its annual fuel during the period from October 31 of one year through March 31 of the following year. For the purpose of the regulation, annual fuel use is the total fuel consumed during the period October 1 of one year to September 30 of the following year, beginning October 1, 1989. In keeping with COMAR 26.11.09.08F(2), "a person who owns or operates an installation that no longer qualifies as a space heater shall inform the Department not later than 60 days after the date when the fuel-burning equipment did not qualify, and shall meet the applicable fuel-burning equipment RACT requirement in this regulation."

The applicable fuel-burning equipment RACT requirement for EU-1 and EU-2 when not meeting the space heater definition is COMAR 26.11.09.08D(1). This includes meeting the NOx emission standards listed in COMAR 26.11.09.08B(1)(c), demonstration with which can be met by stack testing when

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installations do not have Continuous Emissions Monitoring Systems. Stack testing was conducted on EU-1 and EU-2 in 2024 in order to meet the requirements of COMAR 26.11.09.08D. Stack testing was also conducted in 2025 on EU-1, but not on EU-2 as it went out of service in January 2025.

To simplify the requirements for EU-3, Vicinity Energy requested that EU-3 be subject to COMAR 26.11.09.08E without the option to follow the 'space heater' requirements of COMAR 26.11.09.08F. MDE evaluated this request and since COMAR 26.11.09.08E is more stringent than COMAR 26.11.09.08F, found it to be acceptable. Changes made include the following:

- removed Table 3, "NO_x RACT Requirements," and identified these requirements in Table 1, for EU-1 and EU-2, and in Table 2, for EU-3;
- added clarifying language regarding space heaters to Table 1;
- removed language regarding space heaters from Table 2; and
- added clarifying language to Table 1 regarding requirements for the times when EU-1 or EU-2 does not meet the definition of a space heater.

GREENHOUSE GAS (GHG) EMISSIONS

Vicinity emits the following greenhouse gases (GHGs) related to Clean Air Act requirements: carbon dioxide, methane, and nitrous oxide. These GHGs are generated by the Erie City and the Zurn boilers located at the facility.

Vicinity does not emit greenhouse gases at the major source level (threshold: 100,000 tpy CO_{2eq}) as evidenced by the annual GHG emissions provided in Table 2 below. In addition, the facility has not triggered Prevention of Significant Deterioration (PSD) requirements for GHG emissions. Therefore, there are no applicable GHG Clean Air Act requirements at this time. However, the Permittee is required to continue to quantify its facility-wide GHG emissions and report them in accordance with Section III of the Part 70 permit.

Table 2 summarizes the reported actual GHG emissions listed in the most recent Annual Emissions Certification reports for the calendar years 2018 through 2024. These represent the five years preceding the re-issued permit expiration date to the most recent year for which data is available.

Table 2: Greenhouse Gases Emissions Summary

GHG	Conversion factor	2018 (tpy CO_{2e})	2019 (tpy CO_{2e})	2020 (tpy CO_{2e})	2021 (tpy CO_{2e})	2022 (tpy CO_{2e})	2023 (tpy CO_{2e})	2024 (tpy CO_{2e})
Carbon dioxide CO ₂	1	22,847	18,876	17,518	18,380	16,894	16,830	22,226

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Methane CH ₄	25	10.55	8.77	8.25	8.8	8.08	8.05	10.75
Nitrous Oxide N ₂ O	298	89.10	75.69	44.76	51.85	38.44	29.8	35.76
Total GHG CO _{2eq}		22,947	18,960	17,571	18,441	16,941	16,868	22,272

COMPLIANCE ASSURANCE MONITORING (CAM)

Central Avenue is not subject to CAM requirements. CAM is intended to provide a reasonable assurance of compliance with applicable requirements under the Clean Air Act for large emission units that rely on air pollution control (APC) equipment to achieve compliance. The CAM approach establishes monitoring for the purposes of: (1) documenting continued operation of the control measures within ranges of specified indicators of performance (such as emissions, control device parameters, and process parameters) that are designed to provide a reasonable assurance of compliance with applicable requirements; (2) indicating any excursions from these ranges; and (3) responding to the data so that the cause or causes of the excursions are corrected. In order for a unit to be subject to CAM, the unit must be located at a major source, be subject to an emission limitation or standard; use a control device to achieve compliance; have pre-control emissions of at least 100% of the major source amount; and must not otherwise be exempt from CAM. Applicability determinations are made on a pollutant-by-pollutant basis for each emissions unit. Central Avenue emission units do not meet these conditions.

EMISSION UNIT IDENTIFICATION

Vicinity has identified the following emission units as being subject to Title V permitting requirements and having applicable requirements.

Table 3: Emission Unit Identification

Emissions Unit Number	MDE - ARA Registration Number	Emissions Unit Name and Description	Date of Installation
EU-1	510-0651-5-1281	Erie City boiler rated at 156 MMBtu/hr burning natural gas and No. 2 fuel oil	1954
EU-2	510-0651-5-1282	Erie City boiler rated at 156 MMBtu/hr burning natural gas and No. 2 fuel oil	1954

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EU-3 ¹	510-0651-5-1350	Zurn Industries Low NOx boiler rated at 91.4 MMBtu/hr burning natural gas and No. 2 fuel oil	1993
EU-3 ¹	510-0651-5-1351	Zurn Industries Low NOx boiler rated at 91.4 MMBtu/hr burning natural gas and No. 2 fuel oil	1993

¹ The two Zurn boilers (EU-3) share a common stack

AN OVERVIEW OF THE PART 70 PERMIT

The Fact Sheet is an informational document. If there are any discrepancies between the Fact Sheet and the Part 70 permit, the Part 70 permit is the enforceable document.

Section I of the Part 70 Permit contains a brief description of the facility and an inventory list of the emissions units for which applicable requirements are identified in Section IV of the permit.

Section II of the Part 70 Permit contains the general requirements that relate to administrative permit actions. This section includes the procedures for renewing, amending, reopening, and transferring permits, the relationship to permits to construct and approvals, and the general duty to provide information and to comply with all applicable requirements.

Section III of the Part 70 Permit contains the general requirements for testing, record keeping and reporting; and requirements that affect the facility as a whole, such as open burning, air pollution episodes, particulate matter from construction and demolition activities, asbestos provisions, ozone depleting substance provisions, general conformity, and acid rain permit. This section includes the requirement to report excess emissions and deviations, to submit an annual emissions certification report and an annual compliance certification report, and results of sampling and testing.

Section IV of the Part 70 Permit identifies the emissions standards, emissions limitations, operational limitations, and work practices applicable to each emissions unit located at the facility. For each standard, limitation, and work practice, the permit identifies the basis upon which the Permittee will demonstrate compliance. The basis will include testing, monitoring, record keeping, and reporting requirements. The demonstration may include one or more of these methods.

Section V of the Part 70 Permit contains a list of insignificant activities. These activities emit very small quantities of regulated air pollutants and do not require

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a permit to construct or registration with the Department. For insignificant activities that are subject to a requirement under the Clean Air Act, the requirement is listed under the activity.

Section VI of the Part 70 Permit contains State-only enforceable requirements. Section VI identifies requirements that are not based on the Clean Air Act, but solely on Maryland air pollution regulations. These requirements generally relate to the prevention of nuisances and implementation of Maryland's Air Toxics Program.

**REGULATORY REVIEW/TECHNICAL REVIEW/COMPLIANCE
METHODOLOGY**

40 CFR Part 63, Subpart JJJJJJ – National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources applies to each new, reconstructed, or existing affected source as defined in the subpart. The boilers located at the Vicinity Energy Central Avenue Steam Plant fall under the existing boiler category as defined in this subpart because the construction or reconstruction of the boilers commenced on or before June 4, 2010. The subpart provides exemption for some boilers including boilers that meet the definition of “a gas fired boiler” in Section 63.11195. A gas fired boiler is defined in this Subpart, in Section 63.11237, to “include any boiler that burns gaseous fuels not combined with any solid fuels, burns liquid fuels only during periods of gas curtailment, gas supply emergencies, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year.”

On the basis of this exemption provision, Veolia (now Vicinity Energy) informed the Department in a letter dated April 25, 2013, that the Company has elected to opt-out of the requirements of this Subpart by choosing to operate the boilers as “gas fired boilers” as defined in this Subpart. Vicinity Energy shall maintain records of fuel utilization at these boilers and the reasons for combusting the fuels (such as testing, readiness, etc) as well as the length of time the fuels were combusted. If Vicinity Energy decides at a later time to rescind its current opt-out position, the Company will have 180 days to comply with the provisions of this Subpart.

Emissions Units: EU-1 & EU-2

[MDE ARA Reg. No. 510-0651-5-1281 and 5-1282]

Two (2) 156 MMBtu/hr natural gas and No. 2 fuel oil fired Erie City boilers.

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Emissions Units EU-1 and EU-2 are the Erie City boilers, each rated at 156 MMBtu/hr. These boilers were installed in 1954, prior to the establishment of MDE's permitting program, and as a result, the boilers do not have a permit to construct. They were re-registered as a result of a change of ownership in 1990. These boilers are registered for burning both natural gas and No.2 fuel oil. The boilers have not undergone any major modification or reconstruction since they were installed.

A. Control of Sulfur Oxides

COMAR 26.11.09.07A – Sulfur Content Limitations for Fuel.

"A person may not burn, sell, or make available for sale any fuel with a sulfur content by weight in excess of or which otherwise exceeds the following limitations: (2) In Areas III and IV: (b) distillate fuel oils, 0.3 percent."

Compliance Demonstration:

The Permittee shall obtain fuel suppliers' certification, which shall include the following information:

(1) For distillate oil:

- (a) The name of the oil supplier;
- (b) A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in § 60.41c; and
- (c) The sulfur content or maximum sulfur content of the oil.

The Permittee shall maintain records of fuel supplier's certification for at least five (5) years and submit the records upon request to the Department.

Rationale for/Discussion of Periodic Monitoring:

This periodic monitoring strategy is similar to the requirement for fuel certifications for New Source Performance Standards Subpart Dc for steam generating units greater than 10 but less than 100 million BTU per hour of heat input.

Compliance Status:

The Permittee verifies that it has obtained fuel supplier certification for fuel oil consumed by these units twice a year via the required semi-annual monitoring reports. Semi-annual monitoring reports were received every six months during the five-year permit period ending September 30, 2023 to the most recent period for which reports are available. These reports demonstrated compliance and listed no deviation from the permit terms for obtaining the certification. The Permittee also describes the compliance status in the annual Compliance

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Certification reports. Compliance Certification Reports were received yearly during the permit period to the most recent period for which reports are available. Each year the reports demonstrated compliance.

B. Visible Emissions Limitations

COMAR 26.11.09.05A(2) – Fuel Burning Equipment.

“In Areas III and IV, a person may not cause or permit the discharge of emissions from any fuel burning equipment, other than water in an uncombined form, which is visible to human observers except that, for the purpose of demonstrating compliance using COM data, emissions that are visible to a human observer are those that are equal to or greater than 10 percent opacity.”

COMAR 26.11.09.05A(3) – Exceptions.

“Section A(1) and (2) of this regulation do not apply to emissions during load changing, soot blowing, startup, or adjustments or occasional cleaning of control equipment if:

- (a) The visible emissions are not greater than 40 percent opacity; and
- (b) The visible emissions do not occur for more than 6 consecutive minutes in any sixty-minute period.”

Compliance Demonstration:

The Permittee shall:

- (1) Properly operate and maintain the boilers in a manner to prevent visible emissions;
- (2) Maintain an operations manual and preventive maintenance plan that relates to combustion performance; and
- (3) Verify no visible emissions when burning No. 2 fuel oil. The Permittee shall perform a visual observation for a 12-minute period once for each 168 hours that the boiler burns oil or at a minimum of once per year. If a boiler operates for less than 100 hours during a calendar year, this requirement is waived.

If visible emissions are observed, the Permittee shall:

- (4) Inspect combustion control system and boiler operations.
- (5) Perform all necessary adjustments and/or repairs to the boiler within 48 hours to eliminate visible emissions;
- (6) Document in writing the results of the inspections, adjustments and/or repairs to the boiler; and
- (7) Perform a Method 9 observation once daily for 18 minutes until visible emissions are eliminated, if after 48 hours the adjustments and/or repairs have not eliminated the visible emissions. **[Authority: COMAR 26.11.03.06C]**

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In addition, the Permittee shall:

- (1) Maintain a log of maintenance performed on the boiler and operations training provided to the boiler operators; and
- (2) Maintain a log of visible emissions observations performed on site for five (5) years and make the log available to the Department's representative upon request. **[Authority: COMAR 26.11.03.06C]**

All records must be maintained on site for at least five (5) years and made available to the Department's representative upon request. **[Authority: COMAR 26.11.03.06.C(5)(g)]**

To demonstrate compliance with these monitoring and record keeping requirements, the Permittee submits six-month (SIXMON) and annual (Compliance Certification) reports, as required by Condition 4 of Section III, Plant Wide Conditions, Items 4, "Report of Excess Emissions and Deviations", and 9, "Compliance Certification Report."

Rationale for/Discussion of Periodic Monitoring:

The facility is a minor source for PM₁₀ (certified less than 1 ton/year for the past five years). The boilers are not subject to a particulate matter emissions limitation (gr./dscf or lbs/MMBtu).

Visible emissions associated with natural gas burning will only occur during periods of improper combustion, which would not be allowed to continue due to safety considerations. Therefore, no observation will be required when burning natural gas. Visible emissions from the combustion of No. 2 fuel oil are possible, but unlikely with good operations and maintenance.

The boilers burn fuel oil during periods of natural gas curtailment, gas supply interruption, startups and periodic testing. Periods of improper combustion are not preplanned and may occur for short periods and at times when a visible emissions observation is not feasible due to time of day or weather conditions. The requirement to perform an observation once every 168 hours of fuel oil combustion will provide sufficient time for the Permittee to have the 12-minute observation completed.

With a no visible emissions requirement, it is not necessary to have an observer be certified in Reference Method 9 opacity observations. The observer shall be trained to distinguish between visible emissions and water vapor/steam.

Compliance Status:

Semi-annual monitoring reports were received every six months during the five-year permit period ending September 30, 2023 to the most recent year for which

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these reports are available and annual Compliance Certification Reports were received yearly during the permit period to the most recent year for which these reports are available. No visible emission observations were reported.

C. NOx RACT Requirements

COMAR 26.11.09.01B – Definitions.

- (15) "Space heater" means fuel-burning equipment that consumes more than 60 percent of its annual fuel during the period from October 31 of one year through March 31 of the following year. For the purpose of this regulation, annual fuel use is the total fuel consumed during the period October 1 of one year to September 30 of the following year, beginning October 1, 1989.

COMAR 26.11.09.08 – Control of NOx Emissions for Major Stationary Sources.

COMAR 26.11.09.08B(1)(a) and (c) – General Requirements and Conditions.

"(1) Emission Standards and Requirements.

- (a) A person who owns or operates an installation that causes NOx emissions subject to this regulation is in compliance with this regulation if the person establishes compliance with the emissions standards in §B(1)(c) of this regulation.

...

- (c) Emission Standards in Pounds of NOx per Million Btu of heat input.

Fuel	Tangential-Fired	Wall-Fired
Gas only	0.20	0.20
Gas/Oil	0.25	0.25
Coal (dry bottom)	0.38	0.38
Coal (wet bottom)	1.00	1.00

Note: The two boilers burn natural gas and fuel oil. The NOx emissions limit for the boilers is 0.25 pounds of NOx per million Btu of heat input.

COMAR 26.11.09.08B(2) – Demonstration of Compliance.

"(a) A person subject to a NOx emission standard in this regulation shall demonstrate compliance as follows:

...

- (ii) For all other installations, compliance with the NOx emissions standards in this regulation shall be established by stack tests using Method 07 of the test methods referenced in COMAR 26.11.01.04C(1) or other test methods approved by the Department and the EPA.

...

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- ...
- (e) For a person who establishes compliance using a stack test, compliance shall be determined as averages of the stack test duration.”

COMAR 26.11.09.08B(5) – Operator Training.

“(5) Operator Training.

- (a) For purposes of this regulation, the equipment operator to be trained may be the person who maintains the equipment and makes the necessary adjustments for efficient operation.
- (b) The operator training course sponsored by the Department shall include an in-house training course that is approved by the Department.”

COMAR 26.11.09.08D – Requirements for Fuel-Burning Equipment with a Rated Heat Input Capacity of Less than 250 Million Btu Per Hour and Greater than 100 Million Btu Per Hour.

(1) Equipment Specifications and Standards.

- (a) A person who owns or operates coal fired fuel-burning equipment with a rated heat input capacity of less than 250 Million Btu per hour and greater than 100 Million Btu per hour shall install and operate in accordance with the manufacturer's specifications, combustion modifications, or other technologies to meet an emission rate of 0.65 pounds of NO_x per Million Btu per hour.
 - (b) All other fuel burning equipment with a rated heat input capacity of less than 250 Million Btu per hour and greater than 100 Million Btu per hour shall meet the NO_x emission rates set forth in §B(1)(c) of this regulation.
- (2) Exceptions. The requirements in §D(1) of this regulation do not apply to a space heater as defined in Regulation .01B of this chapter or to fuel-burning equipment subject to §G of this regulation.

COMAR 26.11.09.08F – Requirements for Space Heaters.

“(1) A person who owns or operates a space heater as defined in Regulation .01B of this chapter shall:

- (a) Submit to the Department a list of each affected installation on the premises and the types of fuel used in each installation;
- (b) Develop an operating and maintenance plan to minimize NO_x emissions based on the recommendations of equipment vendors and other information including the source's operating and maintenance experience;
- (c) Implement the operating and maintenance plan and maintain the plan at the premises for review upon request by the Department;

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- (d) Require installation operators to attend in-State operator training programs once every 3 years on combustion optimization that are sponsored by the Department, the EPA, or equipment vendors; and
 - (e) Prepare and maintain a record of training program attendance for each operator at the site and make these records available to the Department upon request.
- (2) A person who owns or operates an installation that no longer qualifies as a space heater shall inform the Department not later than 60 days after the date when the fuel-burning equipment did not qualify, and shall meet the applicable fuel-burning equipment RACT requirement in this regulation.”

COMAR 26.11.09.08G – Requirements for Fuel-Burning Equipment with a Capacity Factor of 15 Percent or Less, and Combustion Turbines with a Capacity Factor Greater than 15 Percent.

“G. Requirements for Fuel-Burning Equipment with a Capacity Factor of 15 Percent or Less, and Combustion Turbines with a Capacity Factor Greater than 15 Percent.

- (1) A person who owns or operates fuel-burning equipment with a capacity factor (as defined in 40 CFR Part 72.2) of 15 percent or less shall:
 - (a) Provide certification of the capacity factor of the equipment to the Department in writing;
 - (b) For fuel-burning equipment that operates more than 500 hours during a calendar year, perform a combustion analysis and optimize combustion at least once annually;
 - (c) Maintain the results of the combustion analysis at the site for at least 2 years and make these results available to the Department and the EPA upon request;
 - (d) Require each operator of an installation, except combustion turbines, to attend operator training programs at least once every 3 years, on combustion optimization that are sponsored by the Department, the EPA, or equipment vendors; and
 - (e) Maintain a record of training program attendance for each operator at the site, and make these records available to the Department upon request.”

40 CFR § 72.2 Definitions.

...

“*Capacity factor* means...

- (2) The ratio of a unit's annual heat input (in million British thermal units or equivalent units of measure) to the unit's maximum rated hourly

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heat input rate (in million British thermal units per hour or equivalent units of measure) times 8,760 hours.”

Compliance Demonstration:

When the definition of “**space heater**” is not met:

Not later than 180 days after the date when the fuel-burning equipment first did not qualify as a space heater within the term of the issuance of this permit, the Permittee shall perform a stack test on the equipment that did not qualify as a space heater, on natural gas. The Permittee shall submit a test protocol to the Department for approval at least 30 days before the scheduled test date. The Permittee shall submit all test results and supporting data from the stack tests to the Department within 45 days after the stack tests are conducted. **[Authority: COMAR 26.11.01.04 and COMAR 26.11.03.06C]**

Note: The Permittee shall test the boiler(s) that did not qualify as a space heater for NO_x emissions no more than once during the life of the permit using EPA Reference Method 7E, or other acceptable methods. **[Authority: COMAR 26.11.03.06C]**

The Permittee shall measure the NO_x content of the flue gases from each boiler for a 5-minute period every 168 hours of operation. The Permittee shall use an analyzer that is properly calibrated and maintained in accordance with the vendor specification. The analyzer shall be the type approved by the Department. **[Authority: COMAR 26.11.03.06C]**

The Permittee shall maintain annual fuel use records on site. **[Authority: COMAR 26.11.09.05K(3)]**

The Permittee shall maintain the results of NO_x stack tests and the NO_x analyzer readings. **[Authority: COMAR 26.11.03.06C]**

The Permittee shall maintain a record of training program attendance for each operator at the site. **[Authority: COMAR 26.11.09.08E(5)]**

The Permittee shall report the results of NO_x tests boilers along with supporting data from the stack tests within 45 days of the completion of the stack tests. **[Authority: COMAR 26.11.09.08K(2) and COMAR 26.11.03.06C]**

When the definition of “**space heater**” is met:

The Permittee shall develop and implement an operating and maintenance plan to minimize NO_x emissions. **[Authority: COMAR 26.11.09.08F(1)]**

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The Permittee shall maintain a list of each affected installation on the premises and the types of fuel used in each installation. **[Authority: COMAR 26.11.09.08F(1)(a)]**

The Permittee shall maintain records of maintenance performed that relates to combustion performance in keeping with the requirements of an operating and maintenance plan. **[Reference: COMAR 26.11.09.08F(1)(c)]**

The Permittee shall maintain the operating and maintenance plan. **[Authority: COMAR 26.11.09.08F(1)(c)]**

The Permittee shall maintain records of training program attendance for each operator. **[Authority: COMAR 26.11.09.08F(1)(e)]**

The Permittee shall maintain records of fuel use that demonstrate that the boiler meets the definition of a space heater. **[Authority: COMAR 26.11.09.08K(3) and COMAR 26.11.03.06C]**

The Permittee shall submit the list of each affected installation on the premises and the types of fuel used in each installation. **[Authority: COMAR 26.11.09.08F(1)(a)]**

The Permittee shall submit a list of trained operators and training program attendance to the Department upon request. **[Authority: COMAR 26.11.09.08E(5)]**

The Permittee shall inform the Department no later than 60 days after the date that the boilers no longer qualify as a space heater.

Rationale for/Discussion of Periodic Monitoring:

Periodic monitoring will be different depending on whether the emissions units meet the definition of a space heater or not. For this reason, Table IV in the permit conditions has been revised to account for both conditions. One of the differences between the two cases is the need for stack testing when an emissions unit does not meet the definition of a space heater.

Compliance Status:

On March 26, 2024, Vicinity Energy submitted a permit deviation letter to MDE indicating that EU-1 and EU-2 had not met the definition of a "space heater" for the period October 1, 2022 through September 30, 2023. As a result, stack testing was conducted on EU-1 and EU-2 in 2024 in order to meet the requirements of COMAR 26.11.09.08D. Stack testing was also conducted in 2025 on EU-1, but not on EU-2 as it went out of service in January 2025.

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The revised permit conditions should result in timely definition of the emissions units as space heaters, or not, and compliance with the appropriate permit conditions as a result.

D. Operational Limitation

The Permittee shall only burn natural gas in the boilers except for periods of natural gas curtailment, gas supply interruption, startups, and periodic testing in order for the boilers to be recognized as natural gas-fired boilers under the Boiler MACT 40 CFR part 63 subpart JJJJJJ. **[Authority: 40 CFR §63.12]**

Compliance Demonstration:

The Permittee shall maintain records of fuel combusted in the boilers.

[Authority: COMAR 26.11.03.06C] The Permittee shall submit annual fuel usage with the annual Emissions Certification Report. **[Authority: COMAR 26.11.03.06C]**

Compliance Status:

The Permittee maintains a record of the annual fuel usage and submits the record of fuel usage along with the annual Emissions Certification Report. The Department received Emissions Certification Reports for all calendar years for the five-year permit period ending September 30, 2023 to the most recent year for which data are available. Annual fuel usage is summarized in Table 4.

Table 4: Annual Fuel Usage

MDE - ARA Registration Number	510-0651-5-1281		510-0651-5-1282	
	Natural Gas (cubic feet)	Fuel Oil (gallons)	Natural Gas (cubic feet)	Fuel Oil (gallons)
2024	3,580,000	0	80,000	0
2023	6,600,000	0	6,590,000	0
2022	47,470,000	48	2,020,000	0
2021	72,430,000	123	24,550,000	0
2020	9,550,000	0	72,960,000	0
2019	106,270,000	25,565	78,150,000	0
2018	177,740,000	39,271	35,910,000	0

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Emissions Unit: EU-3

[MDE ARA Reg. No. 510-0651-5-1350 and 5-1351]

Two (2) 91.4 MMBtu/hr natural gas and No.2 fuel oil fired Zurn boilers.

Emissions Unit EU-3 comprises two (2) Zurn Industry Low NOx boilers, each rated at 91.4 MMBtu/hr, as described in Table 3 above. Flue gases from these two boilers are discharged to a common stack; hence the Permittee has represented them as EU-3 in the Title V application. These boilers were installed in 1993 in accordance with Permit to Construct Nos. 510-5-1350 & 1351N. As mentioned earlier, the Zurn boilers are subject to NSPS, 40 CFR 60 Subpart Dc.

In order to avoid the requirements of a major source review in a nonattainment area, the permit to construct was issued with permit conditions that limited the total NOx emissions from the two Zurn boilers to less than 25 tons on a rolling 12-month basis. To ensure compliance with this limit, the boilers are limited to an annual capacity factor of 0.312 and the NOx emissions rate from each boiler when burning natural gas, the primary fuel, shall not exceed 0.1 lb/MMBtu. These limitations are discussed under "D. Boilers Capacity Factor Limitation" below.

A. Control of Sulfur Oxides

COMAR 26.11.09.07A – Sulfur Content Limitations for Fuel.

"A person may not burn, sell, or make available for sale any fuel with a sulfur content by weight in excess of or which otherwise exceeds the following limitations: (2) In Areas III and IV: (b) distillate fuel oils, 0.3 percent."

40 CFR Part 60 Subpart Dc – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units with a heat input capacity less than 100 MMBtu/hr but greater than 10 MMBtu/hr for which construction began after June 9, 1989.

40 CFR §60.42c – Standard for sulfur dioxide (SO₂).

"(d) On and after the date on which the initial performance test is completed or required to be completed under § 60.8, whichever date comes first, no owner or operator of an affected facility that combusts oil shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO₂ in excess of 215 ng/J (0.50 lb/MMBtu) heat input from oil; or, as an alternative, no owner or operator of an affected facility that combusts oil shall combust oil in the affected facility that contains greater than 0.5 weight percent sulfur. The percent reduction requirements are not applicable to affected facilities under this paragraph.

...

(h) For affected facilities listed under paragraphs (h)(1), (2), (3), or (4) of this section, compliance with the emission limits or fuel oil sulfur limits under

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this section may be determined based on a certification from the fuel supplier, as described under § 60.48c(f), as applicable.

(1) Distillate oil-fired affected facilities with heat input capacities between 2.9 and 29 MW (10 and 100 MMBtu/hr).

...

(i) The SO₂ emission limits, fuel oil sulfur limits, and percent reduction requirements under this section apply at all times, including periods of startup, shutdown, and malfunction."

Note: Compliance with **Subpart Dc, will be demonstrated through compliance with COMAR 26.11.09.07A(2)(b).**

Compliance Demonstration:

The Permittee complies with the applicable standards and limits for control of sulfur oxides monitoring, record keeping, and reporting requirements as follows:

- (1) Obtain a certification from the fuel supplier, which specifies that the No.2 fuel oil complies with the sulfur in fuel limitation; **[Authority: COMAR 26.11.03.06C & 40 CFR 60.42c]**
- (2) Maintain on site a record of the certification from the fuel supplier, which shows that the fuel oil is in compliance with the sulfur in fuel limitation, for at least five (5) years; **[Authority: COMAR 26.11.03.06C& 40 CFR 60.42c]** and
- (3) Submit to the Department and EPA Region III, a semi-annual report including the following: (a) A fuel supplier certification consisting of the name of the oil supplier and a statement from the oil supplier that the oil complies with the sulfur specifications for distillate fuel oil; and (b) A certified statement signed by the Permittee stating that the records of fuel supplier certifications submitted represent all of the fuel oil combusted during the 6-month period. **[Authority: COMAR 26.11.03.06C & 40 CFR 60.48c]**

Compliance Status:

The Permittee certifies that it has obtained fuel supplier certification that the No. 2 fuel oil is in compliance with the sulfur in fuel limitation, for fuel oil consumed by these units, twice a year via the required semi-annual monitoring reports and again in the annual Compliance Certification Report. Semi-annual monitoring reports were received every six months during the five-year permit period ending September 30, 2023. The Department received Emissions Certification Reports for all calendar years for the five-year permit period ending September 30, 2023.

B. Visible Emissions Limitation

COMAR 26.11.09.05A(2) – Fuel Burning Equipment.

"In Areas III and IV, a person may not cause or permit the discharge of emissions from any fuel burning equipment, other than water in an uncombined form, which is visible to human observers except that, for the purpose of demonstrating compliance using COM data, emissions that are

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visible to a human observer are those that are equal to or greater than 10 percent opacity.”

COMAR 26.11.09.05A(3) – Exceptions.

“Section A(1) and (2) of this regulation do not apply to emissions during load changing, soot blowing, startup, or adjustments or occasional cleaning of control equipment if:

- (a) The visible emissions are not greater than 40 percent opacity; and
- (b) The visible emissions do not occur for more than 6 consecutive minutes in any sixty-minute period.”

40 CFR Part 60 Subpart Dc – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units with a heat input capacity less than 100 MMBtu/hr but greater than 10 MMBtu/hr for construction began after June 9, 1989.

§60.43c – Standard for particulate matter (PM).

- “(c) On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that combusts coal, wood, or oil and has a heat input capacity of 8.7 MW (30 MMBtu/h) or greater shall cause to be discharged into the atmosphere from that affected facility any gases that exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity. Owners and operators of an affected facility that elect to install, calibrate, maintain, and operate a continuous emissions monitoring system (CEMS) for measuring PM emissions according to the requirements of this subpart and are subject to a federally enforceable PM limit of 0.030 lb/MMBtu or less are exempt from the opacity standard specified in this paragraph (c).
- (d) The PM and opacity standards under this section apply at all times, except during periods of startup, shutdown, or malfunction.”

Note: Compliance with the “No Visible Emissions” requirements of **COMAR 26.11.09.05A(2) and (3)** will be used to show compliance with this NSPS standard.

In the Part 70 Permit, the NSPS requirement is streamlined with the COMAR limitation. The COMAR requirement of no visible emissions is more stringent than the NSPS 20% opacity standard. Therefore, the demonstration of no visible emissions will be the basis for demonstrating compliance with the NSPS 20% opacity requirement.

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Compliance Demonstration:

The Permittee shall:

- (1) Properly operate and maintain the boilers in a manner to prevent visible emissions;
- (2) Maintain an operations manual and preventive maintenance plan; and
- (3) Verify no visible emissions when burning No. 2 fuel oil. The Permittee shall perform a visual observation for a 12-minute period once for each 168 hours that the boiler burns oil or at a minimum of once per year. If a boiler burns oil for less than 100 hours in a calendar year, this requirement is waived.

The Permittee shall perform the following, if emissions are visible:

- (4) Inspect combustion system and boiler operations;
- (5) Perform all necessary adjustments and/or repairs to the boiler within 48 hours, so that visible emissions are eliminated;
- (6) Document in writing the results of inspections, adjustments and/or repairs to the boiler; and
- (7) After 48 hours, if the required adjustments and/or repairs had no eliminated the visible emissions, perform Method 9 observations once daily for 18 minutes until corrective actions have eliminated the visible emissions.

[COMAR 26.11.03.06C]

The Permittee shall maintain a log of the results of visible emissions observations performed on site for at least five (5) years and make the log available to the Department's representative upon request. Furthermore, the Permittee is required to report on a semi-annual basis those periods when visible emissions are observed, and as required by Permit Condition 4 of Section III, "Report of Excess Emissions and Deviations". **[Authority: COMAR 26.11.03.06C]**

To demonstrate compliance with these monitoring and record keeping requirements, the permittee submits six-month (SIXMON) and annual (Compliance Certification) reports, as required by Condition 4 of Section III, Plant Wide Conditions, Items 4, "Report of Excess Emissions and Deviations", and 9, "Compliance Certification Report."

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Rationale for/Discussion of Periodic Monitoring:

The facility is a minor source for PM10 (certified less than 1 ton/year for the past five years). The boilers are not subject to a particulate matter emissions limitation (gr./dscf or lbs/MMBtu).

Visible emissions associated with natural gas burning will only occur during periods of improper combustion which would not be allowed to continue due to safety considerations. Therefore, no observation will be required when burning natural gas. Visible emissions from the combustion of No.2 fuel oil are possible but unlikely with good operations and maintenance.

The boilers burn fuel oil only as a backup to natural gas. Periods of improper combustion are not always preplanned, and may occur for short periods and at times when a visible emission observation is not feasible due to time of day or weather conditions. The requirement to perform an observation once every 168 hours of fuel oil combustion will provide sufficient time for the Permittee to have the 12-minute observation completed.

With a no visible emissions requirement, it is not necessary to have an observer certified in Reference Method 9 opacity observations. The observer only needs to be trained to distinguish between visible emissions and water vapor/steam. Plant-wide Condition 4, Section III of the Permit, "Report of Excess Emissions and Deviation", requires the Permittee to report, on a semi-annual basis, periods when visible emissions are observed.

Compliance Status:

Semi-annual monitoring reports were received every six months during the five-year permit period ending September 30, 2023 and to the most recent timeframe for submittal. The Department received Emissions Certification Reports for all calendar years for the five-year permit period ending September 30, 2023 and up to the most recent timeframe for submittal, 2025. No visible emission observations were reported.

C. Control of Nitrogen Oxides

MDE Permit to Construct #s 510-5-1350 & 1351 N, Condition C2, requires the Permittee to equip the boilers with Low-NOx burners and limit NOx emissions to 0.1 lb/MMBtu for a 24-hr rolling average when burning natural gas.

Compliance Demonstration:

Compliance with the NOx emissions limit of 0.1 lb/MMBtu of heat input will be demonstrated with the following periodic monitoring.

- (1) Once during the life of the permit, the Permittee shall perform a stack test on the exhaust gases from each boiler using EPA Reference Method 7E

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procedures or other acceptable method. A test protocol shall be submitted to the Department for approval at least 30 days prior to the testing. The Permittee shall maintain records of stack tests on site for at least five (5) years. Results of the tests shall be reported on a "lb/MMBtu" basis and submitted to the Department within 45 days after completion of the testing.

[Authority: COMAR 26.11.03.06C]

- (2) For every 168 hours of operation of each boiler, the Permittee shall use a NOx analyzer that is properly calibrated and maintained in accordance with the vendor specifications and approved by the Department, to check, measure for a 15-minute period, and record the NOx emissions (ppm) of the exhaust gases from the boiler. The Permittee shall maintain records of NOx analyzer readings on site for at least five (5) years. **[Authority: COMAR 26.11.03.06C]**

To demonstrate compliance with these testing, monitoring and record keeping requirements, the permittee submits six-month (SIXMON) and annual (Compliance Certification) reports, as required by Condition 4 of Section III, Plant Wide Conditions, Items 4, "Report of Excess Emissions and Deviations", and 9, "Compliance Certification Report."

Rationale for/Discussion of Periodic Monitoring and Compliance Status:

Generally, with good operations and maintenance of the low NOx burner system, the Permittee is able to comply with the NOx emissions limitation.

Stack tests were conducted March 9, 2022 on boiler 3 (MDE ARA Reg. No. 510-0651-5-1350) and March 10, 2022 on boiler 4 (MDE ARA Reg. No. 510-0651-5-1351). The average 3-hr NOx readings on Boilers Nos. 3 and 4 were 0.083 and 0.099 lb/MMBtu, respectively. Thus, the Permittee demonstrated compliance with NOx limitation while burning natural gas.

To verify continued good operations and maintenance, the Permittee is required to check the NOx level (ppm) in the exhaust gases with an analyzer after 168 hours of boiler operation. By comparing the NOx analyzer readings with the NOx (ppm) recorded during the compliance stack test, this will ensure that the boilers will continue to comply with the NOx emissions limit of 0.1 pounds per million BTU of heat input.

On November 5, 2021, the Permittee reported excess emissions of NOx based on a reading of 0.108 lb/MMBtu. The Permittee explained that the excess O₂ was incorrectly set at 7% instead of 3%. After the setting was corrected the NOx reading was 0.098 lb/MMBtu.

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D. Boiler Capacity Factor Limitation

MDE Permit to Construct 510-0651-5-1350 & 1351 N, limits the annual capacity factor of the boilers to 0.312, unless the Permittee obtains prior approval from the Department.

To prevent triggering nonattainment New Source Review (NSR), the Permittee accepted a limit on the boilers capacity factor (CF), thereby limiting the boilers' potential to emit to less than 25 tons of NOx per year.

The capacity factor was calculated as follows:

$$2 \text{ boilers} \times 91.4 \text{ MMBtu/hr} \times 8760 \text{ hrs/yr} \times 0.1 \text{ lb/MMBtu} \times \text{ton}/2000 \text{ lb} \times \text{CF} = 24.99 \text{ tons}$$

Where 0.1 = boilers' NOx emissions rate

CF = boilers' Capacity Factor

24.99 = a number <25 tons/yr major New Source threshold

Capacity Factor (CF) Limit = 0.312

Compliance Demonstration:

The Permittee will comply with this permit condition as follows:

- (1) Calculate the capacity factor of the Zurn boilers within 30 days after the end of each calendar month for the prior rolling 12-month period;
- (2) Maintain records of calculations of capacity factors and the supporting documentation for the calculations, for five (5) years; and
- (3) Report the calculated rolling 12-month capacity factors with the annual emissions certification report due April 1 of each calendar year.

To demonstrate compliance with these monitoring and record keeping requirements, the permittee submits six-month (SIXMON) reports, as required by Condition 4 of Section III, Plant Wide Conditions, Items 4, "Report of Excess Emissions and Deviations", and an annual Emissions Certification report, as required by Condition 4 of Section III, Plant Wide Conditions, Item 8, "Emissions Certification Report."

Rationale for/Discussion of Periodic Monitoring and Compliance Status:

Central Avenue, which consists of four (4) boilers [two (2) Erie City 156 MMBtu/hr and two (2) Zurn 91.4 MMBtu/hr], provides steam to office buildings, hospitals, prisons, and public housing complexes in the eastern side of downtown Baltimore. Because this is the sole source of steam for heat and hot water for the customers, the facility is required to maintain reserve capacity to guarantee steam supply. There is an inherent operational limit that is represented by the steam demand on the distribution system. The annual capacity factor for the Zurn boilers has ranged from 0.16 to 0.22 historically. The capacity factor for the

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whole steam plant is typically less than 0.15. With the large excess reserve capacity of the four boilers, the likelihood of a violation of the capacity factor of 0.312 for the two Zurn boilers is extremely unlikely.

The Company records the hours of operations of the boilers on a daily basis and has flow meters on the fuel supply line. The monthly capacity factor calculations for the years 2018 through 2022, the five years preceding the re-issued permit expiration date, to the most recent year for which data are available, were within the capacity factor limit of 0.312. Table 5 presents the lowest and highest rolling 12-month average capacity factors for calendar years 2018 through 2022, the five years preceding the re-issued permit expiration date, to the most recent year for which data are available.

Table 5: Capacity Factor

Year	Capacity Factor – Low Rolling 12-month	Capacity Factor – High Rolling 12-month
2024	0.187	0.239
2023	0.14	0.17
2022	0.15	0.16
2021	0.12	0.15
2020	0.1	0.14
2019	0.08	0.1
2018	0.08	0.1

E. New Source Review Constraints

MDE Permit to Construct 510-0651-5-1350 & 1351 N, Condition B(2)j, limits the total NOx emissions from the Zurn boilers to less than 25 tons per year on a rolling 12-month basis.

Compliance Demonstration

The Permittee will demonstrate compliance with the permit condition as follows:

- (1) At the end of each calendar month, the Permittee shall calculate the rolling 12-month sum of NOx emissions for each of the two boilers,
- (2) The records of the calculations and supporting documentation shall be kept on site for at least five (5) years, and
- (3) As part of the annual emissions certification report the Permittee shall submit the rolling 12-month sums of NOx emissions, that were calculated at the end of each month, for each boiler.

To demonstrate compliance with these monitoring and record keeping requirements, the permittee submits six-month (SIXMON) reports, as required by Condition 4 of Section III, Plant Wide Conditions, Items 4, "Report of Excess Emissions and Deviations", and an annual Emissions Certification report, as

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required by Condition 4 of Section III, Plant Wide Conditions, Item 8, "Emissions Certification Report."

Compliance Status:

For the calendar years 2018 through 2022, the five years preceding the re-issued permit expiration date, to the most recent year for which data are available, 2024, the maximum rolling 12-month sum of NOx emission(s) was 13.20 tons, which occurred in December of 2023 (Table 6).

Table 6: Maximum NOx Rolling 12-month Sum

Year	Maximum NOx Rolling 12-month Sum (Tons)	Month
2024	17.32	October
2023	13.20	December
2022	12.51	April
2021	11.03	July
2020	10.05	December
2019	7.49	January
2018	7.9	December

F. NOx RACT Requirements

COMAR 26.11.09.08B(5) – Operator Training.

"(5) Operator Training.

- (a) For purposes of this regulation, the equipment operator to be trained may be the person who maintains the equipment and makes the necessary adjustments for efficient operation.
- (b) The operator training course sponsored by the Department shall include an in-house training course that is approved by the Department."

COMAR 26.11.09.08E – Requirements for Fuel-Burning Equipment with a Rated Heat Input Capacity of 100 Million Btu Per Hour or Less. "A person who owns or operates fuel-burning equipment with a rated heat input capacity of 100 Million Btu per hour or less shall:

- (1) Submit to the Department an identification of each affected installation, the rated heat input capacity of each installation, and the type of fuel burned in each;
- (2) Perform a combustion analysis for each installation at least once each year and optimize combustion based on the analysis;
- (3) Maintain the results of the combustion analysis at the site for at least 2 years and make this data available to the Department and the EPA upon request;

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- (4) Once every 3 years, require each operator of the installation to attend operator training programs on combustion optimization that are sponsored by the Department, the EPA, or equipment vendors; and
- (5) Prepare and maintain a record of training program attendance for each operator at the site, and make these records available to the Department upon request.

Compliance Demonstration:

The Permittee shall perform a combustion analysis on the boilers at least once a year. **[Authority: COMAR 26.11.09.08E(2)]**

The Permittee shall optimize combustion based on the annual combustion analysis. **[Authority: COMAR 26.11.09.08E(2)]**

The Permittee shall maintain annual fuel use records on site. **[Authority: COMAR 26.11.09.05K(3)]**

The Permittee shall maintain the results of NO_x stack tests and the NO_x analyzer readings. **[Authority: COMAR 26.11.03.06C)]**

The Permittee shall maintain a record of training program attendance for each operator at the site. **[Authority: COMAR 26.11.09.08E(5)]**

The Permittee shall submit the results of the combustion analysis to the Department and the EPA upon request. **[Authority COMAR 26.11.09.08E(3)]**

The Permittee shall submit a record of training program attendance for each operator to the Department upon request. **[Authority COMAR 26.11.09.08E(5)]**

Compliance Status:

NO_x RACT training took place during the reporting period in March 2022.

Semi-annual monitoring reports demonstrating compliance, except as noted below, were received every six months during the five-year permit period ending September 30, 2023 and up to the last required submittal date, first six months of 2025. The Permittee also describes the compliance status in the annual Compliance Certification reports. Compliance Certification Reports were received yearly during the permit period to the most recent year for which reports are available, which is 2024. Each year the reports demonstrated compliance, except as noted below.

On March 28th, 2024, the facility notified the Department that emissions units EU-3 did not meet the qualifications of a space heater and therefore did not meet the applicable fuel burning equipment RACT requirements in COMAR

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26.11.09.08. A notice of permit deviation for failure to report within 60 days was sent with the notification. To simplify the requirements for EU-3, Vicinity Energy requested that in the permit renewal EU-3 be subject to COMAR 26.11.09.08E without the option to follow the 'space heater' requirements of COMAR 26.11.09.08F. MDE evaluated this request and since COMAR 26.11.09.08E is more stringent than COMAR 26.11.09.08F found it to be acceptable.

With this permit renewal, emissions units EU-3 will follow COMAR 26.11.09.08E, Requirements for Fuel-Burning Equipment with a Rated Heat Input Capacity of 100 Million Btu Per Hour or Less, and not space heater requirements. This should allow compliance to be achieved without having to switch from one set of requirements to another depending on fuel variability throughout the year.

G. Operational Limitation

The Permittee shall only burn natural gas in the boilers except for periods of natural gas curtailment, gas supply interruption, startups, and periodic testing in order to be recognized as a natural gas fired boiler under the Boiler MACT 40 CFR part 63 subpart JJJJJJ. **[Authority 40 CFR §63.12]**

Compliance Demonstration:

The Permittee shall maintain a record of the annual fuel usage and submit the record of fuel usage along with the annual Emissions Certification Report.

To demonstrate compliance with these monitoring and record keeping requirements, the permittee submits six-month (SIXMON) reports, as required by Condition 4 of Section III, Plant Wide Conditions, Items 4, "Report of Excess Emissions and Deviations", and an annual Emissions Certification report, as required by Condition 4 of Section III, Plant Wide Conditions, Item 8, "Emissions Certification Report."

Compliance Status:

The Permittee maintains a record of the annual fuel usage and submits the records along with the annual Emissions Certification Reports. Table 7 lists the annual fuel usage for the boilers that make up EU-3, for the calendar years 2018 through 2022, the five years preceding the re-issued permit expiration date, to the most recent year for which reports are available, 2024.

Table 7: Annual Fuel Usage

MDE - ARA Registration Number	510-0651-5-1350		510-0651-5-1351	
	Natural Gas (cubic feet)	Fuel Oil (gallons)	Natural Gas (cubic feet)	Fuel Oil (gallons)

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2024	270,340,000	881	96,030,000	1,267
2023	115,120,000	3,353	151,900,000	4,383
2022	39,830,000	1,572	191,950,000	0
2021	53,950,000	1,604	155,080,000	0
2020	168,820,000	0	40,340,000	1,557
2019	50,810,000	0	73,250,000	7,372
2018	43,630,000	0	110,510,000	30,632

COMPLIANCE SCHEDULE

Vicinity is currently in compliance with all applicable air quality regulations.

TITLE IV – ACID RAIN

Not Applicable.

TITLE VI – OZONE DEPLETING SUBSTANCES

Vicinity is not subject to Title VI requirements.

SECTION 112(r) – ACCIDENTAL RELEASE

Vicinity is not subject to the requirements of Section 112(r).

PERMIT SHIELD

Vicinity did not request a permit shield

INSIGNIFICANT ACTIVITIES

This section provides a list of insignificant emissions units that were reported in the Title V permit application. The applicable Clean Air Act requirements, if any, are listed below the insignificant activity.

- (1) Containers, reservoirs, or tanks used exclusively for:
- (a) — Dipping operations for applying coatings of natural or synthetic resins that contain no VOC;
 - (b) — Dipping operations for coating objects with oils, waxes, or greases, and where no VOC is used;

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- (c) ___ Storage of butane, propane, or liquefied petroleum, or natural gas;
- (d) No. 10 Storage of lubricating oils;
- (e) No. ___ Unheated storage of VOC with an initial boiling point of 300 °F (149 °C) or greater;
- (f) No. 2 Storage of Numbers 1, 2, 4, 5, and 6 fuel oil and aviation jet engine fuel;
- (g) No. ___ Storage of motor vehicle gasoline and having individual tank capacities of 2,000 gallons (7.6 cubic meters) or less;
- (h) No. ___ The storage of VOC normally used as solvents, diluents, thinners, inks, colorants, paints, lacquers, enamels, varnishes, liquid resins, or other surface coatings and having individual capacities of 2,000 gallons (7.6 cubic meters) or less;

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STATE ONLY ENFORCEABLE REQUIREMENTS

This section of the permit contains state-only enforceable requirements. The requirements in this section will not be enforced by the U.S. Environmental Protection Agency. The requirements in this section are not subject to COMAR 26.11.03 10 - Public Petitions for Review to EPA Regarding Part 70 Permits.

1. COMAR 26.11.06.08 – Nuisance.

“An installation or premises may not be operated or maintained in such a manner that a nuisance or air pollution is created. Nothing in this regulation relating to the control of emissions may in any manner be construed as authorizing or permitting the creation of, or maintenance of, nuisance or air pollution.”

2. COMAR 26.11.06.09 – Odors.

“A person may not cause or permit the discharge into the atmosphere of gases, vapors, or odors beyond the property line in such a manner that a nuisance or air pollution is created.”

Compliance Status:

No nuisance or odor complaints were reported during the permit period.

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SECTION I SOURCE IDENTIFICATION

1. DESCRIPTION OF FACILITY

Vicinity Energy is a Boston-based Energy Company owned by Antin Infrastructure Partners (Antin). Antin is a global infrastructure fund based in Paris, London and New York. Vicinity Energy is comprised of central heating plants and associated distribution networks that supply steam or hot water, chilled water and electricity across 19 networks in 12 major cities. It is the largest district energy provider in North America.

In December 2019, Vicinity Energy purchased Veolia North America's district energy assets in the United States including Veolia Energy Baltimore Heating, LLP and its Central Avenue Steam Plant (Central Avenue) and became Vicinity Energy Baltimore Heating, LLP (Vicinity). Central Avenue is located at 201 North Central Avenue in Baltimore, Maryland. This change of ownership necessitated the reissuance of Central Avenue's Title V Permit and Factsheet. Central Avenue generates and distributes steam, which is primarily used for space heating in major buildings in the downtown Baltimore area. The SIC code for this facility is 4911.

Central Avenue consists of two (2) Erie City Boilers, each rated at 156 MMBtu/hr, and two (2) Zurn Industries Model Keystone Low NOx Boilers, each rated at 91.4 MMBtu/hr. Both model boilers are dual-fuel fired. The predominant fuel consumed by the boilers is natural gas.

2. FACILITY INVENTORY LIST

Emissions Unit Number	MDE - ARA Registration Number	Emissions Unit Name and Description	Date of Installation
EU-1	510-0651-5-1281	Erie City boiler rated at 156 MMBtu/hr burning natural gas and No. 2 fuel oil	1954
EU-2	510-0651-5-1282	Erie City boiler rated at 156 MMBtu/hr burning natural gas and No. 2 fuel oil	1954
EU-3 Note 1	510-0651-5-1350	Zurn Industries Low NOx boiler rated at 91.4 MMBtu/hr burning natural gas and No. 2 fuel oil	1993
EU-3 Note 1	510-0651-5-1351	Zurn Industries Low NOx boiler rated at 91.4 MMBtu/hr burning natural gas and No. 2 fuel oil	1993

Note 1: The two Zurn boilers (EU-3) share a common stack

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SECTION II GENERAL CONDITIONS

1. DEFINITIONS

[COMAR 26.11.01.01] and [COMAR 26.11.02.01]

The words or terms in this Part 70 permit shall have the meanings established under COMAR 26.11.01 and .02 unless otherwise stated in this permit.

2. ACRONYMS

ARA	Air and Radiation Administration
BACT	Best Available Control Technology
Btu	British thermal unit
CAA	Clean Air Act
CAM	Compliance Assurance Monitoring
CEM	Continuous Emissions Monitor
CFR	Code of Federal Regulations
CO	Carbon Monoxide
COMAR	Code of Maryland Regulations
EPA	United States Environmental Protection Agency
FR	Federal Register
gr	grains
HAP	Hazardous Air Pollutant
MACT	Maximum Achievable Control Technology
MDE	Maryland Department of the Environment
MVAC	Motor Vehicle Air Conditioner
NESHAPS	National Emission Standards for Hazardous Air Pollutants
NO _x	Nitrogen Oxides
NSPS	New Source Performance Standards
NSR	New Source Review
OTR	Ozone Transport Region
PM	Particulate Matter
PM10	Particulate Matter with Nominal Aerodynamic Diameter of 10 micrometers or less
ppm	parts per million
ppb	parts per billion
PSD	Prevention of Significant Deterioration
PTC	Permit to construct
PTO	Permit to operate (State)
SIC	Standard Industrial Classification
SO ₂	Sulfur Dioxide

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TAP	Toxic Air Pollutant
tpy	tons per year
VE	Visible Emissions
VOC	Volatile Organic Compounds

3. EFFECTIVE DATE

The effective date of the conditions in this Part 70 permit is the date of permit issuance, unless otherwise stated in the permit.

4. PERMIT EXPIRATION

[COMAR 26.11.03.13B(2)]

Upon expiration of this permit, the terms of the permit will automatically continue to remain in effect until a new Part 70 permit is issued for this facility provided that the Permittee has submitted a timely and complete application and has paid applicable fees under COMAR 26.11.02.16.

Otherwise, upon expiration of this permit the right of the Permittee to operate this facility is terminated.

5. PERMIT RENEWAL

[COMAR 26.11.03.02B(3)] and [COMAR 26.11.03.02E]

The Permittee shall submit to the Department a completed application for renewal of this Part 70 permit at least 12 months before the expiration of the permit. Upon submitting a completed application, the Permittee may continue to operate this facility pending final action by the Department on the renewal.

The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall submit such supplementary facts or corrected information no later than 10 days after becoming aware that this occurred. The Permittee shall also provide additional information as necessary to address any requirements that become applicable to the facility after the date a completed application was submitted, but prior to the release of a draft permit. This information shall be submitted to the Department no later than 20 days after a new requirement has been adopted.

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6. CONFIDENTIAL INFORMATION

[COMAR 26.11.02.02G]

In accordance with the provisions of the State Government Article, Sec. 10-611 et seq., Annotated Code of Maryland, all information submitted in an application shall be considered part of the public record and available for inspection and copying, unless the Permittee claims that the information is confidential when it is submitted to the Department. At the time of the request for inspection or copying, the Department will make a determination with regard to the confidentiality of the information. The Permittee, when requesting confidentiality, shall identify the information in a manner specified by the Department and, when requested by the Department, promptly provide specific reasons supporting the claim of confidentiality. Information submitted to the Department without a request that the information be deemed confidential may be made available to the public. Subject to approval of the Department, the Permittee may provide a summary of confidential information that is suitable for public review. The content of this Part 70 permit is not subject to confidential treatment.

7. PERMIT ACTIONS

[COMAR 26.11.03.06E(3)] and [COMAR 26.11.03.20(A)]

This Part 70 permit may be revoked or reopened and revised for cause. The filing of an application by the Permittee for a permit revision or renewal; or a notification of termination, planned changes or anticipated noncompliance by the facility, does not stay a term or condition of this permit.

The Department shall reopen and revise, or revoke the Permittee's Part 70 permit under the following circumstances:

- a. Additional requirements of the Clean Air Act become applicable to this facility and the remaining permit term is 3 years or more;
- b. The Department or the EPA determines that this Part 70 permit contains a material mistake, or is based on false or inaccurate information supplied by or on behalf of the Permittee;

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- c. The Department or the EPA determines that this Part 70 permit must be revised or revoked to assure compliance with applicable requirements of the Clean Air Act; or
- d. Additional requirements become applicable to an affected source under the Federal Acid Rain Program.

8. PERMIT AVAILABILITY

[COMAR 26.11.02.13G]

The Permittee shall maintain this Part 70 permit in the vicinity of the facility for which it was issued, unless it is not practical to do so, and make this permit immediately available to officials of the Department upon request.

9. REOPENING THE PART 70 PERMIT FOR CAUSE BY THE EPA

[COMAR 26.11.03.20B]

The EPA may terminate, modify, or revoke and reissue a permit for cause as prescribed in 40 CFR §70.7(g)

10. TRANSFER OF PERMIT

[COMAR 26.11.02.02E]

The Permittee shall not transfer this Part 70 permit except as provided in COMAR 26.11.03.15.

11. REVISION OF PART 70 PERMITS – GENERAL CONDITIONS

[COMAR 26.11.03.14] and [COMAR 26.11.03.06A(8)]

- a. The Permittee shall submit an application to the Department to revise this Part 70 permit when required under COMAR 26.11.03.15 -.17.
- b. When applying for a revision to a Part 70 permit, the Permittee shall comply with the requirements of COMAR 26.11.03.02 and .03 except that the application for a revision need include only information listed that is related to the proposed change to the source and revision to

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the permit. This information shall be sufficient to evaluate the proposed change and to determine whether it will comply with all applicable requirements of the Clean Air Act.

- c. The Permittee may not change any provision of a compliance plan or schedule in a Part 70 permit as an administrative permit amendment or as a minor permit modification unless the change has been approved by the Department in writing.
- d. A permit revision is not required for a change that is provided for in this permit relating to approved economic incentives, marketable permits, emissions trading, and other similar programs.

12. SIGNIFICANT PART 70 OPERATING PERMIT MODIFICATIONS

[COMAR 26.11.03.17]

The Permittee may apply to the Department to make a significant modification to its Part 70 Permit as provided in COMAR 26.11.03.17 and in accordance with the following conditions:

- a. A significant modification is a revision to the federally enforceable provisions in the permit that does not qualify as an administrative permit amendment under COMAR 26.11.03.15 or a minor permit modification as defined under COMAR 26.11.03.16.
- b. This permit does not preclude the Permittee from making changes, consistent with the provisions of COMAR 26.11.03, that would make the permit or particular terms and conditions of the permit irrelevant, such as by shutting down or reducing the level of operation of a source or of an emissions unit within the source. Air pollution control equipment shall not be shut down or its level of operation reduced if doing so would violate any term of this permit.
- c. Significant permit modifications are subject to all requirements of COMAR 26.11.03 as they apply to permit issuance and renewal, including the requirements for applications, public participation, and review by affected states and EPA, except:
 - (1) An application need include only information pertaining to the proposed change to the source and modification of this permit, including a description of the change and modification, and any

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new applicable requirements of the Clean Air Act that will apply if the change occurs;

- (2) Public participation, and review by affected states and EPA, is limited to only the application and those federally enforceable terms and conditions of the Part 70 permit that are affected by the significant permit modification.
- d. As provided in COMAR 26.11.03.15B(5), an administrative permit amendment may be used to make a change that would otherwise require a significant permit modification if procedures for enhanced preconstruction review of the change are followed that satisfy the requirements of 40 CFR 70.7(d)(1)(v).
- e. Before making a change that qualifies as a significant permit modification, the Permittee shall obtain all permits-to-construct and approvals required by COMAR 26.11.02.
- f. The Permittee shall not make a significant permit modification that results in a violation of any applicable requirement of the Clean Air Act.
- g. The permit shield in COMAR 26.11.03.23 applies to a final significant permit modification that has been issued by the Department, to the extent applicable under COMAR 26.11.03.23.

13. MINOR PERMIT MODIFICATIONS

[COMAR 26.11.03.16]

The Permittee may apply to the Department to make a minor modification to the federally enforceable provisions of this Part 70 permit as provided in COMAR 26.11.03.16 and in accordance with the following conditions:

- a. A minor permit modification is a Part 70 permit revision that:
 - (1) Does not result in a violation of any applicable requirement of the Clean Air Act;
 - (2) Does not significantly revise existing federally enforceable monitoring, including test methods, reporting, record keeping, or compliance certification requirements except by:

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- (a) Adding new requirements,
 - (b) Eliminating the requirements if they are rendered meaningless because the emissions to which the requirements apply will no longer occur, or
 - (c) Changing from one approved test method for a pollutant and source category to another;
 - (3) Does not require or modify a:
 - (a) Case-by-case determination of a federally enforceable emissions standard,
 - (b) Source specific determination for temporary sources of ambient impacts, or
 - (c) Visibility or increment analysis;
 - (4) Does not seek to establish or modify a federally enforceable permit term or condition for which there is no corresponding underlying applicable requirement of the Clean Air Act, but that the Permittee has assumed to avoid an applicable requirement to which the source would otherwise be subject, including:
 - (a) A federally enforceable emissions standard applied to the source pursuant to COMAR 26.11.02.03 to avoid classification as a Title I modification; and
 - (b) An alternative emissions standard applied to an emissions unit pursuant to regulations promulgated under Section 112(i)(5) of the Clean Air Act
 - (5) Is not a Title I modification; and
 - (6) Is not required under COMAR 26.11.03.17 to be processed as a significant modification to this Part 70 permit.
- b. Application for a Minor Permit Modification

The Permittee shall submit to the Department an application for a minor permit modification that satisfies the requirements of COMAR 26.11.03.03 which includes the following:

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- (1) A description of the proposed change, the emissions resulting from the change, and any new applicable requirements that will apply if the change is made;
 - (2) The proposed minor permit modification;
 - (3) Certification by a responsible official, in accordance with COMAR 26.11.02.02F, that:
 - (a) The proposed change meets the criteria for a minor permit modification, and
 - (b) The Permittee has obtained or applied for all required permits-to-construct required by COMAR 26.11.03.16 with respect to the proposed change;
 - (4) Completed forms for the Department to use to notify the EPA and affected states, as required by COMAR 26.11.03.07-.12.
- c. Permittee's Ability to Make Change
- (1) For changes proposed as minor permit modifications to this permit that will require the applicant to obtain a permit to construct, the permit to construct must be issued prior to the new change.
 - (2) During the period of time after the Permittee applies for a minor modification but before the Department acts in accordance with COMAR 26.11.03.16F(2):
 - (a) The Permittee shall comply with applicable requirements of the Clean Air Act related to the change and the permit terms and conditions described in the application for the minor modification.
 - (b) The Permittee is not required to comply with the terms and conditions in the permit it seeks to modify. If the Permittee fails to comply with the terms and conditions in the application during this time, the terms and conditions of both this permit and the application for modification may be enforced against it.

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- d. The Permittee is subject to enforcement action if it is determined at any time that a change made under COMAR 26.11.03.16 is not within the scope of this regulation.
- e. Minor permit modification procedures may be used for Part 70 permit modifications involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches, but only to the extent that the minor permit modification procedures are explicitly provided for in regulations approved by the EPA as part of the Maryland SIP or in other applicable requirements of the Clean Air Act.

14. ADMINISTRATIVE PART 70 OPERATING PERMIT AMENDMENTS

[COMAR 26.11.03.15]

The Permittee may apply to the department to make an administrative permit amendment as provided in COMAR 26.11.03.15 and in accordance with the following conditions:

- a. An application for an administrative permit amendment shall:
 - (1) Be in writing;
 - (2) Include a statement certified by a responsible official that the proposed amendment meets the criteria in COMAR 26.11.03.15 for an administrative permit amendment, and
 - (3) Identify those provisions of this part 70 permit for which the amendment is requested, including the basis for the request.
- b. An administrative permit amendment:
 - (1) Is a correction of a typographical error;
 - (2) Identifies a change in the name, address, or phone number of a person identified in this permit, or a similar administrative change involving the Permittee or other matters which are not directly related to the control of air pollution;
 - (3) requires more frequent monitoring or reporting by the Permittee;

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- (4) Allows for a change in ownership or operational control of a source for which the Department determines that no other revision to the permit is necessary and is documented as per COMAR 26.11.03.15B(4);
 - (5) Incorporates into this permit the requirements from preconstruction review permits or approvals issued by the Department in accordance with COMAR 26.11.03.15B(5), but only if it satisfies 40 CFR 70.7(d)(1)(v);
 - (6) Incorporates any other type of change, as approved by the EPA, which is similar to those in COMAR 26.11.03.15B(1)—(4);
 - (7) Notwithstanding COMAR 26.11.03.15B(1)—(6), all modifications to acid rain control provisions included in this Part 70 permit are governed by applicable requirements promulgated under Title IV of the Clean Air Act; or
 - (8) Incorporates any change to a term or condition specified as State-only enforceable, if the Permittee has obtained all necessary permits-to-construct and approvals that apply to the change.
- c. The Permittee may make the change addressed in the application for an administrative amendment upon receipt by the Department of the application, if all permits-to-construct or approvals otherwise required by COMAR 26.11.02 prior to making the change have first been obtained from the Department.
- d. The permit shield in COMAR 26.11.03.23 applies to administrative permit amendments made under Section B(5) of COMAR 26.11.03.15 , but only after the Department takes final action to revise the permit.
- e. The Permittee is subject to enforcement action if it is determined at any time that a change made under COMAR 26.11.03.15 is not within the scope of this regulation.

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15. OFF-PERMIT CHANGES TO THIS SOURCE

[COMAR 26.11.03.19]

The Permittee may make off-permit changes to this facility as provided in COMAR 26.11.03.19 and in accordance with the following conditions:

- a. The Permittee may make a change to this permitted facility that is not addressed or prohibited by the federally enforceable conditions of this Part 70 permit without obtaining a Part 70 permit revision if:
 - (1) The Permittee has obtained all permits and approvals required by COMAR 26.11.02 and .03;
 - (2) The change is not subject to any requirements under Title IV of the Clean Air Act;
 - (3) The change is not a Title I modification; and
 - (4) The change does not violate an applicable requirement of the Clean Air Act or a federally enforceable term or condition of the permit.
- b. For a change that qualifies under COMAR 26.11.03.19, the Permittee shall provide contemporaneous written notice to the Department and the EPA, except for a change to an emissions unit or activity that is exempt from the Part 70 permit application, as provided in COMAR 26.11.03.04. This written notice shall describe the change, including the date it was made, any change in emissions, including the pollutants emitted, and any new applicable requirements of the Clean Air Act that apply as a result of the change.
- c. Upon satisfying the requirements of COMAR 26.11.03.19, the Permittee may make the proposed change.
- d. The Permittee shall keep a record describing:
 - (1) Changes made at the facility that result in emissions of a regulated air pollutant subject to an applicable requirement of the Clean Air Act, but not otherwise regulated under this permit; and
 - (2) The emissions resulting from those changes.

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- e. Changes that qualify under COMAR 26.11.03.19 are not subject to the requirements for Part 70 revisions.
- f. The Permittee shall include each off-permit change under COMAR 26.11.03.19 in the application for renewal of the part 70 permit.
- g. The permit shield in COMAR 26.11.03.23 does not apply to off-permit changes made under COMAR 26.11.03.19.
- h. The Permittee is subject to enforcement action if it is determined that an off-permit change made under COMAR 26.11.03.19 is not within the scope of this regulation.

16. ON-PERMIT CHANGES TO SOURCES

[COMAR 26.11.03.18]

The Permittee may make on-permit changes that are allowed under Section 502(b)(10) of the Clean Air Act as provided in COMAR 26.11.03.18 and in accordance with the following conditions:

- a. The Permittee may make a change to this facility without obtaining a revision to this Part 70 permit if:
 - (1) The change is not a Title I modification;
 - (2) The change does not result in emissions in excess of those expressly allowed under the federally enforceable provisions of the Part 70 permit for the permitted facility or for an emissions unit within the facility, whether expressed as a rate of emissions or in terms of total emissions;
 - (3) The Permittee has obtained all permits and approvals required by COMAR 26.11.02 and .03;
 - (4) The change does not violate an applicable requirement of the Clean Air Act;
 - (5) The change does not violate a federally enforceable permit term or condition related to monitoring, including test methods, record keeping, reporting, or compliance certification requirements;

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- (6) The change does not violate a federally enforceable permit term or condition limiting hours of operation, work practices, fuel usage, raw material usage, or production levels if the term or condition has been established to limit emissions allowable under this permit;
 - (7) If applicable, the change does not modify a federally enforceable provision of a compliance plan or schedule in this Part 70 permit unless the Department has approved the change in writing; and
 - (8) This permit does not expressly prohibit the change under COMAR 26.11.03.18.
- b. The Permittee shall notify the Department and the EPA in writing of a proposed on-permit change under COMAR 26.11.03.18 not later than 7 days before the change is made. The written information shall include the following information:
 - (1) A description of the proposed change;
 - (2) The date on which the change is proposed to be made;
 - (3) Any change in emissions resulting from the change, including the pollutants emitted;
 - (4) Any new applicable requirement of the Clean Air Act; and
 - (5) Any permit term or condition that would no longer apply.
- c. The responsible official of this facility shall certify in accordance with COMAR 26.11.02.02F that the proposed change meets the criteria for the use of on-permit changes under COMAR 26.11.03.18.
- d. The Permittee shall attach a copy of each notice required by condition b. above to this Part 70 permit.
- e. On-permit changes that qualify under COMAR 26.11.03.18 are not subject to the requirements for part 70 permit revisions.
- f. Upon satisfying the requirements under COMAR 26.11.03.18, the Permittee may make the proposed change.

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- g. The permit shield in COMAR 26.11.03.23 does not apply to on-permit changes under COMAR 26.11.03.18.
- h. The Permittee is subject to enforcement action if it is determined that an on-permit change made under COMAR 26.11.03.18 is not within the scope of the regulation or violates any requirement of the State air pollution control law.

17. FEE PAYMENT

[COMAR 26.11.02.16A(2) & (5)(b)]

- a. The fee for this Part 70 permit is as prescribed in Regulation .19 of COMAR 26.11.02.
- b. The fee is due on and shall be paid on or before each 12-month anniversary date of the permit.
- c. Failure to pay the annual permit fee constitutes cause for revocation of the permit by the Department.

18. REQUIREMENTS FOR PERMITS-TO-CONSTRUCT AND APPROVALS

[COMAR 26.11.02.09.]

The Permittee may not construct or modify or cause to be constructed or modified any of the following sources without first obtaining, and having in current effect, the specified permits-to-construct and approvals:

- a. New Source Review source, as defined in COMAR 26.11.01.01, approval required, except for generating stations constructed by electric companies;
- b. Prevention of Significant Deterioration source, as defined in COMAR 26.11.01.01, approval required, except for generating stations constructed by electric companies;
- c. New Source Performance Standard source, as defined in COMAR 26.11.01.01, permit to construct required, except for generating stations constructed by electric companies;

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- d. National Emission Standards for Hazardous Air Pollutants source, as defined in COMAR 26.11.01.01, permit to construct required, except for generating stations constructed by electric companies;
- e. A stationary source of lead that discharges one ton per year or more of lead or lead compounds measured as elemental lead, permit to construct required, except for generating stations constructed by electric companies;
- f. All stationary sources of air pollution, including installations and air pollution control equipment, except as listed in COMAR 26.11.02.10, permit to construct required;
- g. In the event of a conflict between the applicability of (a.— e.) above and an exemption listed in COMAR 26.11.02.10, the provision that requires a permit applies.
- h. Approval of a PSD or NSR source by the Department does not relieve the Permittee obtaining an approval from also obtaining all permits-to-construct required by (c.— g.) above.

19. CONSOLIDATION OF PROCEDURES FOR PUBLIC PARTICIPATION

[COMAR 26.11.02.11C] and [COMAR 26.11.03.01K]

The Permittee may request the Department to authorize special procedures for the Permittee to apply simultaneously, to the extent possible, for a permit to construct and a revision to this permit.

These procedures may provide for combined public notices, informational meetings, and public hearings for both permits but shall not adversely affect the rights of a person, including EPA and affected states, to obtain information about the application for a permit, to comment on an application, or to challenge a permit that is issued.

These procedures shall not alter any existing permit procedures or time frames.

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20. PROPERTY RIGHTS

[COMAR 26.11.03.06E(4)]

This Part 70 permit does not convey any property rights of any sort, or any exclusive privileges.

21. SEVERABILITY

[COMAR 26.11.03.06A(5)]

If any portion of this Part 70 permit is challenged, or any term or condition deemed unenforceable, the remainder of the requirements of the permit continues to be valid.

22. INSPECTION AND ENTRY

[COMAR 26.11.03.06G(3)]

The Permittee shall allow employees and authorized representatives of the Department, the EPA, and local environmental health agencies, upon presentation of credentials or other documents as may be required by law, to:

- a. Enter at a reasonable time without delay and without prior notification the Permittee's property where a Part 70 source is located, emissions-related activity is conducted, or records required by this permit are kept;
- b. Have access to and make copies of records required by the permit;
- c. Inspect all emissions units within the facility subject to the permit and all related monitoring systems, air pollution control equipment, and practices or operations regulated or required by the permit; and
- d. Sample or monitor any substances or parameters at or related to the emissions units at the facility for the purpose of determining compliance with the permit.

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23. DUTY TO PROVIDE INFORMATION

[COMAR 26.11.03.06E(5)]

The Permittee shall furnish to the Department, within a reasonable time specified by the Department, information requested in writing by the Department in order to determine whether the Permittee is in compliance with the federally enforceable conditions of this Part 70 permit, or whether cause exists for revising or revoking the permit. Upon request, the Permittee shall also furnish to the Department records required to be kept under the permit.

For information claimed by the Permittee to be confidential and therefore potentially not discloseable to the public, the Department may require the Permittee to provide a copy of the records directly to the EPA along with a claim of confidentiality.

The Permittee shall also furnish to the Department, within a reasonable time specified by the Department, information or records requested in writing by the Department in order to determine if the Permittee is in compliance with the State-only enforceable conditions of this permit.

24. COMPLIANCE REQUIREMENTS

[COMAR 26.11.03.06E(1)] and [COMAR 26.11.03.06A(11)] and [COMAR 26.11.02.05]

The Permittee shall comply with the conditions of this Part 70 permit. Noncompliance with the permit constitutes a violation of the Clean Air Act, and/or the Environment Article Title 2 of the Annotated Code of Maryland and may subject the Permittee to:

- a. Enforcement action,
- b. Permit revocation or revision,
- c. Denial of the renewal of a Part 70 permit, or
- d. Any combination of these actions.

The conditions in this Part 70 permit are enforceable by EPA and citizens under the Clean Air Act except for the State-only enforceable conditions.

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Under Environment Article Section 2-609, Annotated Code of Maryland, the Department may seek immediate injunctive relief against a person who violates this permit in such a manner as to cause a threat to human health or the environment.

25. CREDIBLE EVIDENCE

Nothing in this permit shall be interpreted to preclude the use of credible evidence to demonstrate noncompliance with any term of this permit.

26. NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE

[COMAR 26.11.03.06E(2)]

The need to halt or reduce activity in order to comply with the conditions of this permit may not be used as a defense in an enforcement action.

27. CIRCUMVENTION

[COMAR 26.11.01.06]

The Permittee may not install or use any article, machine, equipment or other contrivance, the use of which, without resulting in a reduction in the total weight of emissions, conceals or dilutes emissions which would otherwise constitute a violation of any applicable air pollution control regulation.

28. PERMIT SHIELD

[COMAR 26.11.03.23]

A permit shield as described in COMAR 26.11.03.23 shall apply only to terms and conditions in this Part 70 permit that have been specifically identified as covered by the permit shield. Neither this permit nor COMAR 26.11.03.23 alters the following:

- a. The emergency order provisions in Section 303 of the Clean Air Act, including the authority of EPA under that section;

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- b. The liability of the Permittee for a violation of an applicable requirement of the Clean Air Act before or when this permit is issued or for a violation that continues after issuance;
- c. The requirements of the Acid Rain Program, consistent with Section 408(a) of the Clean Air Act;
- d. The ability of the Department or EPA to obtain information from a source pursuant to Maryland law and Section 114 of the Clean Air Act; or
- e. The authority of the Department to enforce an applicable requirement of the State air pollution control law that is not an applicable requirement of the Clean Air Act.

29. ALTERNATE OPERATING SCENARIOS

[COMAR 26.11.03.06A(9)]

For all alternate operating scenarios approved by the Department and contained within this permit, the Permittee, while changing from one approved scenario to another, shall contemporaneously record in a log maintained at the facility each scenario under which the emissions unit is operating and the date and time the scenario started and ended.

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SECTION III PLANT WIDE CONDITIONS

1. PARTICULATE MATTER FROM CONSTRUCTION AND DEMOLITION

[COMAR 26.11.06.03D]

The Permittee shall not cause or permit any building, its appurtenances, or a road to be used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne.

2. OPEN BURNING

[COMAR 26.11.07]

Except as provided in COMAR 26.11.07.04, the Permittee shall not cause or permit an open fire from June 1 through August 31 of any calendar year. Prior to any open burning, the Permittee shall request and receive approval from the Department.

3. AIR POLLUTION EPISODE

[COMAR 26.11.05.04]

When requested by the Department, the Permittee shall prepare in writing standby emissions reduction plans, consistent with good industrial practice and safe operating procedures, for reducing emissions creating air pollution during periods of Alert, Warning, and Emergency of an air pollution episode.

4. REPORT OF EXCESS EMISSIONS AND DEVIATIONS

[COMAR 26.11.01.07] and [COMAR 26.11.03.06C(7)]

The Permittee shall comply with the following conditions for occurrences of excess emissions and deviations from requirements of this permit, including those in Section VI – State-only Enforceable Conditions:

- a. Report any deviation from permit requirements that could endanger human health or the environment, by orally notifying the Department immediately upon discovery of the deviation;

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- b. Promptly report all occurrences of excess emissions that are expected to last for one hour or longer by orally notifying the Department of the onset and termination of the occurrence;
- c. When requested by the Department the Permittee shall report all deviations from permit conditions, including those attributed to malfunctions as defined in COMAR 26.11.01.07A, within 5 days of the request by submitting a written description of the deviation to the Department. The written report shall include the cause, dates and times of the onset and termination of the deviation, and an account of all actions planned or taken to reduce, eliminate, and prevent recurrence of the deviation;
- d. The Permittee shall submit to the Department semi-annual monitoring reports that confirm that all required monitoring was performed, and that provide accounts of all deviations from permit requirements that occurred during the reporting periods. Reporting periods shall be January 1 through June 30 and July 1 through December 31, and reports shall be submitted within 30 days of the end of each reporting period. Each account of deviation shall include a description of the deviation, the dates and times of onset and termination, identification of the person who observed or discovered the deviation, causes and corrective actions taken, and actions taken to prevent recurrence. If no deviations from permit conditions occurred during a reporting period, the Permittee shall submit a written report that so states.
- e. When requested by the Department, the Permittee shall submit a written report to the Department within 10 days of receiving the request concerning an occurrence of excess emissions. The report shall contain the information required in COMAR 26.11.01.07D(2).

5. ACCIDENTAL RELEASE PROVISIONS

[COMAR 26.11.03.03B(23)] and [40 CFR 68]

Should the Permittee become subject to 40 CFR 68 during the term of this permit, the Permittee shall submit risk management plans by the date specified in 40 CFR 68.150 and shall certify compliance with the requirements of 40 CFR 68 as part of the annual compliance certification as required by 40 CFR 70.

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The Permittee shall initiate a permit revision or reopening according to the procedures of 40 CFR 70.7 to incorporate appropriate permit conditions into the Permittee's Part 70 permit.

6. GENERAL TESTING REQUIREMENTS

[COMAR 26.11.01.04]

The Department may require the Permittee to conduct, or have conducted, testing to determine compliance with this Part 70 permit. The Department, at its option, may witness or conduct these tests. This testing shall be done at a reasonable time, and all information gathered during a testing operation shall be provided to the Department.

7. EMISSIONS TEST METHODS

[COMAR 26.11.01.04]

Compliance with the emissions standards and limitations in this Part 70 permit shall be determined by the test methods designated and described below or other test methods submitted to and approved by the Department.

Reference documents of the test methods approved by the Department include the following:

- a. 40 CFR 60, appendix A
- b. 40 CFR 51, appendix M
- c. The Department's Technical Memorandum 91-01 "Test Methods and Equipment Specifications for Stationary Sources", (January 1991), as amended through Supplement 3, (October 1, 1997)

8. EMISSIONS CERTIFICATION REPORT

**[COMAR 26.11.01.05-1] and [COMAR 26.11.02.19C] and
[COMAR 26.11.02.19D]**

The Permittee shall certify actual annual emissions of regulated pollutants from the facility on a calendar year basis.

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- a. The certification shall be on forms obtained from the Department and submitted to the Department not later than April 1 of the year following the year for which the certification is required;
- b. The individual making the certification shall certify that the information is accurate to the individual's best knowledge. The individual shall be:
 - (1) Familiar with each source for which the certifications forms are submitted, and
 - (2) Responsible for the accuracy of the emissions information;
- c. The Permittee shall maintain records necessary to support the emissions certification including the following information if applicable:
 - (1) The total amount of actual emissions of each regulated pollutant and the total of all regulated pollutants;
 - (2) An explanation of the methods used to quantify the emissions and the operating schedules and production data that were used to determine emissions, including significant assumptions made;
 - (3) Amounts, types and analyses of all fuels used;
 - (4) Emissions data from continuous emissions monitors that are required by this permit, including monitor calibration and malfunction information;
 - (5) Identification, description, and use records of all air pollution control equipment and compliance monitoring equipment including:
 - (a) Significant maintenance performed,
 - (b) Malfunctions and downtime, and
 - (c) Episodes of reduced efficiency of all equipment;
 - (6) Limitations on source operation or any work practice standards that significantly affect emissions; and
 - (7) Other relevant information as required by the Department.

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9. COMPLIANCE CERTIFICATION REPORT

[COMAR 26.11.03.06G(6) and (7)]

The Permittee shall submit to the Department and EPA Region III a report certifying compliance with each term of this Part 70 permit including each applicable standard, emissions limitation, and work practice for the previous calendar year by April 1 of each year.

- a. The compliance certification shall include:
 - (1) The identification of each term or condition of this permit which is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether the compliance was continuous or intermittent;
 - (4) The methods used for determining the compliance status of each source, currently and over the reporting period; and
 - (5) Any other information required to be reported to the Department that is necessary to determine the compliance status of the Permittee with this permit.
- b. The Permittee shall submit the compliance certification reports to the Department and EPA simultaneously.

10. CERTIFICATION BY RESPONSIBLE OFFICIAL

[COMAR 26.11.02.02F]

All application forms, reports, and compliance certifications submitted pursuant to this permit shall be certified by a responsible official as to truth, accuracy, and completeness. The Permittee shall expeditiously notify the Department of an appointment of a new responsible official.

The certification shall be in the following form:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system

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designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

11. SAMPLING AND EMISSIONS TESTING RECORD KEEPING

[COMAR 26.11.03.06C(5)]

The Permittee shall gather and retain the following information when sampling and testing for compliance demonstrations:

- a. The location as specified in this permit, and the date and time that samples and measurements are taken;
- b. All pertinent operating conditions existing at the time that samples and measurements are taken;
- c. The date that each analysis of a sample or emissions test is performed and the name of the person taking the sample or performing the emissions test;
- d. The identity of the Permittee, individual, or other entity that performed the analysis;
- e. The analytical techniques and methods used; and
- f. The results of each analysis.

12. GENERAL RECORDKEEPING

[COMAR 26.11.03.06C(6)]

The Permittee shall retain records of all monitoring data and information that support the compliance certification for a period of five (5) years from the date that the monitoring, sample measurement, application, report or emissions test was completed or submitted to the Department.

These records and support information shall include:

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- a. All calibration and maintenance records;
- b. All original data collected from continuous monitoring instrumentation;
- c. Records which support the annual emissions certification; and
- d. Copies of all reports required by this permit.

13. GENERAL CONFORMITY

[COMAR 26.11.26.09]

The Permittee shall comply with the general conformity requirements of 40 CFR 93, Subpart B and COMAR 26.11.26.09.

14. ASBESTOS PROVISIONS

[40 CFR 61, Subpart M]

The Permittee shall comply with 40 CFR 61, Subpart M when conducting any renovation or demolition activities at the facility.

15. OZONE DEPLETING REGULATIONS

[40 CFR 82, Subpart F]

The Permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for MVACs in subpart B:

- a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the prohibitions and required practices pursuant to 40 CFR 82.154 and 82.156.
- b. Equipment used during the maintenance, service, repair or disposal of appliances shall comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

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- c. Persons performing maintenance, service, repairs or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
- d. Persons disposing of small appliances, MVACS, and MVAC-like appliances as defined in 40 CFR 82.152, shall comply with record keeping requirements pursuant to 40 CFR 82.155.
- e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.157.
- f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.

16. ACID RAIN PERMIT

Not applicable

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SECTION IV PLANT SPECIFIC CONDITIONS

This section provides tables that include the emissions standards, emissions limitations, and work practices applicable to each emissions unit located at this facility. The Permittee shall comply with all applicable emissions standards, emissions limitations and work practices included herein.

The tables also include testing, monitoring, record keeping and reporting requirements specific to each emissions unit. In addition to the requirements included here in **Section IV**, the Permittee is also subject to the general testing, monitoring, record keeping and reporting requirements included in **Section III – Plant Wide Conditions** of this permit.

Unless otherwise provided in the specific requirements for an emissions unit, the Permittee shall maintain at the facility for at least five (5) years, and shall make available to the Department upon request, all records that the Permittee is required under this section to establish. **[Authority: COMAR 26.11.03.06C(5)(g)]**

Table IV – 1	
1.0	<u>Emissions Unit Number(s): EU-1 and EU-2</u> [MDE ARA Reg. No. 510-0651-5-1281 and 5-1282] Two (2) 156 MMBtu/hr natural gas and No. 2 fuel oil fired Erie City boilers.
1.1	<u>Applicable Standards/Limits:</u> A. <u>Control of Sulfur Oxides</u> COMAR 26.11.09.07A – Sulfur Content Limitations for Fuel. “A person may not burn, sell, or make available for sale any fuel with a sulfur content by weight in excess of or which otherwise exceeds the following limitations: (2) In Areas III and IV: (b) distillate fuel oils, 0.3 percent.” B. <u>Visible Emissions Limitations</u> COMAR 26.11.09.05A(2) – Fuel Burning Equipment. “In Areas III and IV, a person may not cause or permit the discharge of emissions from any fuel burning equipment, other than water in an uncombined form, which is visible to human observers except that, for the purpose of demonstrating compliance using COM data, emissions that are visible to a human observer are those that are equal to or greater than 10 percent opacity.”

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COMAR 26.11.09.05A(3) – Exceptions.

“Section A(1) and (2) of this regulation do not apply to emissions during load changing, soot blowing, startup, or adjustments or occasional cleaning of control equipment if:

- (a) The visible emissions are not greater than 40 percent opacity; and
- (b) The visible emissions do not occur for more than 6 consecutive minutes in any sixty-minute period.”

C. NOx RACT Requirements

COMAR 26.11.09.01B – Definitions.

- (15) “Space heater” means fuel-burning equipment that consumes more than 60 percent of its annual fuel during the period from October 31 of one year through March 31 of the following year. For the purpose of this regulation, annual fuel use is the total fuel consumed during the period October 1 of one year to September 30 of the following year, beginning October 1, 1989.

COMAR 26.11.09.08 – Control of NOx Emissions for Major Stationary Sources.

COMAR 26.11.09.08B(1)(a) and (c) – General Requirements and Conditions.

“(1) Emission Standards and Requirements.

- (a) A person who owns or operates an installation that causes NOx emissions subject to this regulation is in compliance with this regulation if the person establishes compliance with the emissions standards in §B(1)(c) of this regulation.

...

- (c) Emission Standards in Pounds of NOx per Million Btu of heat input.

Fuel	Tangential-Fired	Wall-Fired
Gas only	0.20	0.20
Gas/Oil	0.25	0.25
Coal (dry bottom)	0.38	0.38
Coal (wet bottom)	1.00	1.00

Note: The two boilers burn natural gas and fuel oil. The NOx emissions limit for the boilers is 0.25 pounds of NOx per million Btu of heat input.

COMAR 26.11.09.08B(2) – Demonstration of Compliance.

- “(a) A person subject to a NOx emission standard in this regulation shall demonstrate compliance as follows:

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...

(ii) For all other installations, compliance with the NO_x emissions standards in this regulation shall be established by stack tests using Method 07 of the test methods referenced in COMAR 26.11.01.04C(1) or other test methods approved by the Department and the EPA....

(e) For a person who establishes compliance using a stack test, compliance shall be determined as averages of the stack test duration.

COMAR 26.11. 09.08B(5) – Operator Training.

“(5) Operator Training.

- (a) For purposes of this regulation, the equipment operator to be trained may be the person who maintains the equipment and makes the necessary adjustments for efficient operation.
- (b) The operator training course sponsored by the Department shall include an in-house training course that is approved by the Department.”

COMAR 26.11. 09.08D – Requirements for Fuel-Burning Equipment with a Rated Heat Input Capacity of Less than 250 Million Btu Per Hour and Greater than 100 Million Btu Per Hour.

(1) Equipment Specifications and Standards.

- (a) A person who owns or operates coal fired fuel-burning equipment with a rated heat input capacity of less than 250 Million Btu per hour and greater than 100 Million Btu per hour shall install and operate in accordance with the manufacturer's specifications, combustion modifications, or other technologies to meet an emission rate of 0.65 pounds of NO_x per Million Btu per hour.
- (b) All other fuel burning equipment with a rated heat input capacity of less than 250 Million Btu per hour and greater than 100 Million Btu per hour shall meet the NO_x emission rates set forth in §B(1)(c) of this regulation.

(2) Exceptions. The requirements in §D(1) of this regulation do not apply to a space heater as defined in Regulation .01B of this chapter or to fuel-burning equipment subject to §G of this regulation.

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	COMAR 26.11. 09.08F – <u>Requirements for Space Heaters.</u> “(1) A person who owns or operates a space heater as defined in Regulation .01B of this chapter shall: (a) Submit to the Department a list of each affected installation on the premises and the types of fuel used in each installation; (b) Develop an operating and maintenance plan to minimize NO_x emissions based on the recommendations of equipment vendors and other information including the source's operating and maintenance experience; (c) Implement the operating and maintenance plan and maintain the plan at the premises for review upon request by the Department; (d) Require installation operators to attend in-State operator training programs once every 3 years on combustion optimization that are sponsored by the Department, the EPA, or equipment vendors; and (e) Prepare and maintain a record of training program attendance for each operator at the site and make these records available to the Department upon request. (2) A person who owns or operates an installation that no longer qualifies as a space heater shall inform the Department not later than 60 days after the date when the fuel-burning equipment did not qualify, and shall meet the applicable fuel-burning equipment RACT requirement in this regulation.” COMAR 26.11. 09.08G – <u>Requirements for Fuel-Burning Equipment with a Capacity Factor of 15 Percent or Less, and Combustion Turbines with a Capacity Factor Greater than 15 Percent.</u> “G. Requirements for Fuel-Burning Equipment with a Capacity Factor of 15 Percent or Less, and Combustion Turbines with a Capacity Factor Greater than 15 Percent. (1) A person who owns or operates fuel-burning equipment with a capacity factor (as defined in 40 CFR Part 72.2) of 15 percent or less shall: (a) Provide certification of the capacity factor of the equipment to the Department in writing;

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	(b) For fuel-burning equipment that operates more than 500 hours during a calendar year, perform a combustion analysis and optimize combustion at least once annually; (c) Maintain the results of the combustion analysis at the site for at least 2 years and make these results available to the Department and the EPA upon request; (d) Require each operator of an installation, except combustion turbines, to attend operator training programs at least once every 3 years, on combustion optimization that are sponsored by the Department, the EPA, or equipment vendors; and (e) Maintain a record of training program attendance for each operator at the site, and make these records available to the Department upon request.” 40 CFR § 72.2 Definitions. “<i>Capacity factor</i> means... (2) The ratio of a unit's annual heat input (in million British thermal units or equivalent units of measure) to the unit's maximum rated hourly heat input rate (in million British thermal units per hour or equivalent units of measure) times 8,760 hours. <u>D. Operational Limitation</u> The Permittee shall only burn natural gas in the boilers except for periods of natural gas curtailment, gas supply interruption, startups, and periodic testing in order for the boilers to be recognized as natural gas fired boilers under the Boiler MACT 40 CFR part 63 subpart JJJJJJ. [Authority: 40 CFR §63.12]
1.2	<u>Testing Requirements:</u> <u>A. Control of Sulfur Oxides</u> See Monitoring Requirements in Section 1.3.A. <u>B. Visible Emissions Limitations</u> See Monitoring Requirements in Section 1.3.B. <u>C. NOx RACT Requirements</u> When the definition of “space heater” is not met:

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	Not later than 180 days after the date when the fuel-burning equipment first did not qualify as a space heater within the term of the issuance of this permit, the Permittee shall perform a stack test on the equipment that did not qualify as a space heater, on natural gas. The Permittee shall submit a test protocol to the Department for approval at least 30 days before the scheduled test date. The Permittee shall submit all test results and supporting data from the stack tests to the Department within 45 days after the stack tests are conducted. [Authority: COMAR 26.11.01.04 and COMAR 26.11.03.06C] Note: The Permittee shall test the boiler(s) that did not qualify as a space heater for NOx emissions no more than once during the life of the permit using EPA Reference Method 7E, or other acceptable methods. [Authority: COMAR 26.11.03.06C] When the definition of “space heater” is met: See Monitoring Requirements in Section 1.3. D. <u>Operational Limitation</u> See Recordkeeping Requirements in Section 1.4.D. and Reporting Requirements in Section 1.5.D.
1.3	<u>Monitoring Requirements:</u> A. <u>Control of Sulfur Oxides</u> The Permittee shall obtain fuel suppliers’ certification, which shall include the following information: (1) For distillate oil: (a) The name of the oil supplier; (b) A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in § 60.41c; and (c) The sulfur content or maximum sulfur content of the oil. [Reference: 40 CFR 60.48c(f) and COMAR 26.11.09.08E(2)]

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B. Visible Emissions Limitations

The Permittee shall:

- (1) Properly operate and maintain the boilers in a manner to prevent visible emissions;
- (2) Maintain an operations manual and preventive maintenance plan that relates to combustion performance; and
- (3) Verify no visible emissions when burning No. 2 fuel oil. The Permittee shall perform a visual observation for a 12-minute period once for each 168 hours that the boiler burns oil or at a minimum of once per year. If a boiler operates for less than 100 hours during a calendar year, this requirement is waived.

The Permittee shall perform the following, if emissions are visible:

- (4) Inspect combustion system and boiler operations;
- (5) Perform all necessary adjustments and/or repairs to the boiler within 48 hours, so that visible emissions are eliminated;
- (6) Document in writing the results of inspections, adjustments and/or repairs to the boiler; and
- (7) After 48 hours, if the required adjustments and/or repairs had not eliminated the visible emissions, perform Method 9 observations once daily for 18 minutes until corrective actions have eliminated the visible emissions. **[Authority: COMAR 26.11.03.06C]**

C. NOx RACT Requirements

When the definition of “space heater” is not met:

- (1) The Permittee shall measure the NOx content of the flue gases from each boiler for a 5-minute period every 168 hours of operation. The Permittee shall use an analyzer that is properly calibrated and maintained in accordance with the vendor specification. The analyzer shall be the type approved by the Department. **[Authority: COMAR 26.11.03.06C]**

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	When the definition of “space heater” is met: (2) The Permittee shall develop and implement an operating and maintenance plan to minimize NO_x emissions. [Authority: COMAR 26.11.09.08F(1)] <u>D. Operational Limitation</u> See Record Keeping Requirements in Section 1.4.D. and Reporting Requirements in Section 1.5.D.
1.4	<u>Record Keeping Requirements:</u> NOTE: All records must be maintained for a period of five (5) years. [Authority: COMAR 26.11.03.06.C(5)(g)] <u>A. Control of Sulfur Oxides</u> The Permittee shall maintain records of fuel supplier’s certification and shall make records available to the Department upon request. [Authority: 40 CFR 60.48c(e)] <u>B. Visible Emissions Limitations</u> The Permittee shall: (1) Maintain a log of maintenance performed on the boiler and operations training provided to the boiler operators; and (2) Maintain a log of visible emissions observations performed on site for five (5) years and make the log available to the Department’s representative upon request. [Authority: COMAR 26.11.03.06C] <u>C. NO_x RACT Requirements</u> When the definition of “space heater” is not met: (1) The Permittee shall maintain annual fuel use records on site. [Authority: COMAR 26.11.09.05K(3)] (2) The Permittee shall maintain the results of NO_x stack tests and the NO_x analyzer readings. [Authority: COMAR 26.11.03.06C] (3) The Permittee shall maintain a record of training program attendance for each operator at the site. [Authority: COMAR 26.11.09.08E(5)]

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	When the definition of “space heater” is met: (4) The Permittee shall maintain a list of each affected installation on the premises and the types of fuel used in each installation. [Authority: COMAR 26.11.09.08F(1)(a)] (5) The Permittee shall maintain records of maintenance performed that relates to combustion performance in keeping with the requirements of an operating and maintenance plan. [Reference: COMAR 26.11.09.08F(1)(c)] (6) The Permittee shall maintain the operating and maintenance plan. [Authority: COMAR 26.11.09.08F(1)(c)] (7) The Permittee shall maintain records of training program attendance for each operator. [Authority: COMAR 26.11.09.08F(1)(e)] (8) The Permittee shall maintain records of fuel use that demonstrate that the boiler meets the definition of a space heater. [Authority: COMAR 26.11.09.08K(3) and COMAR 26.11.03.06C] <u>D. Operational Limitation</u> The Permittee shall maintain records of the quantity and type of fuel combusted in the boilers. [Authority: COMAR 26.11.03.06C]
1.5	<u>Reporting Requirements:</u> <u>A. Control of Sulfur Oxides</u> The Permittee shall submit fuel supplier certifications to the Department upon request. [Authority: COMAR 26.11.03.06C] <u>B. Visible Emissions Limitations</u> The Permittee shall report incidents of visible emissions in accordance with Section III – Plant Wide Conditions, Item 4, “Report of Excess Emissions and Deviations.” [Authority: COMAR 26.11.03.06C] <u>C. NOx RACT Requirements</u> When the definition of “space heater” is not met: (1) The Permittee shall report the results of NOx tests along with supporting data from the stack tests within 45 days of the

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	completion of the stack tests. [Authority: COMAR 26.11.09.08K(2) and COMAR 26.11.03.06C] When the definition of “space heater” is met: (2) The Permittee shall submit the list of each affected installation on the premises and the types of fuel used in each installation. [Authority: COMAR 26.11.09.08F(1)(a)] (3) The Permittee shall submit a list of trained operators and training program attendance to the Department upon request. [Authority: COMAR 26.11.09.08E(5)] (4) The Permittee shall inform the Department no later than 60 days after the date that the boilers no longer qualify as a space heater. <u>D. Operational Limitation</u> The Permittee shall submit annual fuel usage with the annual Emissions Certification Report. [Authority: COMAR 26.11.03.06C]

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2.0	<u>Emissions Unit Number(s):</u> EU-3 [MDE ARA Reg. No. 510-0651-5-1350 and 5-1351] Two (2) 91.4 MMBtu/hr natural gas and No.2 fuel oil fired Zurn boilers.
2.1	<u>Applicable Standards/Limits:</u> <u>A. Control of Sulfur Oxides</u> COMAR 26.11.09.07A – Sulfur Content Limitations for Fuel. “A person may not burn, sell, or make available for sale any fuel with a sulfur content by weight in excess of or which otherwise exceeds the following limitations: (2) In Areas III and IV: (b) distillate fuel oils, 0.3 percent.” 40 CFR Part 60 Subpart Dc – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units with a heat

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input capacity less than 100 MMBtu/hr but greater than 10 MMBtu/hr for which construction began after June 9, 1989.

40 CFR §60.42c – Standard for sulfur dioxide (SO₂).

“(d) On and after the date on which the initial performance test is completed or required to be completed under § 60.8, whichever date comes first, no owner or operator of an affected facility that combusts oil shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO₂ in excess of 215 ng/J (0.50 lb/MMBtu) heat input from oil; or, as an alternative, no owner or operator of an affected facility that combusts oil shall combust oil in the affected facility that contains greater than 0.5 weight percent sulfur. The percent reduction requirements are not applicable to affected facilities under this paragraph.

...

(h) For affected facilities listed under paragraphs (h)(1), (2), (3), or (4) of this section, compliance with the emission limits or fuel oil sulfur limits under this section may be determined based on a certification from the fuel supplier, as described under § 60.48c(f), as applicable.

(1) Distillate oil-fired affected facilities with heat input capacities between 2.9 and 29 MW (10 and 100 MMBtu/hr).

...

(i) The SO₂ emission limits, fuel oil sulfur limits, and percent reduction requirements under this section apply at all times, including periods of startup, shutdown, and malfunction.”

Note: Compliance with **Subpart Dc, will be demonstrated through compliance with COMAR 26.11.09.07A(2)(b).**

B. Visible Emissions Limitations

COMAR 26.11.09.05A(2) – Fuel Burning Equipment.

“In Areas III and IV, a person may not cause or permit the discharge of emissions from any fuel burning equipment, other than water in an uncombined form, which is visible to human observers except that, for the purpose of demonstrating compliance using COM data, emissions that are visible to a human observer are those that are equal to or greater than 10 percent opacity.”

COMAR 26.11.09.05A(3) – Exceptions.

“Section A(1) and (2) of this regulation do not apply to emissions during load changing, soot blowing, startup, or adjustments or occasional cleaning of control equipment if:

(a) The visible emissions are not greater than 40 percent opacity; and

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(b) The visible emissions do not occur for more than 6 consecutive minutes in any sixty-minute period.”

40 CFR Part 60 Subpart Dc – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units with a heat input capacity less than 100 MMBtu/hr. but greater than 10 MMBtu/hr. for construction began after June 9, 1989.

§60.43c – Standard for particulate matter (PM).

“(c) On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that combusts coal, wood, or oil and has a heat input capacity of 8.7 MW (30 MMBtu/h) or greater shall cause to be discharged into the atmosphere from that affected facility any gases that exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity. Owners and operators of an affected facility that elect to install, calibrate, maintain, and operate a continuous emissions monitoring system (CEMS) for measuring PM emissions according to the requirements of this subpart and are subject to a federally enforceable PM limit of 0.030 lb/MMBtu or less are exempt from the opacity standard specified in this paragraph (c).

(d) The PM and opacity standards under this section apply at all times, except during periods of startup, shutdown, or malfunction.”

Note: Compliance with the “No Visible Emissions” requirements of **COMAR 26.11.09.05A(2) and (3)** will be used to show compliance with this NSPS standard.

C. Control of Nitrogen Oxides

MDE Permit to Construct #s 510-5-1350 & 1351 N, Condition C2, which requires the Permittee to equip the boilers with Low-NOx burners and limit NOx emissions to 0.1 lb/MMBtu for a 24-hr rolling average when burning natural gas.

D. Boilers Capacity Factor Limitation

MDE Permit to Construct #s 510-5-1350 & 1351 N, Condition C4, which limits annual capacity factor of the boilers to 0.312 unless the Permittee obtains prior approval from the Department.

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E. New Source Review Constraints

MDE Permit to Construct #s 510-5-1350 & 1351 N, Condition B(2)(j), which limit the total NO_x emissions from the Zurn boilers to less than 25 tons per year on a rolling 12-month basis.

F. NO_x RACT Requirements

COMAR 26.11.09.08B(5) – Operator Training.

“(5) Operator Training.

- (a) For purposes of this regulation, the equipment operator to be trained may be the person who maintains the equipment and makes the necessary adjustments for efficient operation.
- (b) The operator training course sponsored by the Department shall include an in-house training course that is approved by the Department.”

COMAR 26.11.09.08E – Requirements for Fuel-Burning Equipment with a Rated Heat Input Capacity of 100 Million Btu Per Hour or Less.

“A person who owns or operates fuel-burning equipment with a rated heat input capacity of 100 Million Btu per hour or less shall:

- (1) Submit to the Department an identification of each affected installation, the rated heat input capacity of each installation, and the type of fuel burned in each;
- (2) Perform a combustion analysis for each installation at least once each year and optimize combustion based on the analysis;
- (3) Maintain the results of the combustion analysis at the site for at least 2 years and make this data available to the Department and the EPA upon request;
- (4) Once every 3 years, require each operator of the installation to attend operator training programs on combustion optimization that are sponsored by the Department, the EPA, or equipment vendors; and
- (5) Prepare and maintain a record of training program attendance for each operator at the site, and make these records available to the Department upon request.

G. Operational Limitation

The Permittee shall only burn natural gas in the boilers except for periods of natural gas curtailment, gas supply interruption, startups, and periodic testing in order to be recognized as a natural gas fired boiler under the Boiler MACT 40 CFR part 63 subpart JJJJJJ.

[Authority: 40 CFR §63.12]

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2.2	<u>Testing Requirements:</u> A. <u>Control of Sulfur Oxides</u> See Monitoring Requirements in Section 2.3.A. B. <u>Visible Emissions Limitations</u> See Monitoring Requirements in Section 2.3.B. C. <u>Control of Nitrogen Oxides</u> The Permittee shall test each boiler for NOx emissions at least once during the life of the permit using EPA Reference Method 7E, or other acceptable methods. The Permittee shall submit a test protocol for approval to the Department at least 30 days prior to the proposed test date. [Authority: COMAR 26.11.03.06C] D. <u>Boilers Capacity Factor Limitation</u> See Monitoring Requirements in Section 2.3.D. E. <u>New Source Review Constraints</u> See Monitoring Requirements in Section 2.3.E. F. <u>NOx RACT Requirements</u> The Permittee shall perform a combustion analysis on the boilers at least once a year. [Authority: COMAR 26.11.09.08E(2)] G. <u>Operational Limitation</u> None
2.3	<u>Monitoring Requirements:</u> A. <u>Control of Sulfur Oxides</u> The Permittee shall obtain fuel suppliers' certification, which shall include the following information: (1) For distillate oil: (a) The name of the oil supplier; (b) A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in § 60.41c; and

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- (c) The sulfur content or maximum sulfur content of the oil.
[Reference: 40 CFR 60.48c(f) and COMAR 26.11.09.08E(2)]

B. Visible Emissions Limitations

The Permittee shall:

- (1) Properly operate and maintain the boilers in a manner to prevent visible emissions;
- (2) Maintain an operations manual and preventive maintenance plan; and
- (3) Verify no visible emissions when burning No. 2 fuel oil. The Permittee shall perform a visual observation for a 12-minute period once for each 168 hours that the boiler burns oil or at a minimum of once per year. If a boiler burns oil for less than 100 hours in a calendar year, this requirement is waived.

The Permittee shall perform the following, if emissions are visible:

- (4) Inspect combustion system and boiler operations;
- (5) Perform all necessary adjustments and/or repairs to the boiler within 48 hours, so that visible emissions are eliminated;
- (6) Document in writing the results of inspections, adjustments and/or repairs to the boiler; and
- (7) After 48 hours, if the required adjustments and/or repairs had not eliminated the visible emissions, perform Method 9 observations once daily for 18 minutes until corrective actions have eliminated the visible emissions. **[Authority: COMAR 26.11.03.06C]**

C. Control of Nitrogen Oxides

Measure the NO_x content (ppm) of the flue gases from the boilers for a 15-minute period once every 168 hours of operation. The Permittee shall use a NO_x analyzer that is properly calibrated and maintained in accordance with the vendor specifications. The analyzer shall be of a type approved by the Department. **[Authority: COMAR 26.11.03.06C]**

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	<u>D. Boilers Capacity Factor Limitation</u> Calculate the capacity factors of the boilers within 30 days after the end of the month for the prior rolling 12-month period. [Authority: COMAR 26.11.03.06C] <u>E. New Source Review Constraints</u> Calculate the rolling 12-month sum of NOx emissions at the end of each calendar month. [Authority: COMAR 26.11.03.06C] <u>F. NOx RACT Requirements</u> The Permittee shall optimize combustion based on the annual combustion analysis. [Authority: COMAR 26.11.09.08E(2)] <u>G. Operational Limitation</u> See Record Keeping Requirements in Section 2.4.G. and Reporting Requirements in Section 2.5.G.
2.4	<u>Record Keeping Requirements:</u> NOTE: All records must be maintained for a period of five (5) years. [Authority: COMAR 26.11.03.06.C(5)(g)] The Permittee shall: <u>A. Control of Sulfur Oxides</u> Maintain on site a record of the certification from the fuel supplier, which shows that the fuel oil is in compliance with the sulfur in fuel limitation, for at least five (5) years [Authority: 40 CFR 60.42c] <u>B. Visible Emissions Limitations</u> Maintain on site a log of visible emission observations performed, for at least five (5) years, and make available to the Department's representative upon request. [Authority: COMAR 26.11.03.06C] <u>C. Control of Nitrogen Oxides</u> Maintain on site records of stack tests and NOx analyzer readings, for at least five (5) years. [Authority: COMAR 26.11.03.06C] <u>D. Boilers Capacity Factor Limitation</u> Maintain on site records of calculations of capacity factors and the supporting documentation for the calculations, for at least five (5) years. [Authority: COMAR 26.11.03.06C]

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201 NORTH CENTRAL AVENUE, BALTIMORE, MD 21202
DRAFT PART 70 OPERATING PERMIT No. 24-510-0651**

Table IV – 2	
	<u>E. New Source Review Constraints</u> Maintain records of the rolling 12-month sum of NO_x emissions calculations and the supporting documentation, for at least five (5) years. [Authority: COMAR 26.11.03.06C] <u>F. NO_x RACT Requirements</u> (1) The Permittee shall maintain annual fuel use records on site. [Authority: COMAR 26.11.09.05K(3)] (2) The Permittee shall maintain the results of NO_x stack tests and the NO_x analyzer readings. [Authority: COMAR 26.11.03.06C] (3) The Permittee shall maintain a record of training program attendance for each operator at the site. [Authority: COMAR 26.11.09.08E(5)] <u>G. Operational Limitation</u> Maintain records of fuel combusted in the boilers. [Authority: COMAR 26.11.03.06C]
2.5	<u>Reporting Requirements:</u> The Permittee shall: <u>A. Control of Sulfur Oxides</u> Submit to the Department and EPA Region III, a semi-annual report including the following: (1) A fuel supplier certification consisting of the name of the oil supplier and a statement from the oil supplier that the oil complies with the sulfur specifications for distillate fuel oil; and (2) A certified statement signed by the Permittee stating that the records of fuel supplier certifications submitted represent all of the fuel oil combusted during the 6-month period. [Authority: 40 CFR 60.48c] <u>B. Visible Emissions Limitations</u> Submit a summary of periods when visible emissions were observed in the semi-annual monitoring report, and as required by Permit Condition 4 of Section III, "Report of Excess Emissions and Deviations". [Authority: COMAR 26.11.03.06C(7)]

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Table IV – 2

C. Control of Nitrogen Oxides

Report results of stack tests on a “lb/MMBtu” basis and within 45 days of testing. **[Authority: COMAR 26.11.03.06C]**

D. Boilers Capacity Factor Limitation

Report the capacity factors calculated each month with the annual emissions certification report due April 1 of each calendar year.

[Authority: COMAR 26.11.03.06C]

E. New Source Review Constraints

Report the calculated rolling twelve months NO_x emissions with the annual emissions certification report due April 1 of each calendar year.

[Authority: COMAR 26.11.03.06C]

F. NO_x RACT Requirements

(1) Submit the results of the combustion analysis to the Department and the EPA upon request. **[Authority COMAR 26.11.09.08E(3)]**

(2) Submit a record of training program attendance for each operator to the Department upon request. **[Authority COMAR 26.11.09.08E(5)]**

G. Operational Limitation

Submit annual fuel usage with the annual Emissions Certification Report. **[Authority: COMAR 26.11.03.06C]**

**VICINITY ENERGY BALTIMORE HEATING, LLP
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SECTION V INSIGNIFICANT ACTIVITIES

This section provides a list of insignificant emissions units that were reported in the Title V permit application. The applicable Clean Air Act requirements, if any, are listed below the insignificant activity.

- (1) Containers, reservoirs, or tanks used exclusively for:
- (a) Dipping operations for applying coatings of natural or synthetic resins that contain no VOC;
 - (b) Dipping operations for coating objects with oils, waxes, or greases, and where no VOC is used;
 - (c) Storage of butane, propane, or liquefied petroleum, or natural gas;
 - (d) No. 10 Storage of lubricating oils;
 - (e) No. Unheated storage of VOC with an initial boiling point of 300 °F (149 °C) or greater;
 - (f) No. 2 Storage of Numbers 1, 2, 4, 5, and 6 fuel oil and aviation jet engine fuel;
 - (g) No. Storage of motor vehicle gasoline and having individual tank capacities of 2,000 gallons (7.6 cubic meters) or less;
 - (h) No. The storage of VOC normally used as solvents, diluents, thinners, inks, colorants, paints, lacquers, enamels, varnishes, liquid resins, or other surface coatings and having individual capacities of 2,000 gallons (7.6 cubic meters) or less;

**VICINITY ENERGY BALTIMORE HEATING, LLP
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201 NORTH CENTRAL AVENUE, BALTIMORE, MD 21202
DRAFT PART 70 OPERATING PERMIT No. 24-510-0651**

SECTION VI STATE-ONLY ENFORCEABLE CONDITIONS

For all emissions units, the Permittee is subject to the following State-only enforceable requirements:

1. **COMAR 26.11.06.08 – Nuisance.**
“An installation or premises may not be operated or maintained in such a manner that a nuisance or air pollution is created. Nothing in this regulation relating to the control of emissions may in any manner be construed as authorizing or permitting the creation of, or maintenance of, nuisance or air pollution.”
2. **COMAR 26.11.06.09 – Odors.**
“A person may not cause or permit the discharge into the atmosphere of gases, vapors, or odors beyond the property line in such a manner that a nuisance or air pollution is created.”



Vicinity Energy Baltimore
6 S. Frederick Street
Baltimore, MD 21202

September 19, 2022

Ms. Suna Yi Sariscak
Manager, Air Quality Permits Program
Air and Radiation Administration
Maryland Department of the Environment
1800 Washington Blvd.
Baltimore, MD 21230

Dear Ms. Sariscak:

Please find enclosed three copies (two hardcopies and one electronic version) of the Title V operating permit renewal application for Vicinity Energy Baltimore Heating LLP's Central Avenue Steam Plant. Currently, the facility is operating in accordance with Maryland Department of the Environment (MDE) Title V Operating Permit No. 24-510-0651. No revisions to the permit are requested and, at this time, there are no new, final regulations that impact the facility's permit.

This application package consists of the following six (6) attachments:

- Application Narrative (*Attachment A*)
- MDE Part 70 Permit Application Forms (*Attachment B*)
- Emissions Certification Report for 2021 (*Attachment C*)
- Compliance Certification for 2021 (*Attachment D*)
- Checklist of Insignificant Units and Exempt Activities (*Attachment E*)
- Application Completeness Checklist (*Attachment F*)

If you have any questions or comments about the information presented in this application, please do not hesitate to contact Mr. Ryan Hill at (410) 642-4017 or Ms. Susan Barnes at Trinity Consultants at (240) 831-4243.

Sincerely,

DocuSigned by:

011214E388064B3...

Mathew R. Ware
Senior Vice President, Operations (Energy), South Region
Vicinity Energy Baltimore Heating, LLP
6 South Frederick Street
Baltimore, Maryland 21202

cc: Mr. Ryan Hill, Vicinity Energy Baltimore Heating, LLP
Ms. Susan Barnes, Trinity Consultants

ATTACHMENT A: APPLICATION NARRATIVE

TITLE V PERMIT REPORT

Attachment A



Vicinity Energy Baltimore Heating, LLP / Central Avenue Steam Plant, Baltimore, MD

Prepared By:

TRINITY CONSULTANTS

5320 Spectrum Drive
Suite A
Frederick, MD 21703
(240) 379-7490

September 2022

Project 222101.0052



1. INTRODUCTION

Vicinity Energy Baltimore Heating, LLP (Vicinity) is submitting this Title V Operating Permit Renewal Application for the Central Avenue Steam Plant located at 201 North Central Avenue, Baltimore, Maryland. The facility generates and distributes district steam, used primarily for space heating in buildings in the downtown Baltimore area. Currently, the Central Avenue Steam Plant is operating in accordance with Maryland Department of the Environment (MDE) Title V Operating Permit No. 24-510-0651, last issued on September 30, 2020.

The current Title V Operating Permit expires on September 30, 2023. Vicinity is submitting this timely and complete permit renewal application by MDE's renewal submission deadline of October 1, 2022. Presuming MDE finds this application administratively complete, Vicinity may continue to operate the Central Avenue Steam Plant under an application shield in accordance with the terms of the existing Title V Operating Permit until the renewed permit is issued, even if this issuance would occur after the current permit's expiration date.

1.1 Facility Description

The Central Avenue Steam Plant consists of two (2) Erie City boilers each rated at 156 MMBtu/hr, and two (2) Zurn Industries Model Keystone Low NO_x boilers each rated at 91.4 MMBtu/hr. The Zurn Industries boilers are equipped with low nitrogen oxides (NO_x) burners to reduce emissions of NO_x. All four boilers are dual-fuel fired, with natural gas serving as the primary fuel and No. 2 fuel oil as the secondary fuel. The two Erie City boilers each have an individual stack and are referred to as EU-1 and EU-2 in the current Part 70 Operating Permit, while the two Zurn boilers share a common stack and are denoted as EU-3.

1.2 Regulatory Review

Since the issuance of the current Title V Operating Permit, no state or federal regulations applicable to the Central Avenue Steam Plant have been significantly revised and no new regulations have become applicable. There have also been no changes to the Central Avenue Steam Plant. As such, no changes are requested to the renewed permit.

1.3 Application Package

This application package consists of the following parts:

- ▶ Attachment B - MDE Part 70 Permit Application Forms for Renewal
- ▶ Attachment C - Emissions Certification Report for 2021
- ▶ Attachment D - Compliance Certification for 2021
- ▶ Attachment E - Checklist of Insignificant Units and Exempt Activities
- ▶ Attachment F - Application Completeness Checklist

ATTACHMENT B: APPLICATION FORMS

MARYLAND DEPARTMENT OF THE ENVIRONMENT
 1800 Washington Boulevard • Baltimore MD 21230
 (410) 537-3000 • 1-800-633-6101 • <http://www.mde.state.md.us>

PART 70 PERMIT APPLICATION FOR RENEWAL
 AIR AND RADIATION MANAGEMENT ADMINISTRATION

Facilities required to obtain a Part 70 permit under COMAR 26.11.03.01 must complete and return this form. Applications are incomplete unless all applicable information required by COMAR 26.11.03.03 and 26.11.03.13 is supplied. Failure to supply additional information required by the Department to enable it to act on the application may result in loss of the application shield and denial of this application.

Owner and Operator:

Name of Owner or Operator: Vicinity Energy Baltimore Heating, LLP		
Street Address: 6 South Frederick Street		
City: Baltimore	State: Maryland	Zip Code: 21202
Telephone Number (410) 649-2200		Fax Number N/A

Facility Information:

Name of Facility: Vicinity Energy Baltimore Heating, LLP - Central Avenue Steam Plant		
Street Address: 201 North Central Avenue		
City: Baltimore	State: Maryland	Zip Code: 21202
Plant Manager: David Smith	Telephone Number: (443)224-0581	Fax Number: N/A
24-Hour Emergency Telephone Number for Air Pollution Matters: (410) 625-4555		

List, on a separate page, the names and telephone numbers of other facility owners and persons with titles.

SECTION 1. CERTIFICATION STATEMENTS**1. Compliance Status with Applicable Enhanced Monitoring and Compliance Certification Requirements**

The emissions units identified in this application are in compliance with applicable enhanced monitoring and compliance certification requirements.

2. Certification of Current Compliance with All Applicable Federally Enforceable Requirements

Except for the requirements identified in Section 7 of this application, for which compliance is not achieved, I hereby certify, based on information and belief formed after reasonable inquiry, that the facility is currently in compliance with all applicable federally enforceable requirements and agree that the facility will continue to comply with those requirements during the permit term.

You must complete a Section 7 form for each non-complying emissions unit.

3. Statement of Compliance with Respect to All New Applicable Requirements Effective During the Permit Term

I hereby state, based on information and belief formed after reasonable inquiry, that the facility agrees to meet, in a timely manner, all applicable federally enforceable requirements that become effective during the permit term, unless a more detailed schedule is expressly required by the applicable requirement.

4. Risk Management Plan Compliance

I hereby certify that, based on information and belief formed after reasonable inquiry, that a Risk Management Plan as required under §112(r) of the Clean Air Act:

☐ has been submitted;

☐ will be submitted at a future date; or

☒ does not need to be submitted.



5. Statement of Truth, Accuracy, and Completeness

"I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision and in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person(s) who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

RESPONSIBLE OFFICIAL:

X

SIGNATURE

DocuSigned by:

Mathew Ware

011214E388064B3...

9/19/2022

DATE

Mathew R. Ware

PRINTED NAME

Senior Vice President, Operations, South Region,
Vicinity Energy Baltimore Heating, LLP

TITLE



SECTION 2. FACILITY DESCRIPTION SUMMARY**1. Major Activities of Facility**

Briefly describe the major activities, including the applicable SIC Code(s) and end product(s).

The Central Avenue steam plant provides critical process heating and domestic hot water needs to include, but not limited to, (1) The State of Maryland Department of Corrections Complex, including the medical treatment facility, kitchens, etc., (2) Housing Authority of Baltimore City residential housing apartments serving thousands of low-income families, and (3) Three (3) Baltimore City Public Schools. The SIC for this facility is 4911. Central Avenue consists of two (2) Erie City Boilers, each rated at 156 MMBtu/hr and two (2) Zurn Industries Model Keystone Low NOx Boilers, each rated at 91.4 MMBtu/hr. Both model boilers are dual-fuel fired. Natural gas serves as the primary fuel with low sulfur No. 2 fuel oil as backup.

2. Facility-Wide Emissions

- A. This facility is required to obtain a Part 70 Operating Permit because it is:
Check appropriate box:

- ☐ Actual Major
☒ Potential Major
☐ Solid Waste Incineration Unit Requiring Permit Under § 129(e) of CAA

- B. List the actual facility-wide emissions below:

PM10 0.292 NOx 23.9 VOC 0.842 SOx 0.0979 CO 12.9
HAPs 0.0134

* Based on 2021 actual emissions (refer to Attachment C)

3. Include With the Application:

Flow Diagrams showing all emissions units, emission points, and control devices;
Emissions Certification Report (copy of the most recent submitted to the
Department.)



1. Emissions Unit No.: EU-1		2. MDE Registration No.:(if applicable)	
1a. Date of installation (month/year): 1954		24-5-1281	
3. Detailed description of the emissions unit, including all emission point(s) and the assigned number(s): EU-1 is an Erie City boiler at 156 MMBtu/hr burning natural gas and No. 2 fuel oil.			
4. Federally Enforceable Limit on the Operating Schedule for this Emissions Unit:			
General Reference: None			
Continuous Processes:		24 hours/day	59 days/year
Batch Processes:		hours/batch	batches/day
		days/year	
5. Fuel Consumption:			
Type(s) of Fuel	% Sulfur	Annual Usage (specify units)	
1. Natural Gas	0.01	1,366,560 MMBtu	
2. No. 2 Fuel Oil	0.3	1,366,560 MMBtu*	
*The Title V Operating Permit limits EU-1 to burning No. 2 Fuel Oil for 48 hours or less, except in cases of natural gas curtailment, gas supply interruption, startups, and periodic testing. However, the maximum potential annual No. 2 Fuel Oil usage has been presented here.			
6. Emissions in Tons:			
A.	Actual Major:	Potential Major:	X (note: before control device)
B.	Actual Emissions:	NOx 10.1 SOx 0.02 VOC 0.20 PM10 0.07 HAPs <0.01	

1. Emissions Unit No.: EU-2	2. MDE Registration No.:(if applicable)										
1a. Date of installation (month/year): 1954	24-5-1282										
3. Detailed description of the emissions unit, including all emission point(s) and the assigned number(s): <u>EU-2 is an Erie City boiler rated at 156 MMBtu/hr burning natural gas and No. 2 fuel oil.</u>											
4. Federally Enforceable Limit on the Operating Schedule for this Emissions Unit: General Reference: <u>None</u> Continuous Processes: <u>24</u> hours/day <u>21</u> days/year Batch Processes: <u> </u> hours/batch <u> </u> batches/day <u> </u> days/year											
5. Fuel Consumption: <table border="1"> <thead> <tr> <th>Type(s) of Fuel</th> <th>% Sulfur</th> <th>Annual Usage (specify units)</th> </tr> </thead> <tbody> <tr> <td>1. <u>Natural Gas</u></td> <td><u>0.01</u></td> <td><u>1,366,560 MMBtu</u></td> </tr> <tr> <td>2. <u>No. 2 Fuel Oil</u></td> <td><u>0.3</u></td> <td><u>1,366,560 MMBtu*</u></td> </tr> </tbody> </table> <u>*The Title V Operating Permit limits EU-1 to burning No. 2 Fuel Oil for 48 hours or less, except in cases of natural gas curtailment, gas supply interruption, startups, and periodic testing. However, the maximum potential annual No. 2 Fuel Oil usage has been presented here.</u>		Type(s) of Fuel	% Sulfur	Annual Usage (specify units)	1. <u>Natural Gas</u>	<u>0.01</u>	<u>1,366,560 MMBtu</u>	2. <u>No. 2 Fuel Oil</u>	<u>0.3</u>	<u>1,366,560 MMBtu*</u>	
Type(s) of Fuel	% Sulfur	Annual Usage (specify units)									
1. <u>Natural Gas</u>	<u>0.01</u>	<u>1,366,560 MMBtu</u>									
2. <u>No. 2 Fuel Oil</u>	<u>0.3</u>	<u>1,366,560 MMBtu*</u>									
6. Emissions in Tons: <table border="1"> <tbody> <tr> <td>A. Actual Major:</td> <td><u> </u></td> <td>Potential Major:</td> <td><u>X</u></td> <td>(note: before control device)</td> </tr> <tr> <td>C. Actual Emissions:</td> <td>NOx <u>3.44</u></td> <td>SOx <u>0.01</u></td> <td>VOC <u>0.07</u></td> <td>PM10 <u>0.02</u> HAPs <u><0.01</u></td> </tr> </tbody> </table>		A. Actual Major:	<u> </u>	Potential Major:	<u>X</u>	(note: before control device)	C. Actual Emissions:	NOx <u>3.44</u>	SOx <u>0.01</u>	VOC <u>0.07</u>	PM10 <u>0.02</u> HAPs <u><0.01</u>
A. Actual Major:	<u> </u>	Potential Major:	<u>X</u>	(note: before control device)							
C. Actual Emissions:	NOx <u>3.44</u>	SOx <u>0.01</u>	VOC <u>0.07</u>	PM10 <u>0.02</u> HAPs <u><0.01</u>							

MARYLAND DEPARTMENT OF THE ENVIRONMENT**SECTION 3A. EMISSIONS UNIT DESCRIPTIONS**

1. Emissions Unit No.: EU-3 1a. Date of installation (month/year): 1993	2. MDE Registration No.:(if applicable) 24-5-1350, 24-5-1351										
3. Detailed description of the emissions unit, including all emission point(s) and the assigned number(s): <u>EU-3 consists of two (2) Zurn Industries Low NOx boilers rated at 91.4 MMBtu/hr burning natural gas and No. 2 Fuel Oil.</u> 											
4. Federally Enforceable Limit on the Operating Schedule for this Emissions Unit: General Reference: <u>Part 70 Permit No. 24-510-00651, Conditions IV.2.1D and IV.2.1E</u> Continuous Processes: <u>24</u> hours/day <u>340</u> days/year Batch Processes: _____ hours/batch _____ batches/day _____ days/year											
5. Fuel Consumption: <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Type(s) of Fuel</th> <th style="text-align: left;">% Sulfur</th> <th style="text-align: left;">Annual Usage (specify units)</th> </tr> </thead> <tbody> <tr> <td>1. <u>Natural Gas</u></td> <td><u>0.01</u></td> <td><u>1,601,328 MMBtu</u></td> </tr> <tr> <td>2. <u>No. 2 Fuel Oil</u></td> <td><u>0.3</u></td> <td><u>1,601,328 MMBtu*</u></td> </tr> </tbody> </table> <u>*The Title V Operating Permit limits EU-1 to burning No. 2 Fuel Oil for 48 hours or less, except in cases of natural gas curtailment, gas supply interruption, startups, and periodic testing. However, the maximum potential annual No. 2 Fuel Oil usage has been presented here.</u>		Type(s) of Fuel	% Sulfur	Annual Usage (specify units)	1. <u>Natural Gas</u>	<u>0.01</u>	<u>1,601,328 MMBtu</u>	2. <u>No. 2 Fuel Oil</u>	<u>0.3</u>	<u>1,601,328 MMBtu*</u>	
Type(s) of Fuel	% Sulfur	Annual Usage (specify units)									
1. <u>Natural Gas</u>	<u>0.01</u>	<u>1,601,328 MMBtu</u>									
2. <u>No. 2 Fuel Oil</u>	<u>0.3</u>	<u>1,601,328 MMBtu*</u>									
6. Emissions in Tons: <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">A. Actual Major:</td> <td style="width: 20%;">_____</td> <td style="width: 30%;">Potential Major:</td> <td style="width: 20%;">_____ <u>X</u> _____</td> <td style="width: 10%;">(note: before control device)</td> </tr> <tr> <td>D. Actual Emissions:</td> <td>NOx <u>10.34</u></td> <td>SOx <u>0.07</u></td> <td>VOC <u>0.58</u></td> <td>PM10 <u>0.20</u> HAPs <u><0.01</u></td> </tr> </table>		A. Actual Major:	_____	Potential Major:	_____ <u>X</u> _____	(note: before control device)	D. Actual Emissions:	NOx <u>10.34</u>	SOx <u>0.07</u>	VOC <u>0.58</u>	PM10 <u>0.20</u> HAPs <u><0.01</u>
A. Actual Major:	_____	Potential Major:	_____ <u>X</u> _____	(note: before control device)							
D. Actual Emissions:	NOx <u>10.34</u>	SOx <u>0.07</u>	VOC <u>0.58</u>	PM10 <u>0.20</u> HAPs <u><0.01</u>							



MARYLAND DEPARTMENT OF THE ENVIRONMENT**SECTION 3B. CITATION TO AND DESCRIPTION OF APPLICABLE
FEDERALLY ENFORCEABLE REQUIREMENTS**

Emissions Unit No.: EU-1 and EU-2 **General Reference:** COMAR 26.11.09.07 A, Part 70
Operating Permit No. 24-510-0651, Condition IV.1.1A

Briefly describe the Emission Standard/Limit or Operational Limitation:

Sulfur content in distillate fuel oil limited to 0.3% by wt.

Compliance Demonstration:

Check appropriate reports required to be submitted:

Quarterly Monitoring Report:

Annual Compliance Certification: X

Semi-Annual Monitoring Report: X

Methods used to demonstrate compliance:

Monitoring: Reference: COMAR 26.11.03.06C Describe: Owner or operator must obtain fuel supplier
certification indicating that the oil complies with the limitation on sulfur content of fuel oil.

Testing: Reference: None Describe:

Record Keeping: Reference: COMAR 26.11.03.06C Describe: Maintain records of fuel supplier's
certification for five years.

Reporting: Reference: COMAR 26.11.03.06C Describe: Submit certification records to the
Department upon request

Frequency of submittal of the compliance demonstration: Semi-annual



Emissions Unit No.: EU-1 and EU-2 **General Reference:** COMAR 26.11.09.05 A(2) and A(3), Part 70 Operating Permit No. 24-510-0651, Condition IV.1.1B



MARYLAND DEPARTMENT OF THE ENVIRONMENT**SECTION 3B. CITATION TO AND DESCRIPTION OF APPLICABLE
FEDERALLY ENFORCEABLE REQUIREMENTS**

Emissions Unit No.: EU-1 and EU-2 **General Reference:** Boiler MACT 40 CFR part 63 subpart JJJJJJ
(40 CFR 63.12); Part 70 Operating Permit No. 24-510-0651, Condition IV.1.1D

Briefly describe the Emission Standard/Limit or Operational Limitation:

Only burn natural gas in the boilers except for periods of natural gas curtailment, gas supply interruption, startups, and periodic testing in order to be recognized as a natural gas fired boiler under the Boiler MACT 40 CFR part 63 subpart JJJJJ.

Compliance Demonstration:

Check appropriate reports required to be submitted:

Quarterly Monitoring Report: _____

Annual Compliance Certification: X

Semi-Annual Monitoring Report: _____

Methods used to demonstrate compliance:

Monitoring: Reference: None Describe: _____

Testing: Reference: None Describe: _____

Record Keeping: Reference: COMAR 26.11.03.06C Describe: Maintain records of fuel combusted in the boilers.

Reporting: Reference: COMAR 26.11.03.06C Describe: Submit annual fuel usage with the annual Emissions Certification Report.

Frequency of submittal of the compliance demonstration: Annual



MARYLAND DEPARTMENT OF THE ENVIRONMENT**SECTION 3B. CITATION TO AND DESCRIPTION OF APPLICABLE
FEDERALLY ENFORCEABLE REQUIREMENTS**

Emissions Unit No.: EU-3 **General Reference:** COMAR 26.11.09.07A(2)(b), 40 CFR 60.42c, Part 70 Operating Permit No. 24-510-0651, Condition IV.2.1A

Briefly describe the Emission Standard/Limit or Operational Limitation:

Sulfur content in distillate fuel oil limited to 0.3% by wt.

NSPS Subpart Dc, 40 CFR 60.42c - sulfur content in fuel oil limited to 0.5% by wt.

Compliance Demonstration:

Check appropriate reports required to be submitted:

Quarterly Monitoring Report: _____

Annual Compliance Certification: X

Semi-Annual Monitoring Report: X

Methods used to demonstrate compliance:

Monitoring: Reference: COMAR 26.11.03.06C and 40 CFR 60.42c Describe: Obtain a certification from the fuel supplier that the No. 2 fuel oil is in compliance with the sulfur in fuel limitation.

Testing: Reference None Describe: _____

Record Keeping: Reference: 40 CFR 60.42c Describe: Maintain a certification from the fuel supplier that the No. 2 fuel oil is in compliance with the sulfur in fuel limitation for at least five (5) years.

Reporting: Reference: 40 CFR 60.48c Describe: Submit to the Department upon request, and EPA Region III a semi-annual report including: (1) A fuel supplier certification consisting name of the oil supplier and a statement from the oil supplier that the oil complies with the sulfur specifications for distillate fuel oil; and (2) A certified statement signed by the Permittee stating that the records of fuel supplier certifications submitted represent all of the fuel oil combusted during the 6-month period.

Frequency of submittal of the compliance demonstration: Semi-annual



MARYLAND DEPARTMENT OF THE ENVIRONMENT**SECTION 3B. CITATION TO AND DESCRIPTION OF APPLICABLE
FEDERALLY ENFORCEABLE REQUIREMENTS**

Emissions Unit No.: EU-3 **General Reference:** COMAR 26.11.09.05 A(2) and A(3). 40 CFR 60.43c,
Part 70 Operating Permit No. 24-510-0651, Condition IV.2.1B

Briefly describe the Emission Standard/Limit or Operational Limitation:

Visible emissions other than water in an uncombined form are prohibited. Emissions that are visible to a human observer are those that are equal to or greater than 10 percent opacity. This regulation does not apply to emissions during load changing, soot blowing, startup, or occasional cleaning of control equipment which do not exceed 40% opacity for a period or periods aggregating not more than 6 consecutive minutes in any 60 min. NSPS Subpart Dc- Opacity is limited to 20%. Compliance with COMAR 26.11.09.05A(2) will be used to demonstrate compliance with the NSPS opacity limit of 20%.

Compliance Demonstration:

Check appropriate reports required to be submitted:

Quarterly Monitoring Report: _____

Annual Compliance Certification: X

Semi-Annual Monitoring Report: X

Methods used to demonstrate compliance:

Monitoring: Reference: COMAR 26.11.03.06C Describe: Verify no visible emissions when burning #2 fuel oil. Make an observation of the stack gases for visible emissions for a 12 min period once for each 168 hrs of operations or at a minimum of once per year. This requirement is waived if the boiler burns oil less than 100 hr in a calendar year. Perform the following if emissions are visible: Inspect combustion control; system and boiler operations; Perform all necessary repairs within 48 hr, so that visible emissions are eliminated; Document in writing the results of the inspections, adjustments and/or repairs to the boiler and; After 48 hr, if the required adjustments and/or repairs have not eliminated visible emissions' perform a Method 9 observation once daily for 18 minutes until corrective actions have eliminated the VE.

Testing: Reference: None Describe: _____

Record Keeping: Reference COMAR 26.11.03.06C Describe: Maintain log of visible emission observations performed on site for at least 5 years and make available to the Department's representative upon request.

Reporting: Reference COMAR 26.11.03.06C(7) Describe: Submit a summary of periods when visible emission were observed in the semiannual monitoring report.

Frequency of submittal of the compliance demonstration: Semi-annual



MARYLAND DEPARTMENT OF THE ENVIRONMENT**SECTION 3B. CITATION TO AND DESCRIPTION OF APPLICABLE
FEDERALLY ENFORCEABLE REQUIREMENTS**

Emissions Unit No.: EU-3 **General Reference:** MDE Permit to Construct #510-1350&1351 N,
Condition C2, Part 70 Operating Permit No. 24-510-0651, Condition IV.2.1C

Briefly describe the Emission Standard/Limit or Operational Limitation:

The permittee is required to equip the boilers with Low-NOx burners and limit NOx emissions to 0.1
lb/MMBtu on a 24-hr average when burning natural gas.

Compliance Demonstration:

Check appropriate reports required to be submitted:

Quarterly Monitoring Report: _____
Annual Compliance Certification: X
Semi-Annual Monitoring Report: X

Methods used to demonstrate compliance:

Monitoring: Reference: COMAR 26.11.03.06C Describe: Measure the NOx content (ppm) of the flue gases
from each boiler for a 15-minute period once every 168 hours of operation. Use an analyzer that is properly
calibrated and maintained in accordance with vendor specifications. The analyzer shall be of a type
approved by the Department.

Testing: Reference: COMAR 26.11.03.06C Describe: Test each boiler for NOx emissions at least once
during the life of the permit using EPA Reference Method 7E, or other acceptable methods. Submit a test
protocol for approval to the Department at least 30 days prior to the proposed test date.

Record Keeping: Reference COMAR 26.11.03.06C Describe: Maintain records of stack tests and NOx
analyzer readings on site for at least five years.

Reporting: Reference: COMAR 26.11.03.06C Describe: Report results of stack tests within 45 days of
testing

Frequency of submittal of the compliance demonstration: As needed



MARYLAND DEPARTMENT OF THE ENVIRONMENT**SECTION 3B. CITATION TO AND DESCRIPTION OF APPLICABLE
FEDERALLY ENFORCEABLE REQUIREMENTS**

Emissions Unit No.: EU-3 **General Reference:** MDE Permit to Construct #510-5-1350&1351 N,
Condition C4, Part 70 Operating Permit No. 24-510-0651, Condition IV.2.1D

Briefly describe the Emission Standard/Limit or Operational Limitation:

The annual capacity of the Boilers is limited to 0.312 unless the Company obtains prior approval from the Department.

Compliance Demonstration:

Check appropriate reports required to be submitted:

Quarterly Monitoring Report: _____

Annual Compliance Certification: X

Semi-Annual Monitoring Report: X

Methods used to demonstrate compliance:

Monitoring: Reference: COMAR 26.11 .03.06C Describe: Calculate capacity factors of the boilers within 30 days after the end of the month for the prior rolling twelve-month period.

Testing: Reference: None Describe:

Record Keeping: Reference: COMAR 26.11.03.06C Describe: Maintain records of calculations of capacity factors and the supporting documentation for the calculations for at least five years.

Reporting: Reference: COMAR 26.11 .03.06C Report the capacity factors calculated each month with the annual emissions certification report due April 1 of each calendar year.

Frequency of submittal of the compliance demonstration: Semi-annual



MARYLAND DEPARTMENT OF THE ENVIRONMENT**SECTION 3B. CITATION TO AND DESCRIPTION OF APPLICABLE
FEDERALLY ENFORCEABLE REQUIREMENTS**

Emissions Unit No.: EU-3 **General Reference:** MDE Permit to construct #510-5-1350&1351 N,
Condition B(2)(j), Part 70 Operating Permit No. 24-510-0651, Condition IV.2.1E

Briefly describe the Emission Standard/Limit or Operational Limitation:

Total NOx emissions from the Zurn boilers are limited to less than 25 tons per year on a rolling 12 month basis.

Compliance Demonstration:

Check appropriate reports required to be submitted:

Quarterly Monitoring Report: _____

Annual Compliance Certification: X

Semi-Annual Monitoring Report: X

Methods used to demonstrate compliance:

Monitoring: Reference: COMAR 26.11.03.06C Describe: Calculate the rolling twelve-month NOx emissions at the end of each month.

Testing: Reference: None Describe: _____

Record Keeping: Reference: COMAR 26.11.03.06C Describe: Maintain records of NOx emissions calculations and the supporting documentation for at least five years

Reporting: Reference: COMAR 26.11.03.06C Describe: Report the calculated rolling twelve months NOx emissions with the annual emissions certification reports due April 1 of each calendar year.

Frequency of submittal of the compliance demonstration: Semi-annual



MARYLAND DEPARTMENT OF THE ENVIRONMENT**SECTION 3B. CITATION TO AND DESCRIPTION OF APPLICABLE
FEDERALLY ENFORCEABLE REQUIREMENTS**

Emissions Unit No.: EU-3 **General Reference:** Boiler MACT 40 CFR part 63 subpart JJJJJJ (40 CFR 63.12), Part 70 Operating Permit No. 24-510-0651, Condition IV.2.1G

Briefly describe the Emission Standard/Limit or Operational Limitation:

Only burn natural gas in the boilers except for periods of natural gas curtailment, gas supply interruption, startups, and periodic testing in order to be recognized as a natural gas fired boiler under the Boiler MACT 40 CFR part 63 subpart JJJJJJ.

Compliance Demonstration:

Check appropriate reports required to be submitted:

Quarterly Monitoring Report: _____

Annual Compliance Certification: X

Semi-Annual Monitoring Report: _____

Methods used to demonstrate compliance:

Monitoring: Reference: None Describe: _____

Testing: Reference: None Describe: _____

Record Keeping: Reference: COMAR 26.11.03.06C Describe: Maintain records of fuel combusted in the boilers.

Reporting: Reference: COMAR 26.11.03.06C Describe: Submit annual fuel usage with the annual Emissions Certification Report.

Frequency of submittal of the compliance demonstration: Annual



MARYLAND DEPARTMENT OF THE ENVIRONMENT**SECTION 3B. CITATION TO AND DESCRIPTION OF APPLICABLE
FEDERALLY ENFORCEABLE REQUIREMENTS**

Emissions Unit No.: EU-1, EU-2, and EU-3 **General Reference:** COMAR 26.11.09.08F, Part 70
Operating Permit No. 24-510-0651, Condition IV.3.1

Briefly describe the Emission Standard/Limit or Operational Limitation:

Requirement for Space Heaters - Submit to the Department a list of each affected installation on the premises and types of fuel used in each installation. Develop an operating and maintenance plan to minimize NOx emissions based on recommendation made by the equipment vendors information and other information including the source's operating and maintenance experience. Implement an operating and maintenance plan and maintain the plan at the premises for review upon request by the Department. Require installation operators to attend in-state operators training programs once every 3 years on combustion optimization that are sponsored by the Department, the U.S. EPA, or equipment vendors; Prepare and maintain a record of training program attendance for each operator at the site and make these records available to the Department upon request

Compliance Demonstration:

Check appropriate reports required to be submitted:

Quarterly Monitoring Report: _____
 Annual Compliance Certification: X
 Semi-Annual Monitoring Report: _____

Methods used to demonstrate compliance:

Monitoring: Reference: COMAR 26.11.09.08F(1) Describe: Develop and implement an operations and maintenance plan.

Testing: Reference _____ None _____ Describe: _____

COMAR 26.11.09.08K(3),
 COMAR 26.11.03.06C,
 COMAR 26.11.09.08F(1)(c)

Record Keeping: Reference: COMAR 26.11.09.08F(1)(e) Describe: Maintain: (1) The operating and maintenance plan at the premises. (2) Records of training program attendance for each operator on site for at least 5 years. (3) Records of fuel use that demonstrate that the boiler meets the definition of a space heater.

COMAR 26.11.09.08E(5),

Reporting: Reference: COMAR 26.11.09.08F(2) Describe: Describe: (1) Submit a list of trained operators and training program attendance to the Department upon request. (2) Inform the Department no later than 60 days after the date when the boilers no longer qualify as a space heater, and meet the requirements under COMAR 26.11.09.08E or identify an alternative NOx RACT requirement under COMAR 26.11.09.08 with which the source will comply.

Frequency of submittal of the compliance demonstration: Annual



MARYLAND DEPARTMENT OF THE ENVIRONMENT**SECTION 3C. OBSOLETE, EXTRANEOUS, OR INSIGNIFICANT PERMIT CONDITIONS**

List permit to construct conditions which should be considered to be obsolete, extraneous, or environmentally insignificant.

Emissions Unit No.: N/A **Permit to Construct No.** N/A

Emissions Point No.	Date Permit Issued	Condition No.	Brief Description of Condition and Reason for Exclusion
N/A	N/A	N/A	N/A



ALTERNATE OPERATING SCENARIOS

Emissions Unit No.: N/A

Briefly describe any alternate operating scenarios. Assign a number to each scenario for identification purposes.

N/A

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TTY Users 1-800-735-2258

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MARYLAND DEPARTMENT OF THE ENVIRONMENT**SECTION 3E. CITATION TO AND DESCRIPTION OF APPLICABLE
FEDERALLY ENFORCEABLE REQUIREMENTS FOR AN ALTERNATE
OPERATING SCENARIO**Scenario No.: N/AEmissions Unit No.: N/A General Reference: N/A

Briefly describe any applicable Emissions Standard/Limits/Operational Limitations:

N/A**Compliance Demonstration**

Methods used to demonstrate compliance:

Monitoring: Reference N/A Describe: N/ATesting: Reference N/A Describe: N/ARecord Keeping: Reference N/A Describe: N/AReporting: Reference N/A Describe: N/AFrequency of submittal of the compliance demonstration: N/A

MARYLAND DEPARTMENT OF THE ENVIRONMENT**SECTION 4. CONTROL EQUIPMENT**

1. <u>Associated Emissions Units No.</u> : N/A	2. <u>Emissions Point No.</u> : N/A
3. <u>Type and Description of Control Equipment</u> : N/A	
4. <u>Pollutants Controlled</u> : N/A	<u>Control Efficiency</u> : N/A
5. <u>Capture Efficiency</u> : N/A	



SECTION 5. SUMMARY SHEET OF POTENTIAL EMISSIONS

List all applicable pollutants in tons per year (tpy) pertaining to this facility. The Emissions Unit No. should be consistent with numbers used in Section 3. Attach a copy of all calculations.

Pollutant	NOx*	CO	SO2	PM/PM-10/PM-2.5	VOC
CAS Number	10102-44-0	630-08-0	7446-09-5	N/A	N/A
Emissions Unit #1	187.6	56.3	207.9	16.1	3.7
Emissions Unit #2	187.6	56.3	207.9	16.1	3.7
Emissions Unit #3	114.4	65.9	243.6	18.9	4.3
Emissions Unit #					
Emissions Unit #					
Emissions Unit #					
Emissions Unit #					
Emissions Unit #					
Emissions Unit #					
Emissions Unit #					
Emissions Unit #					
Emissions Unit #					
Emissions Unit #					
Emissions Unit #					
Emissions Unit #					
Emissions Unit #					
Fugitive Emissions					
Total	489.5	178.5	659.5	51.1	11.7

*Although NOx PTE for Zurn Industries Boilers #3 and #4 is greater than 25 tons/year, the facility limits its NOx emissions to less than 25 tons/year and an annual capacity factor of 0.312 and emission limit for the Zurn Industries boilers.



SECTION 6.**EXPLANATION OF PROPOSED EXEMPTIONS FROM OTHERWISE
APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS**

Describe and cite the applicable requirements to be exempted. Complete this Section only if the facility is claiming exemptions from or the non-applicability of any federally enforceable requirements.

1. Applicable Requirement:

N/A

2. Brief Description:

N/A

3. Reasons for Proposed Exemption or Justification of Non-applicability:

N/A



MARYLAND DEPARTMENT OF THE ENVIRONMENT

SECTION 7. COMPLIANCE SCHEDULE FOR NONCOMPLYING EMISSIONS
UNITS

1. Emissions Unit #	Anticipated Compliance Date
N/A	N/A
Applicable Federally Enforceable Requirement being Violated: N/A	

2. Description of Plan to Achieve Compliance:
N/A

Certified Progress Reports for sources in noncompliance shall be submitted at least quarterly to the Department.



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STATE-ONLY ENFORCEABLE REQUIREMENTS**Facility Information:**

Name of Facility: Vicinity Energy Baltimore Heating LLP Central Avenue Steam Plant	County Baltimore City
Premises Number: 510-0651	
Street Address: 201 North Central Avenue	
24-hour Emergency Telephone Number for Air Pollution Matters: (410) 625-4555	
Type of Equipment (List Significant Units):	
EU-1 • 156 MMBtu/hr, Dual-Fuel, Erie City Steam Boiler	
EU-2 • 156 MMBtu/hr, Dual-Fuel, Erie City Steam Boiler	
EU-3 • Two 91.4 mmBtu/hr, Dual-Fuel, Zurn Industries Low NOx Steam Boilers	



**CITATION TO AND DESCRIPTION OF APPLICABLE STATE-
ONLY ENFORCEABLE REQUIREMENTS****Registration No.:** 24-5-1281, 24-5-1282, 24-5-1350, 24-5-1351**Emissions Unit No.:** EU1- EU3 **General Reference:** Part 70 Permit No. 24-510-0651

Briefly describe the requirement and the emissions limit (if applicable):

COMAR 26.11.06.08 - which prohibits the operation or maintenance of an installation or premises
in such a manner that a nuisance or air pollution is created.

COMAR 26.11.06.09 - which prohibits the discharge into the atmosphere of gases, vapors, or
odors beyond the property line in such a manner that a nuisance or air pollution is created.

Methods used to demonstrate compliance:

Emission units will be maintained and operated in accordance with the permit conditions found in
Part 70 Operating Permit No. 24-510-0651. Facility personnel are trained to prevent the
discharge of emissions that could create a nuisance or air pollution.



ATTACHMENT C: 2021 EMISSION CERTIFICATION REPORT



Vicinity Energy Baltimore
6 S. Frederick Street
Baltimore, MD 21202

March 29, 2022

Submitted via email to: MDEAir.ECR@maryland.gov

Administrator
Compliance Program
Maryland Department of the Environment
Air and Radiation Management Administration
1800 Washington Boulevard, Suite 715
Baltimore, Maryland 21230

**Subject: Vicinity Energy Baltimore Heating, LLP Central Avenue Steam Plant
2021 Emissions Report (Permit # 24-510-0651)**

To Whom it May Concern,

In accordance with the Reporting and Recordkeeping Requirements for the above referenced facility, please find enclosed the Emissions Certification Report for the 2021 calendar year. This report also includes air toxics emissions data as requested by the department. For the current year, as well as previous years, submissions of air toxics data remain valid.

If you have any questions or require further information, please do not hesitate to contact Mr. Ryan Hill, Environmental, Health and Safety Manager, at 410-642-4017.

In accordance with COMAR 26.11.02.02F:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based upon my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment from knowing violations."

Sincerely,

A handwritten signature in dark ink, appearing to read "Mathew R. Ware", written over a horizontal line.

Mathew R. Ware
Sr. Vice President, Operations (Energy), South Region
Vicinity Energy Baltimore Heating, LLP

Cc: Dakota Blume, Regulatory & Compliance Engineer - MDE
Environmental File

MARYLAND DEPARTMENT OF THE ENVIRONMENT
1800 Washington Blvd, Suite 715 Baltimore, MD 21230-1720
410-537-3000 1-800 633-6101 <http://www.mde.state.md.us>
Air and Radiation Management Administration
Air Quality Compliance Program
410-537-3220

FORM 1:

GENERAL FACILITY INFORMATION
EMISSIONS CERTIFICATION REPORT

Calendar Year: 2021

A. FACILITY IDENTIFICATION					Do Not Write in this Space	
					Date Received Regional	
Facility Name Vicinity Energy Baltmor Heating, LLP - Central Avenue Steam Plant					Date Received State	
Address 201 North Central Avenue					AIRS Code	
City Baltimore	County	Zip Code 21202		FINDS code		
B. Briefly describe the major function of the facility					SIC Code	
Generates steam for comfort heating to downtown Baltimore buildings.					Facility Number	
					TEMPO ID:	
C. SEASONAL PRODUCTION (% if applicable)					Reviewed by:	
Facility operates 24 hrs/day, 7 days/week					Name	
	Winter (Dec-Feb) 40%	Spring (Mar-May) 28%	Summer (Jun-Aug) 15%	Fall (Sept-Nov) 18%	Date	
D. Explain any increases or decreases in emissions from the previous calendar year for each registration at this facility.						
Variability due to annual variation in weather and heating demand						
E. CONTROL DEVICE INFORMATION (for NOx and VOC sources only)						
Control Device		Capture Efficiency		Removal Efficiency		
EU-3, low NOx Burners		-				

I am familiar with the facility and the installations and sources for which this report is submitted. I have personally examined the information in this report, which consists of 27 pages (including attachments), and certify that the information is correct to the best of my knowledge.

Mathew R. Ware Sr. Vice President, Operations (Energy), South Region

3/29/2022

Name (Print/Type)

Title

Date

Signature

410-649-2520

Telephone

1 9 2008

CRITERIA AIR POLLUTANTS

Vicinity Energy Baltimore Heating, LLP -
Central Avenue Steam Plant

Calendar Year: 2021

Pollutant: VOC

Facility ID#: 510-0651

Equipment Description/ Registration No.	SCC Number	Fuel		Actual Emissions		Operating Schedule (Actual)				TOSD		Operating Schedule		Emissions Methods
				Tons/yr	Lbs/dy	Hrs/dy	Dys/wk	Wk/yr	Days/yr	Lbs/dy	Hrs/dy	Start	End	
Nat. Gas/No. 2 Fuel Oil Fired Boiler 24-5-1281	1-03-005/006-01	Natural Gas	S	0.20	1.09	24	1	8	58	0.117	24	4/1/2021	9/30/2021	C3
			F											
Nat. Gas/No. 2 Fuel Oil Fired Boiler 24-5-1282	1-03-005/006-01	Natural Gas	S	0.07	0.37	24	0	3	21	0.027	24	4/1/2021	9/30/2021	C3
			F											
Nat. Gas/No. 2 Fuel Oil Fired Boiler 24-5-1530	1-03-005/006-01	Natural Gas	S	0.15	0.81	24	2	17	120	1.022	24	4/1/2021	9/30/2021	C3
			F											
Nat. Gas/No. 2 Fuel Oil Fired Boiler 24-5-1531	1-03-005/006-01	Natural Gas	S	0.43	2.34	24	3	27	190	2.823	24	4/1/2021	9/30/2021	C3
			F											
Nat. Gas/No. 2 Fuel Oil Fired Boiler 24-5-1281	1-03-005/006-01	No. 2 Fuel Oil	S	1.23E+05	6.74E+05	24	1	1	1	0.000	--	4/1/2021	9/30/2021	C3
			F											
Nat. Gas/No. 2 Fuel Oil Fired Boiler 24-5-1282	1-03-005/006-01	No. 2 Fuel Oil	S	0.00E+00	0.00E+00	--	--	--	--	0.000	--	4/1/2021	9/30/2021	C3
			F											
Nat. Gas/No. 2 Fuel Oil Fired Boiler 24-5-1530	1-03-005/006-01	No. 2 Fuel Oil	S	1.60E+04	8.79E+04	24	2	4	30	0.000	--	4/1/2021	9/30/2021	C3
			F											
Nat. Gas/No. 2 Fuel Oil Fired Boiler 24-5-1531	1-03-005/006-01	No. 2 Fuel Oil	S	0.00E+00	0.00E+00	--	--	--	--	0.000	--	4/1/2021	9/30/2021	C3
			F											
			S											
			F											
			S											
			F											
			S											
			F											
			P	0.84	4.61					3.99				

Daily emissions (lbs/day) are lbs/operating day of the source.

TOSD-Typical Ozone Season Day means a typical day of that period of the year during which conditions for photochemical conditions are most favorable, which is generally during sustained periods of direct sunlight and warm temperatures (April-September). This section needs to be completed only for VOC and NOx sources.

Emission Estimation Method

Al-U S EPA Reference Method

A2- Other Particulate Sampling Train

A3-Liquid Absorption Technique

A3- Liquid Absorption Technique

A4- Solid Absorption Technique

A5- Freezing Out Technique

C1- User calculated based on source

Test of other measurement

C2- User calculated based on material balance

C2= User calculated based on material balance using engineering knowledge of the process

using engineering knowledge of the pr

C3- User calculated based on AP-42

C5- User calculated based on a State or local

agency emission factor

C6- New construction, not operational

CO7- Source closed, operation ceased

C7:- Source closed, operation ceased

FORM 2:

**CRITERIA AIR POLLUTANTS
EMISSIONS CERTIFICATION REPORT**

Facility Name: Vicinity Energy Baltimore Heating, LLP -
Central Avenue Steam Plant

Facility ID#: 510-0651 **Pollutant:** NOx **Calendar Year:** 2021

Equipment Description/ Registration No.	SCC Number	Fuel	Actual Emissions		Operating Schedule (Actual)			TOSD		Operating Schedule		Emissions Methods
			Tons/yr	Lbs/dy	Dys/wk	Wk/yr	Days/yr	Lbs/dy	Hrs/dy	Start	End	
Nat. Gas/No. 2 Fuel Oil Fired Boiler 24-5-1281	1-03-005/006-01	Natural Gas	10.14	55.56	1	8	58	5.942	24	4/1/2021	9/30/2021	C3
Nat. Gas/No. 2 Fuel Oil Fired Boiler 24-5-1282	1-03-005/006-01	Natural Gas	3.44	18.83	0	3	21	1.367	24	4/1/2021	9/30/2021	C3
Nat. Gas/No. 2 Fuel Oil Fired Boiler 24-5-1530	1-03-005/006-01	Natural Gas	2.67	14.60	2	17	120	18.354	24	4/1/2021	9/30/2021	C1
Nat. Gas/No. 2 Fuel Oil Fired Boiler 24-5-1531	1-03-005/006-01	Natural Gas	7.66	41.98	3	27	190	50.718	24	4/1/2021	9/30/2021	C1
Nat. Gas/No. 2 Fuel Oil Fired Boiler 24-5-1281	1-03-005/006-01	No. 2 Fuel Oil	0.00	0.01	1	1	1	0.000	--	4/1/2021	9/30/2021	C3
Nat. Gas/No. 2 Fuel Oil Fired Boiler 24-5-1282	1-03-005/006-01	No. 2 Fuel Oil	0.00	0.00	--	--	--	0.000	--	4/1/2021	9/30/2021	C3
Nat. Gas/No. 2 Fuel Oil Fired Boiler 24-5-1530	1-03-005/006-01	No. 2 Fuel Oil	0.01	0.06	2	4	30	0.000	--	4/1/2021	9/30/2021	C1
Nat. Gas/No. 2 Fuel Oil Fired Boiler 24-5-1531	1-03-005/006-01	No. 2 Fuel Oil	0.00	0.00	--	--	--	0.000	--	4/1/2021	9/30/2021	C1
Totals			23.92	131.04				76.38				

Daily emissions (lbs/day) are lbs/operating day of the source.

F-Fugitive Emissions

TOSD-Typical Ozone Season: Day means a typical day of that period of the year during which conditions for photochemical conditions are most favorable, which is generally during sustained periods of direct sunlight and warm temperatures (April-September). This section needs to be completed only for VOC and NOx sources.

Emission Estimation Method

- A1- U. S. EPA Reference Method
A2- Other Particulate Sampling Train
A3- Liquid Absorption Technique
A4- Solid Absorption Technique
A5- Freezing Out Technique
A9- Other, Specify
- C1- User calculated based on source test or other measurement
C2- User calculated based on material balance using engineering knowledge of the process
C3- User calculated based on AP- 42
C4- User calculated by best guess/ engineering judgment
- C5- User calculated based on a State or local agency emission factor
C6- New construction, not operational
C7- Source closed, operation ceased
C8- Computer calculated based on standard

1/9/2008

FORM 2:

**CRITERIA AIR POLLUTANTS
EMISSIONS CERTIFICATION REPORT**

Facility Name: Vicinity Energy Baltimore Heating, LLP -
Central Avenue Steam Plant

Facility ID#: 510-0651

Pollutant: SO_x

Calendar Year: 2021

Equipment Description/ Registration No.	SCC Number	Fuel	Actual Emissions		Operating Schedule (Actual)			TOSD		Operating Schedule		Emissions Methods
			Tons/yr	Lbs/dy	Hrs/dy	Dys/wk	Wk/yr	Days/yr	Lbs/dy	Hrs/dy	Start	End
Nat. Gas/No. 2 Fuel Oil Fired Boiler 24-5-1281	1-03-005/006-01	Natural Gas	0.02	0.12	24	1	8	58				C3
Nat. Gas/No. 2 Fuel Oil Fired Boiler 24-5-1282	1-03-005/006-01	Natural Gas	0.01	0.04	24	0	3	21				C3
Nat. Gas/No. 2 Fuel Oil Fired Boiler 24-5-1530	1-03-005/006-01	Natural Gas	0.02	0.09	24	2	17	120				C3
Nat. Gas/No. 2 Fuel Oil Fired Boiler 24-5-1531	1-03-005/006-01	Natural Gas	0.05	0.25	24	3	27	190				C3
Nat. Gas/No. 2 Fuel Oil Fired Boiler 24-5-1281	1-03-005/006-01	No. 2 Fuel Oil	0.00	0.00	24	1	1	1				C3
Nat. Gas/No. 2 Fuel Oil Fired Boiler 24-5-1282	1-03-005/006-01	No. 2 Fuel Oil	0.00	0.00	--	--	--	--				C3
Nat. Gas/No. 2 Fuel Oil Fired Boiler 24-5-1530	1-03-005/006-01	No. 2 Fuel Oil	0.01	0.03	24	2	4	30				C3
Nat. Gas/No. 2 Fuel Oil Fired Boiler 24-5-1531	1-03-005/006-01	No. 2 Fuel Oil	0.00	0.00	--	--	--	--				C3
Totals			0.10	0.54								

Daily emissions (lbs/day) are lbs/operating day of the source.

TOSD-Typical Ozone Season Day means a typical day of that period of the year during which conditions for photochemical conditions are most favorable, which is generally during sustained periods of direct sunlight and warm temperatures (April-September). This section needs to be completed only for VOC and NO_x sources.

Emission Estimation Method

A1- U. S. EPA Reference Method
A2- Other Particulate Sampling Train
A3- Liquid Absorption Technique
A4- Solid Absorption Technique
A5- Freezing Out Technique
A9- Other, Specify

C1- User calculated based on source
test or other measurement
C2- User calculated based on material balance
using engineering knowledge of the process
C3- User calculated based on AP- 42
C4- User calculated by best guess/ engineering judgment

C5- User calculated based on a State or local
agency emission factor
C6- New construction, not operational
C7- Source closed, operation ceased
C8- Computer calculated based on standard

1/9/2008

FORM 2:

**CRITERIA AIR POLLUTANTS
EMISSIONS CERTIFICATION REPORT**

Facility Name: Vicinity Energy Baltimore Heating, LLP -
Central Avenue Steam Plant

Facility ID#: 510-0651

Pollutant: CO

Calendar Year: 2021

Equipment Description/ Registration No.	SCC Number	Fuel		Actual Emissions		Operating Schedule (Actual)			TOSD Lbs/dy	Operating Schedule		Emissions Methods
				Tons/yr	Lbs/dy	Hrs/dy	Dys/wk	Wk/yr		Hrs/dy	Start	End
Nat. Gas/No. 2 Fuel Oil Fired Boiler 24-5-1281	1-03-005/006-01	Natural Gas	S	3.04	16.67	24	1	8	58			C3
			F									
Nat. Gas/No. 2 Fuel Oil Fired Boiler 24-5-1282	1-03-005/006-01	Natural Gas	S	1.03	5.65	24	0	3	21			C3
			F									
Nat. Gas/No. 2 Fuel Oil Fired Boiler 24-5-1530	1-03-005/006-01	Natural Gas	S	2.27	12.42	24	2	17	120			C3
			F									
Nat. Gas/No. 2 Fuel Oil Fired Boiler 24-5-1531	1-03-005/006-01	Natural Gas	S	6.51	35.69	24	3	27	190			C3
			F									
Nat. Gas/No. 2 Fuel Oil Fired Boiler 24-5-1281	1-03-005/006-01	No. 2 Fuel Oil	S	0.00	0.00	24	1	1	1			C3
			F									
Nat. Gas/No. 2 Fuel Oil Fired Boiler 24-5-1282	1-03-005/006-01	No. 2 Fuel Oil	S	0.00	0.00	--	--	--	--			C3
			F									
Nat. Gas/No. 2 Fuel Oil Fired Boiler 24-5-1530	1-03-005/006-01	No. 2 Fuel Oil	S	0.00	0.02	24	2	4	30			C3
			F									
Nat. Gas/No. 2 Fuel Oil Fired Boiler 24-5-1531	1-03-005/006-01	No. 2 Fuel Oil	S	0.00	0.00	--	--	--	--			C3
			F									
			S									
			F									
			S									
			F									
Totals				12.86	70.45							

Daily emissions (lbs/day) are lbs/operating day of the source.

S-Stack Emissions F-Fugitive Emissions
TOSD-Typical Ozone Season Day means a typical day of that period of the year during which conditions for photochemical conditions are most favorable, which is generally during sustained periods of direct sunlight and warm temperatures (April-September). This section needs to be completed only for VOC and NOx sources.

Emission Estimation Method

- A1- U. S. EPA Reference Method
A2- Other Particulate Sampling Train
A3- Liquid Absorption Technique
A4- Solid Absorption Technique
A5- Freezing Out Technique
A9- Other, Specify

- C1- User calculated based on source
test or other measurement
C2- User calculated based on material balance
using engineering knowledge of the process
C3- User calculated based on AP-42
C4- User calculated by best guess/ engineering judgment

- C5- User calculated based on a State or local
agency emission factor
C6- New construction, not operational
C7- Source closed, operation ceased
C8- Computer calculated based on standard

1/9/2008

FORM 2:

**CRITERIA AIR POLLUTANTS
EMISSIONS CERTIFICATION REPORT**

Vicinity Energy Baltimore Heating, LLP -
Central Avenue Steam Plant

Facility Name:

Facility ID#: 510-0651

Pollutant: Pb

Calendar Year: 2021

Equipment Description/ Registration No.	SCC Number	Fuel		Actual Emissions		Operating Schedule (Actual)			TOSD Lbs/day	Operating Schedule		Emissions Methods
				Tons/yr	Lbs/day	Hrs/day	Dys/wk	Wk/yr		Hrs/day	Start	End
Nat. Gas/No. 2 Fuel Oil Fired Boiler 24-5-1281	1-03-005/006-01	Natural Gas	S	1.81E-05	9.92E-05	24	1	8	58			C3
Nat. Gas/No. 2 Fuel Oil Fired Boiler 24-5-1282	1-03-005/006-01	Natural Gas	F	6.14E-06	3.36E-05	24	0	3	21			C3
Nat. Gas/No. 2 Fuel Oil Fired Boiler 24-5-1530	1-03-005/006-01	Natural Gas	S	1.35E-05	7.39E-05	24	2	17	120			C3
Nat. Gas/No. 2 Fuel Oil Fired Boiler 24-5-1531	1-03-005/006-01	Natural Gas	F	3.88E-05	2.12E-04	24	3	27	190			C3
Nat. Gas/No. 2 Fuel Oil Fired Boiler 24-5-1281	1-03-005/006-01	No. 2 Fuel Oil	S	7.75E-08	4.25E-07	24	1	1	1			C3
Nat. Gas/No. 2 Fuel Oil Fired Boiler 24-5-1282	1-03-005/006-01	No. 2 Fuel Oil	F	0.00E+00	0.00E+00	--	--	--	--			C3
Nat. Gas/No. 2 Fuel Oil Fired Boiler 24-5-1530	1-03-005/006-01	No. 2 Fuel Oil	S	1.01E-07	5.54E-07	24	2	4	30			C3
Nat. Gas/No. 2 Fuel Oil Fired Boiler 24-5-1531	1-03-005/006-01	No. 2 Fuel Oil	F	0.00E+00	0.00E+00	--	--	--	--			C3
			S									
			F									
			S									
			F									
Totals				0.00	0.00							

Daily emissions (lbs/day) are lbs/operating day of the source.

TOSD: Typical Ozone Season Day means a typical day of that period of the year during which conditions for photochemical conditions are most favorable, which is generally during sustained periods of direct sunlight and warm temperatures (April-September). This section needs to be completed only for VOC and NOx sources.

Emission Estimation Method

- A1- U. S. EPA Reference Method
A2- Other Particulate Sampling Train
A3- Liquid Absorption Technique
A4- Solid Absorption Technique
A5- Freezing Out Technique
A9- Other, Specify

- C1- User calculated based on source
test or other measurement
C2- User calculated based on material balance
using engineering knowledge of the process
C3- User calculated based on AP-42
C4- User calculated by best guess/ engineering judgment

- C5- User calculated based on a State or local
agency emission factor
C6- New construction, not operational
C7- Source closed, operation ceased
C8- Computer calculated based on standard

1/9/2008

Form 3: PM**EMISSIONS CERTIFICATION REPORT**

Calendar Year:

2021

Facility Name:

Vicinity Energy Baltimore Heating, LLP - CoFacility ID#: 510-0651

Pollutant: PM

Equipment Description / Registration Number	SCC Number	Fuel	PM - Filterable tons/yr	PM - Filterable lbs/day	PM 10 - Filterable tons/yr	PM 10 - Filterable lbs/day	PM 2.5 - Filterable tons/yr	PM 2.5 - Filterable lbs/day	PM Condensable tons/yr	PM Condensable lbs/day	Operation Days/yr	Emissions Methods
Nat. Gas/No. 2 Fuel Oil Fired Boiler 24-5-1281	1-03-005/006-01	Natural Gas	S 0.069	0.377	S 0.069	0.377	S 0.069	0.377	S 0.206	1.131	58	C3
Nat. Gas/No. 2 Fuel Oil Fired Boiler 24-5-1282	1-03-005/006-01	Natural Gas	S 0.023	0.128	S 0.023	0.128	S 0.023	0.128	S 0.070	0.383	21	C3
Nat. Gas/No. 2 Fuel Oil Fired Boiler 24-5-1530	1-03-005/006-01	Natural Gas	S 0.051	0.281	S 0.051	0.281	S 0.051	0.281	S 0.154	0.843	120	C3
Nat. Gas/No. 2 Fuel Oil Fired Boiler 24-5-1531	1-03-005/006-01	Natural Gas	S 0.147	0.807	S 0.147	0.807	S 0.147	0.807	S 0.442	2.422	190	C3
Nat. Gas/No. 2 Fuel Oil Fired Boiler 24-5-1281	1-03-005/006-01	No. 2 Fuel Oil	S 1.23E-04	6.74E-04	S 6.77E-05	3.71E-04	S 5.17E-05	2.83E-04	S 8.00E-05	4.38E-04	1	C3
Nat. Gas/No. 2 Fuel Oil Fired Boiler 24-5-1282	1-03-005/006-01	No. 2 Fuel Oil	S 0.00E+00	0.00E+00	S 0.00E+00	0.00E+00	S 0.00E+00	0.00E+00	S 0.00E+00	0.00E+00	--	C3
Nat. Gas/No. 2 Fuel Oil Fired Boiler 24-5-1530	1-03-005/006-01	No. 2 Fuel Oil	S 1.60E-03	8.79E-03	S 8.82E-04	4.83E-03	S 6.74E-04	3.69E-03	S 1.04E-03	5.71E-03	30	C3
Nat. Gas/No. 2 Fuel Oil Fired Boiler 24-5-1531	1-03-005/006-01	No. 2 Fuel Oil	S 0.00E+00	0.00E+00	S 0.00E+00	0.00E+00	S 0.00E+00	0.00E+00	S 0.00E+00	0.00E+00	--	C3
TOTALS			0.292	1.602	0.292	1.598	0.291	1.597	0.873	4.785		

S - Stack Emissions

F - Fugitive Emissions

Daily emissions (lbs/day) are lbs/operating day of the source.

Include emissions for each fuel used. If more than one fuel is used, calculate and list emissions separately for each fuel.

Emissions Estimation Method

A1-US EPA Reference Method

A2-Other Particulate Sampling Train

A3-Liquid Absorption Technique

A4-Solid Absorption Technique

A5-Freezing Out Technique

A9-Other. Specify

C1-User Calculated based on source
test or other measurementC2-User Calculated based on material balance
using engineering knowledge of the process

C3-User Calculated based on AP-42

C4-User Calculated based on best guess/engineering judgment

C5-User Calculated based on a State or local
agency emission factor

C6-New construction, not operational

C7-Source closed, operation ceased

C8-Computer calculated based on standard

02/21/08

Seasonal Steam Production (Mlb)

Month	2021 Central Ave.
Jan	44,811
Feb	37,767
Mar	35,450
April	24,429
May	18,090
June	14,819
July	14,252
Aug	13,555
Sept	12,545
Oct	13,159
Nov	24,039
Dec	29,882
Total	282,798
Winter (%)	39.77
Spring (%)	27.57
Summer (%)	15.07
Fall (%)	17.59

CENTRAL AVENUE STEAM PLANT

NUMBER	BOILER REG. NO.	HOURS	OZONE HOURS	STEAM (MLB)	TOT. GAS (10,000 cuft)	OZONE GAS (10,000 cuft)	TOT. OIL (Gallons)	OZONE OIL (Gallons)	Gas (MMBtu)	OIL (MMBtu)	TOTAL (MMBtu)	Non-Ozone Gas	Non-Ozone Oil
CA 1	24-5-1281	1,380	114	65,942	7,243	325	123	0	75,322	17	75,339	6,918	123
CA 2	24-5-1282	503	25	27,774	2,455	75	0	0	25,531	0	25,531	2,380	0
CA 3	24-5-1350	2,862	1,329	50,211	5,395	2,842	1,604	0	56,113	228	56,341	2,553	1,604
CA 4	24-5-1351	4,558	3,171	138,871	15,508	7,854	0	0	161,285	0	161,285	7,654	0
TOTAL		9,303	4,640	282,798	30,601	11,096	1,727	0	318,251	245	318,496	19,505	1,727

January 2021

NUMBER	BOILER REG. NO.	HOURS	STEAM (MLB)	GAS (10,000 cuft)	OIL (Gallons)	Gas (MMBtu)	OIL (MMBtu)	TOTAL (MMBtu)
CA 1	24-5-1281	311	17,373	1,894	0	19,701	0	19,701
CA 2	24-5-1282	448	27,409	2,167	0	22,534	0	22,534
CA 3	24-5-1350	18	4	1	0	12	0	12
CA 4	24-5-1351	124	25	31	0	321	0	321
TOTAL		900	44,811	4,093	0	42,568	0	42,568

February 2021

NUMBER	BOILER REG. NO.	HOURS	STEAM (MLB)	GAS (10,000 cuft)	OIL (Gallons)	Gas (MMBtu)	OIL (MMBtu)	TOTAL (MMBtu)
CA 1	24-5-1281	672	37,547	3,581	0	37,246	0	37,246
CA 2	24-5-1282	0	5	3	0	28	0	28
CA 3	24-5-1350	25	165	7	0	72	0	72
CA 4	24-5-1351	16	50	29	0	301	0	301
TOTAL		713	37,767	3,620	0	37,647	0	37,647

March 2021

NUMBER	BOILER REG. NO.	HOURS	STEAM (MLB)	GAS (10,000 cuft)	OIL (Gallons)	Gas (MMBtu)	OIL (MMBtu)	TOTAL (MMBtu)
CA 1	24-5-1281	201	10,778	1,232	0	12,813	0	12,813
CA 2	24-5-1282	0	0	0	0	0	0	0
CA 3	24-5-1350	25	66	11	0	117	0	117
CA 4	24-5-1351	551	24,606	2,785	0	28,964	0	28,964
TOTAL		777	35,450	4,028	0	41,894	0	41,894

April 2021

NUMBER	BOILER REG. NO.	HOURS	STEAM (MLB)	GAS (10,000 cuft)	OIL (Gallons)	Gas (MMBtu)	OIL (MMBtu)	TOTAL (MMBtu)
CA 1	24-5-1281	20	68	78	0	811	0	811
CA 2	24-5-1282	0	0	0	0	0	0	0
CA 3	24-5-1350	21	607	13	0	135	0	135
CA 4	24-5-1351	720	23,754	2,688	0	27,960	0	27,960
TOTAL		761	24,429	2,779	0	28,906	0	28,906

May 2021

NUMBER	BOILER REG. NO.	HOURS	STEAM (MLB)	GAS (10,000 cuft)	OIL (Gallons)	Gas (MMBtu)	OIL (MMBtu)	TOTAL (MMBtu)
CA 1	24-5-1281	12	7	42	0	432	0	432
CA 2	24-5-1282	0	0	3	0	27	0	27
CA 3	24-5-1350	408	10,425	1,181	0	12,282	0	12,282
CA 4	24-5-1351	297	7,658	853	0	8,866	0	8,866
TOTAL		716	18,090	2,078	0	21,607	0	21,607

June 2021

NUMBER	BOILER REG. NO.	HOURS	STEAM (MLB)	GAS (10,000 cuft)	OIL (Gallons)	Gas (MMBtu)	OIL (MMBtu)	TOTAL (MMBtu)
CA 1	24-5-1281	29	21	72	0	748	0	748
CA 2	24-5-1282	0	0	0	0	0	0	0
CA 3	24-5-1350	0	0	0	0	0	0	0
CA 4	24-5-1351	817	14,798	1,600	0	16,641	0	16,641
TOTAL		847	14,819	1,672	0	17,389	0	17,389

July 2021

NUMBER	BOILER REG. NO.	HOURS	STEAM (MLB)	GAS (10,000 cuft)	OIL (Gallons)	Gas (MMBtu)	OIL (MMBtu)	TOTAL (MMBtu)
CA 1	24-5-1281	18	8	50	0	525	0	525
CA 2	24-5-1282	5	18	14	0	144	0	144
CA 3	24-5-1350	124	2,341	276	0	2,871	0	2,871
CA 4	24-5-1351	625	11,885	1,323	0	13,758	0	13,758
TOTAL		772	14,252	1,663	0	17,298	0	17,298

August 2021

NUMBER	BOILER REG. NO.	HOURS	STEAM (MLB)	GAS (10,000 cuft)	OIL (Gallons)	Gas (MMBtu)	OIL (MMBtu)	TOTAL (MMBtu)
CA 1	24-5-1281	4	3	11	0	112	0	112
CA 2	24-5-1282	21	98	58	0	606	0	606
CA 3	24-5-1350	58	747	108	0	1,120	0	1,120
CA 4	24-5-1351	704	12,707	1,390	0	14,457	0	14,457
TOTAL		787	13,555	1,567	0	16,295	0	16,295

September 2021

NUMBER	BOILER REG. NO.	HOURS	STEAM (MLB)	GAS (10,000 cuft)	OIL (Gallons)	Gas (MMBtu)	OIL (MMBtu)	TOTAL (MMBtu)
CA 1	24-5-1281	31	66	72	0	749	0	749
CA 2	24-5-1282	0	0	0	0	0	0	0
CA 3	24-5-1350	718	12,479	1,265	0	13,151	0	13,151
CA 4	24-5-1351	8	0	0	0	0	0	0
TOTAL		757	12,545	1,337	0	13,900	0	13,900

October 2021

NUMBER	BOILER REG. NO.	HOURS	STEAM (MLB)	GAS (10,000 cuft)	OIL (Gallons)	Gas (MMBtu)	OIL (MMBtu)	TOTAL (MMBtu)
CA 1	24-5-1281	31	25	85	0	884	0	884
CA 2	24-5-1282	0	26	31	0	325	0	325
CA 3	24-5-1350	718	13,098	1,475	0	15,344	0	15,344
CA 4	24-5-1351	0	10	7	0	75	0	75
TOTAL		749	13,159	1,599	0	16,628	0	16,628

November 2021

NUMBER	BOILER REG. NO.	HOURS	STEAM (MLB)	GAS (10,000 cuft)	OIL (Gallons)	Gas (MMBtu)	OIL (MMBtu)	TOTAL (MMBtu)
CA 1	24-5-1281	31	41	61	123	634	17	651
CA 2	24-5-1282	0	106	90	0	941	0	941
CA 3	24-5-1350	718	9,800	1,053	1,604	10,949	228	11,177
CA 4	24-5-1351	0	14,092	1,560	0	16,227	0	16,227
TOTAL		749	24,039	2,765	1,727	28,751	245	28,996

December 2021

NUMBER	BOILER REG. NO.	HOURS	STEAM (MLB)	GAS (10,000 cuft)	OIL (Gallons)	Gas (MMBtu)	OIL (MMBtu)	TOTAL (MMBtu)
CA 1	24-5-1281	20	5	64	0	667	0	667
CA 2	24-5-1282	29	112	89	0	926	0	926
CA 3	24-5-1350	29	479	6	0	60	0	60
CA 4	24-5-1351	696	29,286	3,242	0	33,715	0	33,715
TOTAL		775	29,882	3,401	0	35,368	0	35,368

[illegible]

Note: AP-42 emissions factors used for calculations of VOC's on all boilers are as follows:

Time (h)	Temperature (°C)	Pressure (MPa)	Strain (%)
0	25	0.0000	0.0000
1	25	0.0000	0.0000
2	25	0.0000	0.0000
3	25	0.0000	0.0000
4	25	0.0000	0.0000
5	25	0.0000	0.0000
6	25	0.0000	0.0000
7	25	0.0000	0.0000
8	25	0.0000	0.0000
9	25	0.0000	0.0000
10	25	0.0000	0.0000
11	25	0.0000	0.0000
12	25	0.0000	0.0000
13	25	0.0000	0.0000
14	25	0.0000	0.0000
15	25	0.0000	0.0000
16	25	0.0000	0.0000
17	25	0.0000	0.0000
18	25	0.0000	0.0000
19	25	0.0000	0.0000
20	25	0.0000	0.0000
21	25	0.0000	0.0000
22	25	0.0000	0.0000
23	25	0.0000	0.0000
24	25	0.0000	0.0000
25	25	0.0000	0.0000
26	25	0.0000	0.0000
27	25	0.0000	0.0000
28	25	0.0000	0.0000
29	25	0.0000	0.0000
30	25	0.0000	0.0000
31	25	0.0000	0.0000
32	25	0.0000	0.0000
33	25	0.0000	0.0000
34	25	0.0000	0.0000
35	25	0.0000	0.0000
36	25	0.0000	0.0000
37	25	0.0000	0.0000
38	25	0.0000	0.0000
39	25	0.0000	0.0000
40	25	0.0000	0.0000
41	25	0.0000	0.0000
42	25	0.0000	0.0000
43	25	0.0000	0.0000
44	25	0.0000	0.0000
45	25	0.0000	0.0000
46	25	0.0000	0.0000
47	25	0.0000	0.0000
48	25	0.0000	0.0000
49	25	0.0000	0.0000
50	25	0.0000	0.0000
51	25	0.0000	0.0000
52	25	0.0000	0.0000
53	25	0.0000	0.0000
54	25	0.0000	0.0000
55	25	0.0000	0.0000
56	25	0.0000	0.0000
57	25	0.0000	0.0000
58	25	0.0000	0.0000
59	25	0.0000	0.0000
60	25	0.0000	0.0000
61	25	0.0000	0.0000
62	25	0.0000	0.0000
63	25	0.0000	0.0000
64	25	0.0000	0.0000
65	25	0.0000	0.0000
66	25	0.0000	0.0000
67	25	0.0000	0.0000
68	25	0.0000	0.0000
69	25	0.0000	0.0000
70	25	0.0000	0.0000
71	25	0.0000	0.0000
72	25	0.0000	0.0000
73	25	0.0000	0.0000
74	25	0.0000	0.0000
75	25	0.0000	0.0000
76	25	0.0000	0.0000
77	25	0.0000	0.0000
78	25	0.0000	0.0000
79	25	0.0000	0.0000
80	25	0.0000	0.0000
81	25	0.0000	0.0000
82	25	0.0000	0.0000
83	25	0.0000	0.0000
84	25	0.0000	0.0000
85	25	0.0000	0.0000

**Natural Gas
Fuel Oil**

Natural Gas
Fuel Oil

Vicinity Energy
201 North Central Avenue
2021 Nitrogen Oxides (NOx) Emissions

Installation Regis. No.	GAS 10,000 cu ft	OIL Gals	Actual Emissions Gas		Actual Emissions Oil		Operating Schedule (Actual)						TOSD ON bbls/day	TOSD Gas bbls/day	OIL Gals	Operating Schedule		
			lb/day	lb/day	lb/day	Start	End	days/week	wk/yr	days/yr	hrs/yr	Start				End	days	
26-51-281	10.14	123	10.14	55.56	0.01	24	0.00(21)	12/31/21	1.0	8	58	1,380	0	24	0.00(21)	03/30/21	5	1.14
26-51-282	3.44	18.83	0.00	0.00	0.00	24	0.00(21)	12/31/21	0.4	3	21	503	0	25	0.00(21)	03/30/21	2	25
26-51-289	2.67	14.60	0.01	0.06	0.24	24	0.00(21)	12/31/21	0.2	17	120	2,862	0	24	0.00(21)	03/30/21	56	1,329
26-51-351	6.66	41.98	0.00	0.00	0.00	24	0.00(21)	12/31/21	3.4	27	190	4,558	0	24	0.00(21)	03/30/21	133	3,171
1023151	2.39	13.10	0.01	0.03	0.069							9,303	0					

NOTE: AP-42 emission factors used for calculations of NO_x on Boilers 1 and 2 are as follows:

0.0002800 14.41 0008000 0.025

**Natural Gas
Fuel Oil**

**Natural Gas
Fuel Oil**

Note: Stack test emission factors used for calculations of NOx on Trailers 3 and 4 are as follows:

	Natural Gas	Fuel Oil
2/5/2015 stack test results,	0.09 lb NOx/MMBtu on Trailer 3, on natural gas	
2/4/2015 stack test results:	0.10 lb NOx/MMBtu on Trailer 4, on natural gas	

0.00009880 lb NO_x/cuft
0.01386 lb NO_x/val

Natural Gas
Fuel Oil

Vicinity Energy
201 North Central Avenue
2021 Sulfur Oxides (SO2) Emissions

Installation Regis. No.	Gas 10,000 cuft	Oil Gall	Actual Emissions Gas		Actual Emissions Oil		Operating Schedule (Actual)			
			lb/yr	lb/day	lb/yr	lb/day	hr/day	Start	End	days/yr
24-S-1281	2,455	123	0.02	0.13	0.008+00	2.30E-03	24	01/01/21	12/31/21	365
24-S-1282	2,455	0	0.01	0.04	0.008+00	0.008+00	24	01/01/21	12/31/21	365
24-S-1350	5,305	1,604	0.02	0.09	5.65E-03	3.10E-02	24	01/01/21	12/31/21	365
24-S-1351	15,508	0	0.05	0.25	0.008+00	0.008+00	24	01/01/21	12/31/21	365
TOTAL	30,613	1,727	0.092	0.503	0.006	0.033				9,303

Note: Factors used for calculations of SO2 on Boilers are as follows:
Natural Gas 0.00000609 lb SO2/cuft
Fuel Oil 0.0071 lb SO2/gal.
(AP-42)

(Minimum Sulfur in fuel oil = 0.05%)

Vicinity Energy
201 North Central Avenue
2021 Particulate Matter (PM Filterable) Emissions

Installation Regis. No.	Gas 10,000 cuft	Oil Gall	Actual Emissions Gas		Actual Emissions Oil		Operating Schedule (Actual)			
			lb/yr	lb/day	lb/yr	lb/day	hr/day	Start	End	days/yr
24-S-1281	2,455	123	0.02	0.13	0.001+00	6.0E-04	24	01/01/21	12/31/21	365
24-S-1282	2,455	0	0.02	0.13	0.001+00	0.001+00	24	01/01/21	12/31/21	365
24-S-1350	5,305	1,604	0.05	0.24	1.60E-03	8.29E-03	24	01/01/21	12/31/21	365
24-S-1351	15,508	0	0.15	0.61	0.002+00	0.006+00	24	01/01/21	12/31/21	365
TOTAL	30,613	1,727	0.291	1.353	0.002	0.009				9,303

Note: AP-42 emission factors used for calculations of PM on Boilers are as follows:
Natural Gas 0.00000190 lb Particulates/cuft
Fuel Oil 0.0020 lb Particulates/gal.

Vicinity Energy
201 North Central Avenue
2021 Particulate Matter (PM-10 Filterable) Emissions

Installation Regis. No.	Gas 10,000 cuft	Oil Gall	Actual Emissions Gas		Actual Emissions Oil		Operating Schedule (Actual)			
			lb/yr	lb/day	lb/yr	lb/day	hr/day	Start	End	days/yr
24-S-1281	2,455	123	0.07	0.38	6.77E-05	3.71E-04	24	01/01/21	12/31/21	365
24-S-1282	2,455	0	0.02	0.13	0.006+00	0.006+00	24	01/01/21	12/31/21	365
24-S-1350	5,305	1,604	0.05	0.24	8.82E-04	4.83E-03	24	01/01/21	12/31/21	365
24-S-1351	15,508	0	0.15	0.61	0.005+00	0.005+00	24	01/01/21	12/31/21	365
TOTAL	30,613	1,727	0.291	1.353	0.001	0.005				9,303

Note: AP-42 emission factors used for calculations of PM on Boilers are as follows:
Natural Gas 0.00000190 lb Particulates/cuft
Fuel Oil 0.0011 lb Particulates/gal.

Vicinity Energy
201 North Central Avenue
2021 Particulate Matter (PM-2.5 Filterable) Emissions

Installation Regis. No.	GAS 10,000 cu ft	Actual Emissions Gas		Actual Emissions Oil		Operating Schedule (Actual)							
		ton/yr	lb/day	ton/yr	lb/day	hr/day	days/yr	wk/yr	lb/yr				
24-S-1281	7,243	0.07	0.38	2,831+04	24	01/01/21	12/31/21	1.0	8	58	1,380		
24-S-1282	2,455	0.02	0.13	0,004+00	0,008+00	24	01/01/21	12/31/21	0.4	3	21	503	
24-S-1350	5,395	1,604	0.05	0.28	6,740+04	3,690+03	24	01/01/21	12/31/21	2.2	17	120	2,862
24-S-1351	15,508	0	0.15	0.81	0,002+00	0,008+00	24	01/01/21	12/31/21	3.4	27	190	4,558
TOTAL	30,601	1,727	0.20	1.293	0.001	0.004						9,303	

Note: AP-42 emission factors used for calculations of PM on boilers are as follows:
Natural Gas 0.00000190 lb Particulates/cu ft
Fuel Oil 0.0008 lb Particulates/gal.

Vicinity Energy
201 North Central Avenue
2021 Particulate Matter (Condensable) Emissions

Installation Regis. No.	GAS 10,000 cu ft	Oil, ton/yr	Actual Emissions Gas		Actual Emissions Oil		Operating Schedule (Actual)					
			ton/yr	lb/day	ton/yr	lb/day	hr/day	days/yr	wk/yr	lb/yr		
24-S-1281	7,243	123	0.21	1.13	8,000+00	4,300+00	24	01/01/21	12/31/21	1.0	58	1,380
24-S-1282	2,455	0	0.07	0.38	0.00+00	0.00+00	24	01/01/21	12/31/21	0.4	3	21
24-S-1350	5,395	1,604	0.15	0.84	0.00+00	0.00+00	24	01/01/21	12/31/21	2.2	17	20
24-S-1351	15,508	0	2.42	0.00+00	0.00+00	0.00+00	24	01/01/21	12/31/21	3.4	27	190
TOTAL	30,601	1,727	0.872	4.779	0.001	0.006						9,303

Note: AP-42 emission factors used for calculations of PM on boilers are as follows:
Natural Gas 0.00000570 lb Particulates/cu ft
Fuel Oil 0.0012 lb Particulates/gal.

Vicinity Energy
201 North Central Avenue
2021 Carbon Monoxide(CO) Emissions

Installation Regis No.	GAS 10,000 cu ft	Actual Emissions Gas		Actual Emissions Oil		Operating Schedule (Actual)						
		ton/yr	lb/day	ton/yr	lb/day	hr/day	days/yr	wk/yr	lb/yr			
24-S-1281	7,243	3.04	16.67	3,080+00	1,680+00	24	01/01/21	12/31/21	1.0	58	1,380	
24-S-1282	2,455	0	5.65	0.00+00	0.00+00	24	01/01/21	12/31/21	0.4	3	21	503
24-S-1350	5,395	1,604	12.42	4,010+00	2,200+00	24	01/01/21	12/31/21	2.2	17	120	2,862
24-S-1351	15,508	0	35.69	0.00+00	0.00+00	24	01/01/21	12/31/21	3.4	27	190	4,558
TOTAL	30,601	12,852	70,424	0.004	0.024							9,303

Note: AP-42 Emission factors used for calculations of CO on all boilers are as follows:
Natural Gas 0.00000400 lb CO/cu ft
Fuel Oil 0.0050 lb CO/gal.

Central Avenue Steam Plant
2021 Lead Emissions

Registration Number	Gas 10,000 cu.ft.	Fuel Oil Gallons	Pb Emissions		Pb Emissions		Pb Emissions		Pb Emissions		Total Pb TN/YR
			TN/YR	Nat. Gas	Lbs/Day	Natural Gas	TN/YR	Fuel Oil	Lbs/Day	Fuel Oil	
24-5-1281	7,243	123	1.81E-05	9.92E-05	7.75E-08	4.25E-07	1.82E-05	6.14E-06	0.00E+00	1.36E-05	1.82E-05
24-5-1282	2,455	0	6.14E-06	3.36E-05	0.00E+00	0.00E+00	6.14E-06	5.54E-07	0.00E+00	3.88E-05	6.14E-06
24-5-1350	5,395	1,604	1.35E-05	7.39E-05	1.01E-07	5.54E-07	1.36E-05	0.00E+00	0.00E+00	7.67E-05	1.36E-05
24-5-1351	15,508	0	3.88E-05	2.12E-04	0.00E+00	0.00E+00	3.88E-05	9.78E-07	0.00E+00	7.67E-05	3.88E-05
Totals	30601	1727	7.65E-05	4.19E-04	1.79E-07	9.78E-07	7.67E-05	0.00E+00	0.00E+00	7.67E-05	7.67E-05

AP-42 Emissions Factors:
Fuel Oil #2: 9LB/10E12 BTU
Natural Gas: 5E-10 LB/cu.ft.

Greenhouse Gas Emissions

Central Avenue Plant 2021

Carbon Dioxide-2021-Natural Gas

Registration Number	Gas 10,000 cu.ft.	Ton/Yr	Lbs/Day	Lbs/Hr
24-5-1281	7,243.0	4,345.8	149,855.2	6,298.3
24-5-1282	2,455.0	1,473.0	140,285.7	5,856.9
24-5-1350	5,395.0	3,237.0	54,403.4	2,262.1
24-5-1351	15,508.0	9,304.8	97,945.3	4,082.8
Totals	30,601.0	18,360.6	442,489.5	18,500.0

AP-42 Emissions Factor:

Natural Gas: 0.12 LB/cu.ft.

Sample Calculation: $(16,882 * 10,000 * 0.12) / 2000 = 10,129 \text{ TN/YR}$

Carbon Dioxide-2021-Fuel Oil #2

Registration Number	Oil Gallons	Ton/Yr	Lbs/Day	Lbs/Hr
24-5-1281	123.0	1.4	47.3	2.0
24-5-1282	0.0	0.0	0.0	0.0
24-5-1350	1,604.0	17.9	300.6	12.5
24-5-1351	0.0	0.0	0.0	0.0
Totals	1,727.0	19.26	347.87	14.49

AP-42 Emissions Factor:

Fuel Oil #2: 22.3 LB/Gallon

Sample Calculation: $(1,557 * 22.3) / 2000 = 17.4 \text{ TN/YR}$

Nitrous Oxide-2021-Natural Gas

Registration Number	Gas 10,000 cu.ft.	Ton/Yr	Lbs/Day	Lbs/Hr
24-5-1281	7,243.0	0.08	2.75	0.12
24-5-1282	2,455.0	0.03	2.57	0.11
24-5-1350	5,395.0	0.02	0.29	0.01
24-5-1351	15,508.0	0.05	0.52	0.02
Totals	30,601.0	0.17	6.13	0.26

AP-42 Emissions Factor:

Natural Gas: 0.0000022 LB/Cu.ft.

(Boilers #1 and #2)

Natural Gas: 0.00000064 LB/cu.ft.

(Boilers #3 and #4, Low-NOx

Burners)

Sample Calculation: $(16,882 \times 10,000 \times 0.0000022) / 2000 = 0.05 \text{ TN/YR}$ **Nitrous Oxide-2021-Fuel Oil #2**

Registration Number	Oil Gallons	Ton/Yr	Lbs/Day	Lbs/Hr
24-5-1281	123.0	0.00	0.00	0.00
24-5-1282	0.0	0.00	0.00	0.00
24-5-1350	1,604.0	0.00	0.00	0.00
24-5-1351	0.0	0.00	0.00	0.00
Totals	1,727.0	0.00	0.00	0.00

AP-42 Emissions Factor:

Fuel Oil #2: 0.00026 LB/Gallon

Sample Calculation: $(1,557 \times 0.00026) / 2000 = 0.0002 \text{ TN/YR}$

Methane-2021-Natural Gas

Registration Number	Gas 10,000 cu.ft.	Ton/Yr	Lbs/Day	Lbs/Hr
24-5-1281	7,243.0	0.08	2.87	0.12
24-5-1282	2,455.0	0.03	2.69	0.11
24-5-1350	5,395.0	0.06	1.04	0.04
24-5-1351	15,508.0	0.18	1.88	0.08
Totals	30,601.0	0.35	8.48	0.35

AP-42 Emissions Factor:

Natural Gas: 0.0000023 LB/cu.ft.

Sample Calculation: $(16,882 \times 10,000 \times 0.0000023) / 2000 = 0.19 \text{ TN/YR}$ **Methane-2021-Fuel Oil #2**

Registration Number	Oil Gallons	Ton/Yr	Lbs/Day	Lbs/Hr
24-5-1281	123.0	0.00	0.00	0.00
24-5-1282	0.0	0.00	0.00	0.00
24-5-1350	1,604.0	0.00	0.00	0.00
24-5-1351	0.0	0.00	0.00	0.00
Totals	1,727.0	0.00	0.00	0.00

AP-42 Emissions Factor:

Fuel Oil #2: 0.000052 LB/Gallon

Sample Calculation: $(1,557 \times 0.000052) / 2000 = 0.00004 \text{ TN/YR}$

HAPS Calculations for Boilers - Plant Wide**Calendar Year: 2021****Site:** Central Avenue Steam Plant**Facility No:** 510-0651**Natural Gas Usage (cf):** 306,010,577**Fuel Oil Usage (gal):** 1,727

HAP	Natural Gas		#2 Fuel Oil			Total Emissions tons/year	Reporting Threshold tons/year	Are emissions above reporting threshold?
	Emission factor lb/mcf	Emissions tons/year	Emission factor lb/1000 gallons	Emissions tons/year	Emissions tons/year			
Arsenic	2.00E-04	3.06E-05	5.98E-04	4.81E-07	3.11E-05	0.0001	no	
Beryllium	1.20E-05	1.84E-06	4.18E-04	3.61E-07	2.20E-06	0.0001	no	
Cadmium	1.10E-03	1.68E-04	4.18E-04	3.61E-07	1.68E-04	0.001	no	
Chromium	1.40E-03	2.14E-04	4.18E-04	3.61E-07	2.15E-04	0.01	no	
Cobalt	8.40E-05	1.29E-05	0.00E+00	0.00E+00	1.29E-05	0.001	no	
Lead	5.00E-04	7.65E-05	1.25E-03	1.08E-06	7.76E-05	0.001	no	
Mercury	2.60E-04	3.98E-05	4.18E-04	3.61E-07	4.01E-05	0.001	no	
Manganese	3.80E-04	5.81E-05	8.36E-04	7.22E-07	5.89E-05	0.01	no	
Nickel	2.10E-03	3.21E-04	4.18E-04	3.61E-07	3.22E-04	0.001	no	
Selenium	2.40E-05	3.67E-06	2.09E-03	1.81E-06	5.48E-06	0.01	no	
Formaldehyde	7.50E-02	1.15E-02	4.80E-02	4.14E-05	1.15E-02	0.01	YES	
Benzene	2.10E-03	3.21E-04	0.00E+00	0.00E+00	3.21E-04	0.1	no	
Naphthalene	6.10E-04	9.33E-05	0.00E+00	0.00E+00	9.33E-05	1	no	
Toluene	3.40E-03	5.20E-04	0.00E+00	0.00E+00	5.20E-04	10	no	
Acenaphthene	1.80E-06	2.75E-07	0.00E+00	0.00E+00	2.75E-07	0.01	no	
Acenaphthylene	1.80E-06	2.75E-07	0.00E+00	0.00E+00	2.75E-07	0.1	no	
Anthracene	2.40E-05	3.67E-06	0.00E+00	0.00E+00	3.67E-06	0.01	no	
Benz(a)anthracene	1.80E-06	2.75E-07	0.00E+00	0.00E+00	2.75E-07	0.001	no	
Benzo(b)fluoranthene	1.80E-06	2.75E-07	0.00E+00	0.00E+00	2.75E-07	0.001	no	
Benzo(g,h,i)perylene	1.20E-06	1.84E-07	0.00E+00	0.00E+00	1.84E-07	0.01	no	
Chrysene	1.80E-06	2.75E-07	0.00E+00	0.00E+00	2.75E-07	0.01	no	
Dibenz(a,h)anthracene	1.20E-06	1.84E-07	0.00E+00	0.00E+00	1.84E-07	0.0001	no	
Fluoranthene	3.00E-06	4.59E-07	0.00E+00	0.00E+00	4.59E-07	0.1	no	
Fluorene	2.80E-06	4.28E-07	0.00E+00	0.00E+00	4.28E-07	0.01	no	
Indeno(1,2,3-cd)pyrene	1.80E-06	2.75E-07	0.00E+00	0.00E+00	2.75E-07	0.001	no	
Phenanthrene	1.70E-05	2.60E-06	0.00E+00	0.00E+00	2.60E-06	0.01	no	
Pyrene	5.00E-05	7.65E-07	0.00E+00	0.00E+00	7.65E-07	0.01	no	

HAPS Calculations for #2 Fuel Oil Fired Boilers - Equipment**Calendar Year:** 2021**Site:** Central Avenue Steam Plant**Facility No:** 510-0651

Instructions:

- 1) Type MDE Registration number for each #2 fuel oil fired boiler in the blue squares.
 - 2) Input the day operated for each fuel burning unit in the yellow squares
 - 3) Input the fuel usage for each #2 fuel oil fired boiler in the red squares
 - 4) From the Plant Wide Calculations, enter the HAP in the upper green square.
 - 5) From the Plant Wide Calculations, enter the HAP emission factor in the lower green square.
- Add Columns and/or rows as needed.

Equipment Registration No.	Days operated	Hours operated	Gallons of #2 Fuel Oil	Formaldehyde		
				(lb/1000 gal)		
				0.048		
				Ton/Yr Emissions	Lb/Day Emissions	Lb/Hr Emissions
24-5-1281	58	1,380	123	2.95E-06	1.02E-04	4.28E-06
24-5-1282	21	503	0	0.00E+00	0.00E+00	0.00E+00
24-5-1530	120	2,862	1,604	3.85E-05	6.42E-04	2.69E-05
24-5-1531	190	4,558	0	0.00E+00	0.00E+00	0.00E+00

HAPS Calculations for Natural Gas Fired Boilers - Equipment**Calendar Year:** 2021**Site:** Central Avenue Steam Plant**Facility No:** 510-0651**Instructions:**

- 1) Type MDE Registration number for each natural gas fired boiler in the blue squares.
 - 2) Input the day operated for each fuel burning unit in the yellow squares.
 - 3) Input the fuel usage for each natural gas fired boiler in the red squares.
 - 4) From the Plant Wide Calculations, enter the HAP in the upper green square.
 - 5) From the Plant Wide Calculations, enter the HAP emission factor in the lower green square.
- Add Columns and/or rows as needed.

Equipment Registration No.	Days operated	Hours operated	Cubic Feet of Natural Gas	Formaldehyde		
				(lb/mmcf)		
				0.075		
				Ton/Yr Emissions	Lb/Day Emissions	Lb/Hr Emissions
24-5-1281	58	1,380	72,425,000	2.72E-03	9.37E-02	3.94E-03
24-5-1282	21	503	24,549,038	9.21E-04	8.77E-02	3.66E-03
24-5-1530	120	2,862	53,954,808	2.02E-03	3.37E-02	1.41E-03
24-5-1531	190	4,558	155,081,731	5.82E-03	6.12E-02	2.55E-03

ATTACHMENT D: 2021 COMPLIANCE CERTIFICATION REPORT



Vicinity Energy Baltimore
6 S. Frederick Street
Baltimore, MD 21202

March 8, 2022

Submitted via email to: mdeair.ACOMP@maryland.gov

Maryland Department of the Environment
Air and Radiation Management Administration
Air Quality Compliance Program—Suite 715
1800 Washington Boulevard
Baltimore, Maryland 21230-1720

**Subject: Vicinity Energy Baltimore Heating, LLP - Central Avenue Steam Plant
2021 Annual Compliance Certification Report (Permit Number #24-510-0651)**

To Whom it May Concern:

In accordance with the Part 70 Operating Permit Number 24-510-0651, Section III, Plant-Wide Condition #9 for the above referenced facility, the enclosed Compliance Certification Report for the calendar year 2021 is submitted.

If you have any questions or require additional information, please do not hesitate to contact me at 410-642-4017 or at ryan.hill@vicinityenergy.us

Sincerely,

DocuSigned by:

439A10BFF0C7455...

Ryan Hill

EHS & Green Solutions Manager
Vicinity Energy Baltimore Heating, LLP

Cc: USEPA Region III, 1650 Arch Street, Philadelphia, PA. 19103-2029 (via electronic submission)
Environmental File

U.S. ENVIRONMENTAL PROTECTION AGENCY
APPLICATION FOR FEDERAL OPERATING PERMIT, 40 CFR PART 71

FORM A-COMP - ANNUAL COMPLIANCE CERTIFICATION

INSTRUCTIONS: There are 3 pages to this form. On this page, complete Sections A and B once with respect to the entire annual compliance certification.

A. GENERAL INFORMATION

1. Identifying Information.

Source or company name Vicinity Energy Baltimore Heating, LLP -- Central Avenue Steam Plant

Mailing address: Street or P.O. Box 201 North Central Avenue

City Baltimore State MD ZIP 21202

Contact person Ryan Hill Title Environmental, Health and Safety Manager

Telephone (410) 649 - 2200 Ext. 463 Part 70 permit no. 24-510-0651

2. Reporting Period The reporting period should be the one-year, or shorter period, required by your part 71 permit. It will be assumed that the beginning date begins and ends at Midnight (12 A.M.), unless you specify otherwise.

Period beginning 01/01/2021 Period ending 12/31/2021

B. CERTIFICATION OF TRUTH, ACCURACY, AND COMPLETENESS

1. Responsible Official. Identify the responsible official and provide contact information.

Name: (Last) Ware (First) Mathew (Middle) R.

Title Vice President, Operations (Energy), South Region

Street or Post Office Box 6 S. Frederick Street

City Baltimore State MD ZIP 21202

Contact person Ryan Hill Title Environmental, Health and Safety Manager

Telephone (410) 642 - 4017 Ext. Part 70 permit no. 24-510-00651

2. Certification of Truth, Accuracy and Completeness.

The Responsible Official must sign this statement after the form is completed for each applicable requirement.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name (signed) Mathew Ware
0112144E388064B3...

Name (printed or typed) Mathew R. Ware Date: 3/8/2022

INSTRUCTIONS: Use this page to describe the compliance status of each permit term or condition. This page may be used to provide information on 2 different permit terms or conditions. Copy this page as many times as necessary to cover all permit terms and conditions.

C. COMPLIANCE STATUS OF EACH PERMIT TERM OR CONDITION

Identify (Describe and Cross-reference the Permit Term or Condition)	Unit ID(s):	Compliance status during reporting period
[COMAR 26.11.06.03D] The Permittee shall not cause or permit any building, its appurtenances, or a road to be used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne.	Plant Wide	☐ Intermittent Compliance ☒ Continuous Compliance

D. METHODS USED TO DETERMINE COMPLIANCE

Describe all methods or means you used to determine compliance with the permit term and condition described in section C. For each monitoring method or means you must specify whether it produced intermittent or continuous data.

Not applicable. There was no construction, alterations, repairs, or demolitions to buildings or roads during the reporting period.

C. COMPLIANCE STATUS OF EACH PERMIT TERM OR CONDITION

Identify (Describe and Cross-reference) the Permit Term or Condition	Unit ID(s):	Compliance status during reporting period
COMAR 26.11.07) Except as provided in COMAR 26.11.07.04, the Permittee may not cause or permit an open fire from June 1 through August 31 of any calendar year. Prior to any open burning, the Permittee must request and receive approval from the Department.	Plant Wide	☐ Intermittent Compliance ☒ Continuous Compliance

D. METHODS USED TO DETERMINE COMPLIANCE

Describe all methods or means you used to determine compliance with the permit term and condition described in section C. For each method or means you must specify whether it produced intermittent or continuous data.

Not applicable. There were no occasions for open burning during the reporting period.

INSTRUCTIONS: Use this page to describe the compliance status of each permit term or condition. This page may be used to provide information on 2 different permit terms or conditions. Copy this page as many times as necessary to cover all permit terms and conditions.

C. COMPLIANCE STATUS OF EACH PERMIT TERM OR CONDITION

Identify (Describe and Cross-reference the Permit Term or Condition)	Unit ID(s):	Compliance status during reporting period
[COMAR 26.11.05.04] When requested by the Department, the Permittee shall prepare in writing standby emissions reduction plans, consistent with good industrial practice and safe operating procedures, for reducing emissions creating air pollution during periods of Alert, Warning, and Emergency of an air pollution episode.	Plant Wide	☐ Intermittent Compliance ☒ Continuous Compliance

D. METHODS USED TO DETERMINE COMPLIANCE

Describe all methods or means you used to determine compliance with the permit term and condition described in section C. For each monitoring method or means you must specify whether it produced intermittent or continuous data.

The Maryland Department of the Environment has not requested Vicinity to prepare a standby emissions reduction plan for the Central Avenue Steam Plant.
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C. COMPLIANCE STATUS OF EACH PERMIT TERM OR CONDITION

Identify (Describe and Cross-reference) the Permit Term or Condition	Unit ID(s):	Compliance status during reporting period
COMAR 26.11.01.07] and [COMAR 26.11.03.06C(7)] The Permittee shall comply with the following conditions for occurrences of excess emissions and deviations from requirements of this permit including the State-only enforceable section: a. Report any deviation from permit requirements that could endanger human health or the environment, by orally notifying the Department immediately upon discovery of the deviation; b. Promptly report all occurrences of excess emissions that are expected to last for one hour or longer by orally notifying the Department of the onset and termination of the occurrence; c. When requested by the Department the Permittee shall report all deviations from permit conditions, including those attributable to malfunctions as defined in COMAR 26.11.01.07A, within 5 days of the request by submitting a written description of the deviation to the Department. The written report must include the cause, dates and times of the onset and termination of the deviation, as well as the action planned or taken to reduce, eliminate, and prevent the recurrence of the deviation; d. All instances of deviations from permit requirements should be clearly identified in quarterly monitoring reports required by this permit. If quarterly monitoring reports are not required, the Permittee shall submit a report to the Department summarizing all instances of deviations from permit requirements for quarters in which deviations occurred. The reports are due no later than 30 days after the end of the relevant quarter. e. When requested by the Department, the Permittee shall submit a written report to the Department within 10 days of receiving the request concerning an occurrence of excess emissions. The report shall contain the information required in COMAR 26.11.01.07C(2).	Plant Wide	☒ Intermittent Compliance ☐ Continuous Compliance

D. METHODS USED TO DETERMINE COMPLIANCE

Describe all methods or means you used to determine compliance with the permit term and condition described in section C. For each method or means you must specify whether it produced intermittent or continuous data.

a. Excess emissions for NOx at EU-3 was reported during weekly NOx testing to be at 0.108 lb/MMBtu, which exceeds the permitted limit of 0.1 lb/MMBtu. Investigation by the Operations Manager determined that the excess O2 was incorrectly set by an operator and was at 7% instead of 3%. The issue was quickly adjusted and a follow-up reading by the Vicinity technician resulted in NOx emissions below 0.1 lb/MMBtu.
b. None during the reporting period.
c. Not applicable.
d. Not applicable.
e. Not applicable.

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C. COMPLIANCE STATUS OF EACH PERMIT TERM OR CONDITION

Identify (Describe and Cross-reference the Permit Term or Condition)	Unit ID(s):	Compliance status during reporting period
[COMAR 26.11.03.03B(23)] and [40 CFR Part 68] Should the Permittee become subject to 40 CFR Part 68 during the term of this permit, the Permittee shall submit risk management plans by the date specified in 40 CFR Part 68.150 and shall certify compliance with the requirements of 40 CFR Part 68 as part of the annual compliance certification as required by 40 CFR Part 70. The Permittee shall initiate a permit revision or reopening according to the procedures of 40 CFR Part 70.7 to incorporate appropriate permit conditions into the Permittee's Part 70 Permit.	Plant Wide	_____ Intermittent Compliance ___X___ Continuous Compliance

D. METHODS USED TO DETERMINE COMPLIANCE

Describe all methods or means you used to determine compliance with the permit term and condition described in section C. For each monitoring method or means you must specify whether it produced intermittent or continuous data.

Operations associated with the Central Avenue Steam Plant are not subject to 40 CFR Part 68 because the operation of the Steam Plant does not require the use of more than a threshold quantity of any regulated substance in any process. Threshold quantities are given in CAA 112(r) List of Regulated Substances as of October 30, 1998.

C. COMPLIANCE STATUS OF EACH PERMIT TERM OR CONDITION

Identify (Describe and Cross-reference) the Permit Term or Condition	Unit ID(s):	Compliance status during reporting period
COMAR 26.11.01.04] The Department may require the Permittee to conduct, or have conducted, testing to determine compliance with this Part 70 permit. The Department, at its option, may witness or conduct these tests. This testing shall be done at a reasonable time, and all information gathered during a testing operation will be provided to the Department.	Plant Wide	☐ Intermittent Compliance ☒ Continuous Compliance

D. METHODS USED TO DETERMINE COMPLIANCE

Describe all methods or means you used to determine compliance with the permit term and condition described in section C. For each method or means you must specify whether it produced intermittent or continuous data.

The Maryland Department of the Environment has not required any additional testing at the Central Avenue Steam Plant during the reporting period.

On February 4, 2015, emission compliance testing for NOx was performed on Boilers #3 and #4 firing on natural gas. Both units were in compliance with the 0.10 lb/MMBTU limitation. A report was furnished to MDE.
Testing under the current permit is scheduled in March, 2022.

INSTRUCTIONS: Use this page to describe the compliance status of each permit term or condition. This page may be used to provide information on 2 different permit terms or conditions. Copy this page as many times as necessary to cover all permit terms and conditions.

C. COMPLIANCE STATUS OF EACH PERMIT TERM OR CONDITION

Identify (Describe and Cross-reference the Permit Term or Condition)	Unit ID(s):	Compliance status during reporting period
[COMAR 26.11.01.05] Compliance with the emissions standards and limitations in this Part 70 permit shall be determined by the test methods designated and described below or other test methods submitted to and approved by the Department. Reference documents of the test methods approved by the Department include the following: a. 40 CFR Part 60, appendix A b. 40 CFR Part 51, appendix M c. The Department's Technical Memorandum 91-01 "Test Methods and Equipment Specifications for Stationary Sources", (January 1991), as amended through Supplement 2, (July 1, 1992)	Plant Wide	_____ Intermittent Compliance <u> X </u> Continuous Compliance

D. METHODS USED TO DETERMINE COMPLIANCE

Describe all methods or means you used to determine compliance with the permit term and condition described in section C. For each monitoring method or means you must specify whether it produced intermittent or continuous data.

Compliance testing was conducted in accordance with 40 CFR Part 60, Appendix A, and 40 CFR Part 51, Appendix M, as well as MDE's Test Methods and Equipment Specifications for Stationary Sources. MDE was provided with a protocol prior to the testing and a report detailing the compliance stack testing afterward.

C. COMPLIANCE STATUS OF EACH PERMIT TERM OR CONDITION

Identify (Describe and Cross-reference) the Permit Term or Condition	Unit ID(s):	Compliance status during reporting period
COMAR 26.11.02.19C] and [COMAR 26.11.02.19D] The Permittee shall certify actual annual emissions of regulated pollutants from the facility on a calendar year basis. a. The certification shall be on a form obtained from the Department and submitted to the Department not later than April 1 of the year following the year for which the certification is required; b. The individual making the certification shall certify that the information is accurate to the individual's best knowledge. The individual shall be: (1) Familiar with each source for which the certification form is submitted, and (2) Responsible for the accuracy of the emission information; c. The Permittee shall maintain records necessary to support the emission certification including the following information if applicable: (1) The total amount of actual emissions of each regulated pollutant and the total of all regulated pollutants; (2) An explanation of the methods used to quantify the emissions and the operating schedules and production data that were used to determine emissions, including significant assumptions made; (3) Amounts, types, and analyses of all fuels used; (4) Emission data from continuous emission monitors that are required by this permit, including monitor calibration and malfunction information; (5) Identification, description, and use records of all air pollution control equipment and compliance monitoring equipment including: (a) Significant maintenance performed, (b) Malfunctions and downtime, and (c) Episodes of reduced efficiency of all the equipment; (6) Limitations on source operation or any work practice standards that significantly affect emissions; and (7) Other relevant information as required by the Department.	Plant Wide	 ____ Intermittent Compliance _X_ Continuous Compliance

D. METHODS USED TO DETERMINE COMPLIANCE

Describe all methods or means you used to determine compliance with the permit term and condition described in section C. For each method or means you must specify whether it produced intermittent or continuous data.

Vicinity maintains records of daily fuel use and production data for each emission source in the Central Avenue Steam Plant. Vicinity submitted its actual annual emissions of regulated pollutants for calendar year 2020 in March, 2021. There were no continuous emission monitors or air pollution control equipment required for emission sources in the Central Avenue Steam Plant during this compliance period.

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C. COMPLIANCE STATUS OF EACH PERMIT TERM OR CONDITION

Identify (Describe and Cross-reference the Permit Term or Condition)	Unit ID(s):	Compliance status during reporting period
[COMAR 26.11.03.06C(6) and (7)] The Permittee shall submit to the Department and EPA Region III a report certifying compliance with each term of this Part 70 permit including each applicable standard, emission limitation, and work practice for the previous calendar year by April 1 of each year. a. The compliance certification shall include: (1) The identification of each term or condition of this permit, which is the basis of the certification; (2) The compliance status; (3) Whether the compliance was continuous or intermittent; (4) The methods used for determining the compliance of the source, currently and over the reporting period; and (5) Any other information required to be reported to the Department that is necessary to determine the compliance status of the Permittee with this permit. b. The Permittee shall submit the compliance certification reports to the Department and EPA simultaneously.	Plant Wide	_____ Intermittent Compliance <u> X </u> Continuous Compliance

D. METHODS USED TO DETERMINE COMPLIANCE

Describe all methods or means you used to determine compliance with the permit term and condition described in section C. For each monitoring method or means you must specify whether it produced intermittent or continuous data.

Herein, is the compliance certification required under Part 70; it is being simultaneously submitted to the Maryland Department of the Environment and EPA Region III. _____ _____ _____
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C. COMPLIANCE STATUS OF EACH PERMIT TERM OR CONDITION

Identify (Describe and Cross-reference) the Permit Term or Condition	Unit ID(s):	Compliance status during reporting period
[COMAR 26.11.02.02F] All application forms, reports, and compliance certifications submitted pursuant to this permit shall be certified by a responsible official as to truth, accuracy, and completeness. The Permittee shall expeditiously notify the Department of an appointment of a new responsible official. The certification shall be in the following form: "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."	Plant Wide	_____ Intermittent Compliance <u> X </u> Continuous Compliance

D. METHODS USED TO DETERMINE COMPLIANCE

Describe all methods or means you used to determine compliance with the permit term and condition described in section C. For each method or means you must specify whether it produced intermittent or continuous data.

A responsible official of Vicinity Energy Baltimore signed this compliance certification, using the above-referenced certification language.

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C. COMPLIANCE STATUS OF EACH PERMIT TERM OR CONDITION

Identify (Describe and Cross-reference the Permit Term or Condition)	Unit ID(s):	Compliance status during reporting period
[COMAR 26.11.03.06C(5)] The Permittee shall gather and retain the following information when sampling and testing for compliance demonstrations: a. The location as specified in this permit, and the date and time that samples and measurements are taken; b. All pertinent operating conditions existing at the time that samples and measurements are taken; c. The date that each analysis of a sample or emissions test is performed and the name of the person taking the sample or performing the emissions test; d. The identity of the Permittee, individual, or other entity that performed the analysis; e. The analytical techniques and methods used; and f. The results of each analysis.	Plant Wide	 _____ Intermittent Compliance __X__ Continuous Compliance

D. METHODS USED TO DETERMINE COMPLIANCE

Describe all methods or means you used to determine compliance with the permit term and condition described in section C. For each monitoring method or means you must specify whether it produced intermittent or continuous data.

Under the requirements of the previous Title V permit (November 1, 2013 to September 30, 2018), Boilers #3 and #4 must be tested once during the lifetime of the permit. This testing was performed on February 4, 2015 and both units were in compliance with the 0.10 lb/MMBTU NOx limitation. A protocol was provided to the department prior to the testing and a report detailing the outcome of the testing was subsequently provided.

It is planned that testing under the current permit will take place in March 2022.

C. COMPLIANCE STATUS OF EACH PERMIT TERM OR CONDITION

Identify (Describe and Cross-reference) the Permit Term or Condition	Unit ID(s):	Compliance status during reporting period
[COMAR 26.11.03.06(C)(5)and(6)] The Permittee shall retain records of all monitoring data and support information that supports the compliance certification for a period of five years from the date that the monitoring sample, measurement, application, report or emissions test was completed or submitted to the Department. These records and support information shall include: a. All calibration and maintenance records; b. All original strip-chart recordings for continuous monitoring instrumentation; c. Records which support the annual emissions certification; and d. Copies of all reports required by this permit.	Plant Wide	_____ Intermittent Compliance <u> X </u> Continuous Compliance

D. METHODS USED TO DETERMINE COMPLIANCE

Describe all methods or means you used to determine compliance with the permit term and condition described in section C. For each method or means you must specify whether it produced intermittent or continuous data.

Vicinity maintains records of all fuel use and production data, calibration and maintenance records, and copies of all reports required under the permit for a period of at least five years from their date of origination.

C. COMPLIANCE STATUS OF EACH PERMIT TERM OR CONDITION

Identify (Describe and Cross-reference) the Permit Term or Condition	Unit ID(s):	Compliance status during reporting period
[40 CFR Part 61, Subpart M] The Permittee shall comply with 40 CFR Part 61, Subpart M when conducting any renovation or demolition activities at the facility.	Plant Wide	☐ Intermittent Compliance ☒ Continuous Compliance

D. METHODS USED TO DETERMINE COMPLIANCE

Describe all methods or means you used to determine compliance with the permit term and condition described in section C. For each method or means you must specify whether it produced intermittent or continuous data.

There were no projects undertaken at the Central Avenue facility which would have been subject to 40CFR Part 61, Subpart M. It is the policy of Vicinity Energy Baltimore to utilize MDE-approved abatement contractors and appropriate Industrial Hygiene support for any asbestos work.

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C. COMPLIANCE STATUS OF EACH PERMIT TERM OR CONDITION

Identify (Describe and Cross-reference the Permit Term or Condition)	Unit ID(s):	Compliance status during reporting period
[40 CFR Part 82, Subpart F] The Permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in subpart B: a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to §82.154 and §82.156. b. Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158. c. Persons performing maintenance, service, repairs or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161. d. Persons performing maintenance, service, repairs or disposal of appliances must certify with the Administrator pursuant to § 82.162. e. Persons disposing of small appliances, MVACS, and MVAC-like appliances as defined in §82.152, must comply with record keeping requirements pursuant to §82.166. f. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.156. g. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.	Plant Wide	 ____ Intermittent Compliance _X_ Continuous Compliance

D. METHODS USED TO DETERMINE COMPLIANCE

Describe all methods or means you used to determine compliance with the permit term and condition described in section C. For each monitoring method or means you must specify whether it produced intermittent or continuous data.

There was no equipment subject to 40 CFR Part 82, Subpart F, located at the Central Avenue Steam Plant during the reporting period.

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C. COMPLIANCE STATUS OF EACH PERMIT TERM OR CONDITION

Identify (Describe and Cross-reference the Permit Term or Condition)	Unit ID(s):	Compliance status during reporting period
Control of Sulfur Emissions <u>COMAR 26.11.09.07A</u> -- Sulfur Content Limitations for Fuels. A person may not burn, sell, or make available for sale any fuel with a sulfur content by weight in excess of <u>0.3 percent for distillate fuel oils</u> and 1.0 percent for residual fuel oils.	EU-1 EU-2 Two (2) 156 MMBtu/hr boilers	☐ Intermittent Compliance ☒ Continuous Compliance

D. METHODS USED TO DETERMINE COMPLIANCE

Describe all methods or means you used to determine compliance with the permit term and condition described in section C. For each monitoring method or means you must specify whether it produced intermittent or continuous data.

All distillate oil purchased or burned during the reporting period was certified by the supplier as having a sulfur content ≤ 0.0015 percent

C. COMPLIANCE STATUS OF EACH PERMIT TERM OR CONDITION

Identify (Describe and Cross-reference) the Permit Term or Condition	Unit ID(s):	Compliance status during reporting period
Control of Visible Emissions <u>COMAR 26.11.09.05A(2)</u> a) Visible emissions other than water in an uncombined form are prohibited. b) Exceptions: COMAR 26.11.09.05A(3) – “Section (2) of this regulation does not apply to emissions during load changing, soot blowing, start-up, or occasional cleaning of control equipment, which do not exceed 40 percent opacity for a period or periods aggregating not more than 6 consecutive minutes in any 60 minutes.”	EU-1 EU-2 Two (2) 156 MMBtu/hr boilers	_____ Intermittent Compliance <u> X </u> Continuous Compliance

D. METHODS USED TO DETERMINE COMPLIANCE

Describe all methods or means you used to determine compliance with the permit term and condition described in section C. For each method or means you must specify whether it produced intermittent or continuous data.

There were no visible emissions during the reporting period. Any periods of visible emissions, noted by stack observations, would result in the shut-down of that particular emission unit or switching the fuel for that emission unit from oil to natural gas until trouble-shooting is performed and the cause of the visible emissions is remedied.

INSTRUCTIONS: Use this page to describe the compliance status of each permit term or condition. This page may be used to provide information on 2 different permit terms or conditions. Copy this page as many times as necessary to cover all permit terms and conditions.

C. COMPLIANCE STATUS OF EACH PERMIT TERM OR CONDITION

Identify (Describe and Cross-reference the Permit Term or Condition)	Unit ID(s):	Compliance status during reporting period
Monitoring Requirements: <i>[Authority: COMAR 26.11.03.06]</i> The Permittee shall: a) obtain fuel supplier certification indicating that the oil complies with the limitation on sulfur content of the fuel oil. b) 1) (a) properly operate and maintain the boilersto prevent visible emissions; (b) maintain an operations manual and preventative maintenance plan that relates to combustion performance; and 2) (a) verify no visible emissions when burning #2 fuel oil. The Permitte shall make an observation of the stack gases for visible emissions for a 12 minute period once for each 168 hours that the boiler burns oil or at a minimum of once during the calendar year. (b) perform the following, if emissions are visible to human observer (i) inspect combustion control system and boiler operations. (ii) perform all necessary adjustments and/or repairs to the boiler within 48 hours, so that visible emissions are eliminated; (iii) document in writing the results of the inspections, adjustments and/or repairs to the boiler; and (iv) after 48 hours, if the required adjustments and/or repairs had not eliminated the visible emissions, perform a Method 9 observation once daily for 18 minutes until corrective action has eliminated the visible emissions.	EU-1 EU-2 Two (2) 156 MMBtu/hr boilers	_____ Intermittent Compliance <u> X </u> Continuous Compliance

D. METHODS USED TO DETERMINE COMPLIANCE

Describe all methods or means you used to determine compliance with the permit term and condition described in section C. For each monitoring method or means you must specify whether it produced intermittent or continuous data.

a) All distillate oil purchased or burned during the reporting period was certified by the supplier as having a sulfur content ≤ 0.0015 percent, well below the state regulatory limit.

b) The boilers are attended 24 hours a day and maintained consistent with the operations manual and preventative maintenance plans. For each 168 hour period during which the boilers operated on fuel oil, the Production Manager makes an observation of the stack gases for a 12 minute period. There were no instances during the reporting period where Fuel Oil #2 was combusted for 168 hours or greater. Therefore, no observations were made.

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C. COMPLIANCE STATUS OF EACH PERMIT TERM OR CONDITION

Identify (Describe and Cross-reference the Permit Term or Condition)	Unit ID(s):	Compliance status during reporting period
Recordkeeping Requirements: <i>[Authority: COMAR 26.11.03.06]</i> The Permittee shall: a.) maintain records of fuel suppliers certification for 5 years. b.) (1) maintain log of maintenance performed on the boilers and training provided to the boiler operators. (2) maintain log of visible emissions observations performed on site for 5 years and make available to the Department's representative upon request.	EU-1 EU-2 Two (2) 156 MMBtu/hr boilers	_____ Intermittent Compliance ___X___ Continuous Compliance

D. METHODS USED TO DETERMINE COMPLIANCE

Describe all methods or means you used to determine compliance with the permit term and condition described in section C. For each monitoring method or means you must specify whether it produced intermittent or continuous data.

a) All distillate oil purchased or burned during the reporting period was certified by the supplier as having a sulfur content ≤ 0.0015 percent. Records of fuel certification are maintained for a period of 5 years by the Production Manager and the EHS Manager.

b) A log of maintenance performed on the boilers and records of training provided to the operators is maintained onsite. Records of visible emissions observations are maintained by the facility and are available to the Department upon request.

C. COMPLIANCE STATUS OF EACH PERMIT TERM OR CONDITION

Identify (Describe and Cross-reference) the Permit Term or Condition	Unit ID(s):	Compliance status during reporting period
Reporting Requirements	EU-1 EU-2	☐ Intermittent Compliance
a) Submit certification records to the Department upon request.	Two (2) 156 MMBtu/hr boilers	☒ Continuous Compliance
b) Submit a semi-annual report summarizing periods when visible emissions were observed (date, time, and duration).		

D. METHODS USED TO DETERMINE COMPLIANCE

Describe all methods or means you used to determine compliance with the permit term and condition described in section C. For each method or means you must specify whether it produced intermittent or continuous data.

The 2021 semi-annual reports certified no visible emissions from EU-1 or EU-2 during the reporting period.

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C. COMPLIANCE STATUS OF EACH PERMIT TERM OR CONDITION

Identify (Describe and Cross-reference the Permit Term or Condition)	Unit ID(s):	Compliance status during reporting period
Control of Sulfur Emissions <u>COMAR 26.11.09.07A</u> – Sulfur Content Limitations for Fuels. A person may not burn, sell, or make available for sale any fuel with a sulfur content by weight in excess of <u>0.3 percent for distillate fuel oils</u> and 1.0 percent for residual fuel oils.	EU-3 Two (2) 91.4 MMBtu/hr Zum boilers	☐ Intermittent Compliance ☒ Continuous Compliance

D. METHODS USED TO DETERMINE COMPLIANCE

Describe all methods or means you used to determine compliance with the permit term and condition described in section C. For each monitoring method or means you must specify whether it produced intermittent or continuous data.

All distillate oil purchased or burned during the reporting period was certified by the supplier as having a sulfur content ≤ 0.0015 percent

INSTRUCTIONS: Use this page to describe the compliance status of each permit term or condition. This page may be used to provide information on 2 different permit terms or conditions. Copy this page as many times as necessary to cover all permit terms and conditions.

C. COMPLIANCE STATUS OF EACH PERMIT TERM OR CONDITION

Identify (Describe and Cross-reference the Permit Term or Condition)	Unit ID(s):	Compliance status during reporting period
Control of Sulfur Emissions <u>40 CFR 60.42c – NSPS Subpart Dc</u> Sulfur Content Limit in fuel oil to 0.5 wt %. for Fuels. <i>*Note: Distillate fuel oil sulfur content shall not exceed 0.3 % by weight as required by the more stringent requirement of COMAR 26.11.09.07A. The compliance demonstration with the COMAR distillate fuel limitation will be used to demonstrate compliance with the NSPS Subpart Dc fuel oil sulfur requirement.</i>	EU-3 Two (2) 91.4 MMBtu/hr Zum boilers	☐ Intermittent Compliance ☒ Continuous Compliance

D. METHODS USED TO DETERMINE COMPLIANCE

Describe all methods or means you used to determine compliance with the permit term and condition described in section C. For each monitoring method or means you must specify whether it produced intermittent or continuous data.

All distillate oil purchased or burned during the reporting period was certified by the supplier as having a sulfur content ≤ 0.0015 percent.

C. COMPLIANCE STATUS OF EACH PERMIT TERM OR CONDITION

Identify (Describe and Cross-reference) the Permit Term or Condition	Unit ID(s):	Compliance status during reporting period
Control of Visible Emissions <u>COMAR 26.11.09.05A(2)</u> (1) Visible emissions other than water in an uncombined form are prohibited. Exceptions: COMAR 26.11.09.05A(3) – “Section (2) of this regulation does not apply to emissions during load changing, soot blowing, start-up, or occasional cleaning of control equipment, which do not exceed 40 percent opacity for a period or periods aggregating not more than 6 consecutive minutes in any 60 minutes.” <u>40 CFR 60.43c – NSPS Subpart Dc:</u> b) Opacity shall not exceed 20%. The compliance demonstration with COMAR 26.11.09.05(A) will be used to demonstrate compliance with the NSPS opacity limit of 20%.	EU-3 Two (2) 91.4 MMBtu/hr Zurn boilers	☐ Intermittent Compliance ☒ Continuous Compliance

D. METHODS USED TO DETERMINE COMPLIANCE

Describe all methods or means you used to determine compliance with the permit term and condition described in section C. For each method or means you must specify whether it produced intermittent or continuous data.

The 2021 semi-annual reports certified no visible emissions during the reporting period. Any periods of visible emissions, noted by stack observations, would result in the shut-down of that particular emission unit or switching the fuel for that emission unit from oil to natural gas until trouble-shooting is performed and the cause of the visible emissions is remedied.

C. COMPLIANCE STATUS OF EACH PERMIT TERM OR CONDITION

Identify (Describe and Cross-reference) the Permit Term or Condition	Unit ID(s):	Compliance status during reporting period
Applicable Requirements: (C) MDE Permit to Construct (#24-1350 & 1351 N) requires the Permittee to equip the boilers with Low-NOx burners and limit NOx emissions to 0.1 lb/MMBtu for a 24-hour average when burning natural gas.	EU-3 Two (2) 91.4 MMBtu/hr Zurn boilers	☐ Intermittent Compliance ☒ Continuous Compliance

D. METHODS USED TO DETERMINE COMPLIANCE

Describe all methods or means you used to determine compliance with the permit term and condition described in section C. For each method or means you must specify whether it produced intermittent or continuous data.

Boilers #3 and #4 associated with EU-3 are required to be tested on natural gas at least once during the life of the permit using EPA Reference Method 7E. This testing was performed under the previous permit on February 4, 2015 and indicated compliance with the 0.10 lb/MMBTU NOx limitation. Testing under the current permit is planned to take place in March 2022.

C. COMPLIANCE STATUS OF EACH PERMIT TERM OR CONDITION

Identify (Describe and Cross-reference) the Permit Term or Condition	Unit ID(s):	Compliance status during reporting period
<u>Applicable Requirements:</u> (D) MDE Permit to Construct (#24-5-1350 & 1351 N) limits annual capacity factor of the boilers to 0.312 unless the Company obtains prior approval from the Department.	EU-3 Two (2) 91.4 MMBtu/hr Zurn boilers	☐ Intermittent Compliance ☒ Continuous Compliance

D. METHODS USED TO DETERMINE COMPLIANCE

Describe all methods or means you used to determine compliance with the permit term and condition described in section C. For each method or means you must specify whether it produced intermittent or continuous data.

The 2021 semi-annual reports submitted to Maryland Department of the Environment, demonstrated the annual capacity factor of EU-3 = 0.14, below the 0.312 annual capacity factor specified by the permit.

C. COMPLIANCE STATUS OF EACH PERMIT TERM OR CONDITION

Identify (Describe and Cross-reference) the Permit Term or Condition	Unit ID(s):	Compliance status during reporting period
Applicable Requirements: (1) MDE Permit to Construct (#24-5-1350 & 1351 N) limits the total NOx emissions from EU-3 to less than 25 tons per year on a rolling 12 month basis.	EU-3 Two (2) 91.4 MMBtu/hr Zum boilers	☐ Intermittent Compliance ☒ Continuous Compliance

D. METHODS USED TO DETERMINE COMPLIANCE

Describe all methods or means you used to determine compliance with the permit term and condition described in section C. For each method or means you must specify whether it produced intermittent or continuous data.

As demonstrated in the 2021 semi-annual reports submitted to Maryland Department of the Environment, the NOx total emissions for EU-3 were below 25 tons at all times during the 12-month rolling period.

C. COMPLIANCE STATUS OF EACH PERMIT TERM OR CONDITION

Identify (Describe and Cross-reference) the Permit Term or Condition	Unit ID(s):	Compliance status during reporting period
Testing Requirements: (C) The Permittee shall test each boiler for NOx emissions at least once during the life of the permit using EPA Reference Method 7E, or other acceptable methods. The Permittee shall submit a test protocol for approval to the Department at least 30 days prior to the proposed test date. [Authority COMAR 26.11.03.06C]	EU-3 Two (2) 91.4 MMBtu/hr Zurn boilers	☐ Intermittent Compliance ☒ Continuous Compliance

D. METHODS USED TO DETERMINE COMPLIANCE

Describe all methods or means you used to determine compliance with the permit term and condition described in section C. For each method or means you must specify whether it produced intermittent or continuous data.

Stack testing of EU-3 on natural gas is a condition of this permit. Testing took place on February 4, 2015. MDE was provided with an appropriate test protocol and a report detailing the results. Testing under the current permit is planned to take place during March 2022.

INSTRUCTIONS: Use this page to describe the compliance status of each permit term or condition. This page may be used to provide information on 2 different permit terms or conditions. Copy this page as many times as necessary to cover all permit terms and conditions.

C. COMPLIANCE STATUS OF EACH PERMIT TERM OR CONDITION

Identify (Describe and Cross-reference the Permit Term or Condition)	Unit ID(s):	Compliance status during reporting period
Monitoring Requirements: <i>[Authority: COMAR 26.11.03.06]</i> The Permittee shall: a) obtain fuel supplier certification indicating that the oil complies with the limitation on sulfur content of the fuel oil. b) 1) verify no visible emissions when burning #2 fuel oil. An observer shall make an observation of stack emissions for a 12 minute period once for each 168 hours of operations, or at a minimum of once per year. If the boiler burns less than 100 hours in a calendar year, this requirement is waived. 2) perform the following, if emissions are visible to human observer (a) inspect combustion control system and boiler operations. (b) perform all necessary adjustments and/or repairs to the boiler within 48 hours, so that visible emissions are eliminated; (c) document in writing the results of the inspections, adjustments and/or repairs to the boiler; and (d) after 48 hours, if the required adjustments and/or repairs had not eliminated the visible emissions, perform a Method 9 observation once daily for 18 minutes until corrective action has eliminated the visible emissions. c) measure the NOx content of the flue gases from each boiler for a 15 minute period once every 168 hours of operation. The Permittee shall use an analyzer that is properly calibrated and maintained in accordance with the vendor specifications. The analyzer shall be the type approved by the Department. d) calculate capacity factors of the boilers at the end of month for the prior rolling twelve month period. e) calculate the rolling twelve month NOx emissions at the end of each month.	EU-3 Two (2) 91.4 MMBtu/hr Zurn boilers	_____ Intermittent Compliance <u> X </u> Continuous Compliance

D. METHODS USED TO DETERMINE COMPLIANCE

Describe all methods or means you used to determine compliance with the permit term and condition described in section C. For each monitoring method or means you must specify whether it produced intermittent or continuous data.

a) All distillate oil purchased or burned during the reporting period was certified by the supplier as having a sulfur content ≤ 0.0015 percent

b) For any 168 hour period during which the boilers operated on fuel oil, the Production Manager makes an observation of the stack gases for visible emissions. No episodes of visible emissions were recorded during the reporting period; the boilers combusted oil for less than 168 hours.

c) Vicinity's Instrumentation Department performs measurement of the NOx content in the flue gas once every 168 hours of operation. The Instrumentation Department ensures the analyzer, manufactured by Enerac and approved by Maryland Department of the Environment, is calibrated and maintained in accordance with vendor specifications.

d) & e) The capacity factor and NOx emissions for each 12 month rolling period are calculated on a monthly basis by the Envir. Health and Safety Manager to ensure EU-3 is operated below its annual maximum permitted capacity factor.

C. COMPLIANCE STATUS OF EACH PERMIT TERM OR CONDITION

Identify (Describe and Cross-reference the Permit Term or Condition)	Unit ID(s):	Compliance status during reporting period
Recordkeeping Requirements: The Permittee shall: a) maintain records of fuel supplier certification onsite for five years. b) maintain log of visible emissions observations performed onsite for 5 years and make available to the Department's representative upon request. c) maintain records of stack tests, NOx analyzer readings, and records of excess oxygen onsite for five years. d) maintain records of calculations of capacity factors and the supporting documentation for the calculations for five years. e) maintain records of calculations of NOx emissions and the supporting documentation for the calculations for five years.	EU-3 Two (2) 91.4 MMBtu/hr Zum boilers	 ____ Intermittent Compliance __X__ Continuous Compliance

D. METHODS USED TO DETERMINE COMPLIANCE

Describe all methods or means you used to determine compliance with the permit term and condition described in section C. For each monitoring method or means you must specify whether it produced intermittent or continuous data.

a) Records of fuel supplier certification are maintained onsite for five years.

b) For any 168 hour period during which the boilers operated on fuel oil, production facility personnel perform a stack observation and records these observations in a log book. The boilers operated on oil for less than 168 hours during the reporting period.

c) Stack test data is maintained by the EHS Manager and by the facility. NOx analyzer readings are recorded and maintained in the facility logbook.

d) & e) The records of the capacity factor and NOx calculations are maintained by the EHS Manager.

C. COMPLIANCE STATUS OF EACH PERMIT TERM OR CONDITION

Identify (Describe and Cross-reference the Permit Term or Condition)	Unit ID(s):	Compliance status during reporting period
Reporting Requirements: The Permittee shall submit semi-annual reports to the Department and EPA Region III including the following: a) (1) a fuel supplier certification consisting of the name of the oil supplier and a statement from the oil supplier that the oil complies with the sulfur specifications for distillate fuel oil; and (2) a certified statement signed by the Permittee stating that the records of the fuel supplier certifications submitted represent all of the fuel oil combusted during the 6-month period. b) Submit a summary of periods when visible emissions were observed in the semi-annual monitoring report. c) Report the results of stack tests within 45 days of testing. d) Report the capacity factors calculated each month with the annual emissions certification report due April 1 of each calendar year. e) Report the calculated rolling twelve months NOx emissions with the annual emissions certification reports due April 1 of each calendar year.	EU-3 Two (2) 91.4 MMBtu/hr Zurn boilers	_____ Intermittent Compliance <u> X </u> Continuous Compliance

D. METHODS USED TO DETERMINE COMPLIANCE

Describe all methods or means you used to determine compliance with the permit term and condition described in section C. For each monitoring method or means you must specify whether it produced intermittent or continuous data.

a) The 2021 semi-annual reports included a statement by the owner that the fuel oil suppliers' certification represents all of the fuel oil burned during the report period.

b) The 2021 semi-annual reports did not report any visible emissions during the reporting period.

(c) Compliance stack testing under the previous permit was performed on February 4, 2015 and MDE was provided a report within the 45 day requirement. Under the current permit testing is planned to take place in March 2022.

d) & e) The calculated capacity factor and NOx emissions were included with the 2021 annual emissions certification report submitted to the Department in March, 2021.

C. COMPLIANCE STATUS OF EACH PERMIT TERM OR CONDITION

Identify (Describe and Cross-reference) the Permit Term or Condition	Unit ID(s):	Compliance status during reporting period
<u>NOx RACT Applicable Regulation (Requirements for Space Heaters):</u>	EU-1 EU-2 EU-3	_____ Intermittent Compliance _____ <u>X</u> Continuous Compliance
(3.1) (a) Submit to the Department a list of each affected installation on the premises and the types of fuel used in each installation (b) Develop an operating and maintenance plan to minimize NOx emissions based on recommendations made by the equipment vendors and other information including the source's operating and maintenance experience. (c) Implement an operating and maintenance plan and maintain the plan at the premises for review upon request by the Department (d) Require installation operators to attend in-state operators training programs once every 3 years on combustion optimization that are sponsored by the Department, the U.S. EPA, or equipment vendors; and (e) Prepare and maintain a record of training program attendance for each operator at the site and make these records available to the Department upon request.		

D. METHODS USED TO DETERMINE COMPLIANCE

Describe all methods or means you used to determine compliance with the permit term and condition described in section C. For each method or means you must specify whether it produced intermittent or continuous data.

- (a) The facility has satisfied the notification requirement about each affected installation on the premises and the types of fuel used in each installation
 - (b) and (c) The facility has developed and implemented an operating and maintenance plan to minimize NOx emissions. The Plan is available for review by the Department upon request.
 - (d) NOx RACT training is provided to installation operators every 3 years. Operators received Combustion Optimization training through the MDE-approved course offered by KEH Energy Engineering. The last training took place in late 2020. Next training is planned for 2022
 - (e) The NOx RACT training records for each operator are maintained onsite and can be made available to the Department upon request.
-
-
-

C. COMPLIANCE STATUS OF EACH PERMIT TERM OR CONDITION

Identify (Describe and Cross-reference) the Permit Term or Condition	Unit ID(s):	Compliance status during reporting period
NOx RACT -- Monitoring, Recordkeeping, and Reporting Requirements	EU-1 EU-2 EU-3	☐ Intermittent Compliance ☒ Continuous Compliance
3.3 The Permittee shall develop and implement an operations and maintenance plan. 3.4 The Permittee shall maintain the operating and maintenance plan at the premises. Records of training program attendance for each operator shall be maintained on site for at least 5 years. Records of fuel use that demonstrate that the boiler meets the definition of a space heater. 3.5 The Permittee shall submit a list of trained operators and training program attendance to the Department upon request. The Permittee shall inform the Department no later than 60 days after the date when the boilers no longer qualify as a space heater, and shall meet the requirements under COMAR 26.11.09.08E or identify an alternative NOx RACT requirement under COMAR 26.11.09.08 with which the source will comply.		

D. METHODS USED TO DETERMINE COMPLIANCE

Describe all methods or means you used to determine compliance with the permit term and condition described in section C. For each method or means you must specify whether it produced intermittent or continuous data.

3.3 The facility has developed, implemented, and maintains an Operations and Maintenance Plan.

3.4 The facility operating and maintenance plan is maintained on the premises. Training records for each operator are maintained on site for at least 5 years and records of fuel use are maintained that demonstrate that the boilers meet the definition of a space heater.

3.5 The facility maintains NOx RACT training records and these records are available to the Department upon request. The facility will notify the Department no later than 60 days after the date when the boilers no longer qualify as a space heater and shall comply with the appropriate requirements.

C. COMPLIANCE STATUS OF EACH PERMIT TERM OR CONDITION

Identify (Describe and Cross-reference) the Permit Term or Condition	Unit ID(s):	Compliance status during reporting period
1.1(D): Operational Limitation:	EU-1 EU-2 EU-3	☐ Intermittent Compliance ☒ Continuous Compliance
The Permittee shall only burn natural gas in the boilers except for periods of natural gas curtailment, gas supply interruption, startups, and periodic testing in order to be recognized as a natural gas fired boiler under the Boiler MACT 40CFR Part 63, Subpart JJJJJ (40CFR63.12).		

D. METHODS USED TO DETERMINE COMPLIANCE

Describe all methods or means you used to determine compliance with the permit term and condition described in section C. For each method or means you must specify whether it produced intermittent or continuous data.

The facility conformed to the requirements of the Boiler MACT and combusted natural gas except for periods of natural gas curtailment, gas supply interruption, startups and periodic testing. There were no natural gas curtailments during the reporting year. Fuel oil combusted was for testing.

E. DEVIATIONS FROM PERMIT TERMS AND CONDITIONS

The table below is appropriate for reporting deviations from permit terms or conditions that have been previously reported in a six-month monitoring report (assuming that the most recent six-month monitoring report and the annual compliance certification both end on the same date). Copy this page as many times as necessary to include all such deviations. Note that you may cross-reference deviations already reported in the six-month report in the first column of the table, and leave the other columns blank, however such cross-reference must be clear and unambiguous with respect to the six-month monitoring report and the individual deviation being cross-referenced. In addition, in the first column, whether you cross-reference deviations or not, you must indicate whether each deviation is a "possible exceptions" to compliance." If a deviation is not a possible exception to compliance, please briefly explain why it is allowed by the permit and cite the relevant permit term that provides the excuse. In addition, if there are deviations that have never been reported in writing to the permitting authority, more information than required by this table will be needed. In such cases, you must include information consistent with Section D of the six-month monitoring report form, and indicate whether it is a "possible exception to compliance."

Permit Term for Which There is a Deviation & Whether the Deviation is a "Possible Exception to Compliance"	Emission Units (unit IDs)	Deviation Time Periods Date (mo/day/yr) Time (hr/min) Time Zone	Written Deviation Report Submittal Date (mo/day/year)
Section III 4. a The Permittee shall comply with the following conditions for occurrences of excess emissions and deviations from requirements of this permit including the State-only enforceable section: a. Report any deviation from permit requirements that could endanger human health or the environment, by orally notifying the Department immediately upon discovery of the deviation.		Beginning <u>11 / 05 / 2021</u> : <u>13:00</u> <u>EST</u> Ending <u>11 / 05 / 2021</u> : <u>15:00</u> <u>EST</u>	<u>11 / 06 / 2021</u>
		Beginning <u> </u> / <u> </u> / <u> </u> : <u> </u> : <u> </u> <u> </u> Ending <u> </u> / <u> </u> / <u> </u> : <u> </u> : <u> </u> <u> </u>	<u> </u> / <u> </u> / <u> </u>
		Beginning <u> </u> / <u> </u> / <u> </u> : <u> </u> : <u> </u> <u> </u> Ending <u> </u> / <u> </u> / <u> </u> : <u> </u> : <u> </u> <u> </u>	<u> </u> / <u> </u> / <u> </u>
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**CERTIFICATION OF PLANT-WIDE CONDITIONS
(SECTION III OF PART 70 OPERATING PERMIT)**

Indicate compliance with the following requirements of Section III of your Part 70 Operating Permit in the space provided below:

1. Particulate Matter from Construction and Demolition

Not applicable. There was no construction or demolition of buildings or roads during the reporting period.

2. Open Burning

Not applicable. There were no occasions for open burning during the reporting period.

3. Air Pollution Episode (N/A)

Not applicable during the reporting period.

4. Report of Excess Emissions and Deviations

(All deviations from permit requirements should be clearly identified in semi annual monitoring reports.)

There was one episode of excess emissions or deviations during the reporting period for NOx. This is noted in Section E of the Annual Compliance Certification Report for Deviations From Permit Terms or Conditions.

5. Accidental Release Provisions (if applicable)

Not applicable. Operations at the Central Avenue facility are not subject to the provisions of 40CFR68.

6. General Testing Requirements

The facility is required to perform emissions compliance testing on Boilers #3 and #4 firing on natural gas at least once during the lifetime of the permit (November 1, 2013- September 30, 2018). The last testing took place on February 4, 2015. Both units complied with the 0.10 lb/MMBTU NOx requirement.

Under the current permit, testing is planned for March 2022.

7. Emissions Test Methods

The abovementioned compliance testing will be performed in accordance with 40CFR Part 60, Appendix A and 40CFR Part 51, Appendix M, as well as MDE's Test Methods and Equipment Specifications for Stationary Sources.

8. Emission Certification Report

The 2021 annual emissions certification report is being submitted with this document and will be submitted to MDE prior to the April 1st deadline.

9. Compliance Certification Report

Herein, is the compliance certification required under Part 70, submitted simultaneously to MDE and USEPA Region III.

10. Certification by Responsible Official

Herein, is the compliance certification report required under Part 70, certified by a responsible official of Vicinity Energy Baltimore Heating, LLP.

11. Sampling and Emissions Testing Record Keeping

Records of emissions testing are maintained on site by the EH&S Manager.

12. General Record Keeping

The Central Avenue facility maintains records of all fuel use, production data, calibration and maintenance records and copies of all reports required under the permit for a period of at least five years from the date of their origination.

13. General Conformity (N/A except for federal facilities)

Not applicable.

14. Asbestos Provisions (if applicable)

There were no projects undertaken at the Central Avenue facility which would have been subject to 40CFR61, Subpart M.

15. Ozone Depleting Regulations (if applicable)

Not applicable.

16. Acid Rain Permit (if applicable)

Not applicable.

17. Boiler MACT (40CFR63, Subpart JJJJJJ)

In April 2013, Vicinity Energy Baltimore Heating LLP notified MDE of its intent to opt out of the Boiler MACT regulation and combust only natural gas with the exception of natural gas curtailments, gas supply interruptions, start-ups and periodic testing. This notice was submitted under the company's former name, Veolia Energy Baltimore Heating LLP. There were no natural gas curtailments during the reporting year.

ATTACHMENT E: CHECKLIST OF INSIGNIFICANT UNITS AND EXEMPT ACTIVITIES

**MARYLAND DEPARTMENT OF THE ENVIRONMENT
AIR AND RADIATION ADMINISTRATION
RENEWAL TITLE V APPLICATION INSIGNIFICANT ACTIVITIES LIST**

III. Check-off List of Emissions Units and Activities Exempt from the Part 70 Permit Application

Insignificant Activities

Place a check mark beside each type of emissions unit or activity that is located at the facility. Where noted, please indicate the number of that type of emissions unit or activity located at the facility.

- (1) No. ____ Fuel burning equipment using gaseous fuels or no. 1 or no. 2 fuel oil, and having a heat input less than 1,000,000 Btu (1.06 gigajoules) per hour;
- (2) No. ____ Fuel-burning equipment using solid fuel and having a heat input of less than 350,000 Btu (0.37 gigajoule) per hour;
- (3) No. ____ Stationary internal combustion engines with less than 500 brake horsepower (373 kilowatts) of power output
- (4) ____ Space heaters utilizing direct heat transfer and used solely for comfort heat;
- (5) ____ Water cooling towers and water cooling ponds unless used for evaporative cooling of water from barometric jets or barometric condensers, or used in conjunction with an installation requiring a permit to operate;
- (6) No. ____ Unheated VOC dispensing containers or unheated VOC rinsing containers of 60 gallons (227 liters) capacity or less;
- (7) ____ Commercial bakery ovens with a rated heat input capacity of less than 2,000,000 Btu per hour;
- (8) ____ Kilns used for firing ceramic ware, heated exclusively by natural gas, liquefied petroleum gas, electricity, or any combination of these;
- (9) ____ Confection cookers where the products are edible and intended for human consumption;
- (10) ____ Die casting machines;
- (11) ____ Photographic process equipment used to reproduce an image upon sensitized material through the use of radiant energy;
- (12) ____ Equipment for drilling, carving, cutting, routing, turning, sawing, planing, spindle sanding, or disc sanding of wood or wood products;

**MARYLAND DEPARTMENT OF THE ENVIRONMENT
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RENEWAL TITLE V APPLICATION INSIGNIFICANT ACTIVITIES LIST**

- (13) ____ Brazing, soldering, or welding equipment, and cutting torches related to manufacturing and construction activities that emit HAP metals and not directly related to plant maintenance, upkeep and repair or maintenance shop activities;
- (14) ____ Equipment for washing or drying products fabricated from metal or glass, provided that no VOC is used in the process and that no oil or solid fuel is burned;
- (15) ____ Containers, reservoirs, or tanks used exclusively for electrolytic plating work, or electrolytic polishing, or electrolytic stripping of brass, bronze, cadmium, copper, iron, lead, nickel, tin, zinc, and precious metals;
- (16) Containers, reservoirs, or tanks used exclusively for:
- (a) ____ Dipping operations for applying coatings of natural or synthetic resins that contain no VOC;
 - (b) ____ Dipping operations for coating objects with oils, waxes, or greases, and where no VOC is used;
 - (c) ____ Storage of butane, propane, or liquefied petroleum, or natural gas;
 - (d) No. 10 Storage of lubricating oils;
 - (e) No. ____ Unheated storage of VOC with an initial boiling point of 300 °F (
 - (f) No. 2 Storage of Numbers 1, 2, 4, 5, and 6 fuel oil and aviation jet engine fuel,
 - (g) No. ____ Storage of motor vehicle gasoline and having individual tank capacities of 2,000 gallons (7.6 cubic meters) or less;
 - (h) No. ____ The storage of VOC normally used as solvents, diluents, thinners, inks, colorants, paints, lacquers, enamels, varnishes, liquid resins, or other surface coatings and having individual capacities of 2,000 gallons (7.6 cubic meters) or less;
- (17) ____ Gaseous fuel-fired or electrically heated furnaces for heat treating glass or metals, the use of which does not involve molten materials;
- (18) Crucible furnaces, pot furnaces, or induction furnaces, with individual capacities of 1,000 pounds (454 kilograms) or less each, in which no sweating or distilling is conducted, or any fluxing is conducted using chloride, fluoride,

**MARYLAND DEPARTMENT OF THE ENVIRONMENT
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RENEWAL TITLE V APPLICATION INSIGNIFICANT ACTIVITIES LIST**

or ammonium compounds, and from which only the following metals are poured or in which only the following metals are held in a molten state:

- (a) ____ Aluminum or any alloy containing over 50 percent aluminum, if no gaseous chloride compounds, chlorine, aluminum chloride, or aluminum fluoride is used;
- (b) ____ Magnesium or any alloy containing over 50 percent magnesium;
- (c) ____ Lead or any alloy containing over 50 percent lead;
- (d) ____ Tin or any alloy containing over 50 percent tin;
- (e) ____ Zinc or any alloy containing over 50 percent zinc;
- (f) ____ Copper;
- (g) ____ Precious metals;
- (19) ____ Charbroilers and pit barbecues as defined in COMAR 26.11.18.01 with a total cooking area of 5 square feet (0.46 square meter) or less;
- (20) ____ First aid and emergency medical care provided at the facility, including related activities such as sterilization and medicine preparation used in support of a manufacturing or production process;
- (21) ____ Certain recreational equipment and activities, such as fireplaces, barbecue pits and cookers, fireworks displays, and kerosene fuel use;
- (22) ____ Potable water treatment equipment, not including air stripping equipment;
- (23) ____ Firing and testing of military weapons and explosives;
- (24) ____ Emissions resulting from the use of explosives for blasting at quarrying operations and from the required disposal of boxes used to ship the explosive;
- (25) ____ Comfort air conditioning subject to requirements of Title VI of the Clean Air Act;
- (26) ____ Grain, metal, or mineral extrusion presses;
- (27) ____ Breweries with an annual beer production less than 60,000 barrels;

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(28)____ Natural draft hoods or natural draft ventilators that exhaust air pollutants into the ambient air from manufacturing/industrial or commercial processes;

(29)____ Laboratory fume hoods and vents;

(30)No. ____ Sheet-fed letter or lithographic printing press(es) with a cylinder width of less than 18 inches;

For the following, attach additional pages as necessary:

(31) any other emissions unit, not listed in this section, with a potential to emit less than the “de minimus” levels listed in COMAR 26.11.02.10X (list and describe units):

No. ____ _____

No. ____ _____

No. ____ _____

No. ____ _____

No. ____ _____

(32) any other emissions unit at the facility which is not subject to an applicable requirement of the Clean Air Act (list and describe):

No. ____ _____

No. ____ _____

No. ____ _____

ATTACHMENT F: APPLICATION COMPLETENESS CHECKLIST

VI .Application Completeness Checklist

The purpose of this part is to list the information required to achieve a Part 70 application shield.

Cover Page

- (x) Name and address of owner or operator, including telephone number.
- (x) Name and address of facility, including the plant manager's name and telephone number.
- (x) A 24-hour emergency telephone number for air pollution matters.

Section 1 CERTIFICATION STATEMENTS

- (x) The certification statement completed and signed by a responsible official.

Section 2 FACILITY DESCRIPTION SUMMARY

- (x) A brief description of each of the source's process(es), including all applicable SIC codes and end products.
- ~~(x)~~ Flow diagrams indicating all emissions units, emission points, and control devices.
- ~~(x)~~ A plot plan of the entire facility.
- (x) Emission Certification Report.
- (x) General Emissions Information.

Section 3 EMISSIONS UNIT DESCRIPTIONS –

This section must be completed for each emissions unit.

Part A

- (x) Emissions unit number.
- (x) Detailed description of unit, including all emission points.
- (x) Federally enforceable limit(s) on the operating schedule.

- (x) Fuel consumption information for any emissions unit that consumes fuel including the type of fuel, percent sulfur, and annual usage of fuel.

Part B

- (x) A citation and description of each federally enforceable requirement, including all emission standards, for each emissions unit.
- (x) A statement of compliance demonstration techniques for each requirement, including a description of monitoring, record keeping, reporting requirements, and test methods.
- (x) The frequency of submittal of the compliance demonstration during the permit term.

Part C

- ~~(N)~~ Emissions unit number.
- ~~(N)~~ Permit to construct number.
- ~~(N)~~ Emissions point number(s).
- ~~(N)~~ Date(s) the permit to construct was issued.
- ~~(N)~~ Condition number(s) as indicated on the permit to construct.
- ~~(N)~~ Description of the permit condition(s) and the reason(s) why they are believed to be obsolete, extraneous, or insignificant.

Part D

- ~~(N)~~ Description of all alternate operating scenarios that apply to an emissions unit.
- ~~(N)~~ Number assigned to each scenario.
- ~~(N)~~ Emissions unit number.
- ~~(N)~~ Description of the operating parameters for the emissions unit and other information which describes the how the operation of the unit will change under the different scenario.

Part E

- ~~(N)~~ A citation and description of each federally enforceable requirement triggered by an operating scenario, including all emission standards, for each emissions unit.
- ~~(N)~~ As an attachment, the date and results of the most recent compliance demonstration for each emission standard and/or emissions certification report with relevant supporting documentation.
- ~~(N)~~ A statement of compliance demonstration techniques for each requirement, including a description of monitoring, record keeping, reporting requirements, and test methods.
- ~~(N)~~ The frequency of submittal of the compliance demonstration during the permit term.

Section 4 CONTROL EQUIPMENT

- ~~(N)~~ The type of each piece of air pollution control equipment
- ~~(N)~~ The capture and control efficiencies of the control equipment.

Section 5 SUMMARY SHEET OF POTENTIAL EMISSIONS

- (X) Quantity of potential emissions for criteria pollutants and HAPs emitted in tons per year for each emissions unit.
- ~~(N)~~ Fugitive emission estimations for the entire facility for criteria pollutants and HAPs emitted in tons per year.
- ~~(N)~~ Basis for all emission calculations.

Section 6 AN EXPLANATION OF PROPOSED EXEMPTIONS FROM OTHERWISE APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS

- ~~(N)~~ An explanation of the proposed exemption.

Section 7 COMPLIANCE SCHEDULE FOR NONCOMPLYING EMISSIONS UNITS

- (NA) Identification of emissions unit(s) not in compliance, including the requirement being violated and the effective compliance date.
- (NA) Detailed description of methods to be used to achieve compliance.
- (NA) A schedule of remedial measures, including an enforceable sequence of actions with milestones.

Attachment

- (x) Checklist of Insignificant Activities
- (NA) CAM Plan (If Applicable)