

January 6, 2023

Dylan Ramey
Niagara Bottling, LLC
1440 Bridgegate Drive
Diamond Bar, CA 95215

Re: Notice of Preliminary Decision - Authority to Construct
Facility Number: N-10207
Project Number: N-1223922

Dear Mr. Ramey:

Enclosed for your review and comment is the District's analysis of Niagara Bottling, LLC's application for an Authority to Construct for the four 40 MMBtu/hr natural gas-fired boilers served by SCR systems, at 4800 Logistics Drive in Stockton.

The notice of preliminary decision for this project has been posted on the District's website (www.valleyair.org). After addressing all comments made during the 30-day public notice period, the District intends to issue the Authority to Construct. Please submit your written comments on this project within the 30-day public comment period, as specified in the enclosed public notice.

Thank you for your cooperation in this matter. If you have any questions regarding this matter, please contact Mr. Kevin Perez of Permit Services at (209) 557-6458.

Sincerely,



Brian Clements
Director of Permit Services

BC:kp

Enclosures

cc: Courtney Graham, CARB (w/ enclosure) via email

Samir Sheikh
Executive Director/Air Pollution Control Officer

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San Joaquin Valley Air Pollution Control District

Authority to Construct Application Review

Four 40.0 MMBtu/hr Natural Gas-Fired Boilers at Water and Beverage Bottling Plant

Facility Name: Niagara Bottling, LLC
Mailing Address: 1440 Bridgegate Drive
Diamond Bar, CA 91765
Contact Person: Dylan Ramey
Telephone: (814) 504-9790
E-Mail: dramey@niagarawater.com
Application #s: N-10207-1-0, N-10207-2-0, N-10207-3-0, and N-10207-4-0
Project #: N-1223922
Deemed Complete: September 15, 2022

Date: January 5, 2023
Engineer: Kevin Perez
Lead Engineer: James Harader

I. Proposal

Niagara Bottling, LLC has requested Authority to Construct (ATC) permits for the installation of four 40.0 MMBtu/hr natural gas-fired boilers each equipped with a Selective Catalytic Reduction (SCR) system to control NO_x emissions in the exhaust. The boilers will provide heat in the form of steam for the bottling operations conducted at this facility. The draft ATCs are included in Appendix A.

II. Applicable Rules

Rule 2201	New and Modified Stationary Source Review Rule (8/15/19)
Rule 2410	Prevention of Significant Deterioration (6/16/11)
Rule 2520	Federally Mandated Operating Permits (8/15/19)
Rule 4001	New Source Performance Standards (4/14/99)
Rule 4002	National Emissions Standards for Hazardous Air Pollutants (5/20/04)
Rule 4101	Visible Emissions (2/17/05)
Rule 4102	Nuisance (12/17/92)
Rule 4201	Particulate Matter Concentration (12/17/92)
Rule 4301	Fuel Burning Equipment (12/17/92)
Rule 4305	Boilers, Steam Generators, and Process Heaters – Phase 2 (8/21/03)
Rule 4306	Boilers, Steam Generators, and Process Heaters – Phase 3 (12/17/20)
Rule 4320	Advanced Emission Reduction Options for Boilers, Steam Generators, and Process Heaters Greater than 5.0 MMBtu/hr (12/17/20)
Rule 4801	Sulfur Compounds (12/17/92)
CH&SC 41700	Health Risk Assessment
CH&SC 42301.6	School Notice

Public Resources Code 21000-21177: California Environmental Quality Act (CEQA)
California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000-15387: CEQA
Guidelines

III. Project Location

The facility is located at 1440 Bridgegate Drive in Diamond Bar, CA 91765. The equipment is not located within 1,000 feet of the outer boundary of a K-12 school. Therefore, the public notification requirement of California Health and Safety Code 42301.6 is not applicable to this project.

IV. Process Description

Niagara Bottling, LLC is constructing a new water and beverage bottling plant in Stockton. The facility will rely on the four natural gas-fired boilers to provide heat for the sterilization process at the bottling plant. Water and beverage containers are sterilized to increase the shelf-life of the container products.

V. Equipment Listing

N-10207-1-0, N-10207-2-0, N-10207-3-0, and N-10207-4-0: 40 MMBTU/HR HURST BOILER AND WELDING COMPANY MODEL SERIES EURO 1000 NATURAL GAS-FIRED BOILER EQUIPPED WITH A WEISHAAPT MODEL WKMONO-G 80 LOW-NOX BURNER AND AN SCR SYSTEM

N-10207-1-0, N-10207-2-0, N-10207-3-0, and N-10207-4-0: 40 MMBTU/HR HURST BOILER AND WELDING COMPANY MODEL SERIES EURO 1000 NATURAL GAS-FIRED BOILER EQUIPPED WITH A WEISHAAPT MODEL WKMONO-G 80 LOW-NOX BURNER AND AN SCR SYSTEM

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VI. Emission Control Technology Evaluation

Emissions from natural gas-fired boilers include NO_x, CO, VOC, PM₁₀, and SO_x.

NO_x is the major pollutant of concern when burning natural gas. NO_x formation is either due to thermal fixation of atmospheric nitrogen in the combustion air (thermal NO_x) or due to conversion of chemically bound nitrogen in the fuel (fuel NO_x). Due to the low fuel nitrogen content of natural

gas, nearly all NO_x emissions are thermal NO_x. Formation of thermal NO_x is affected by four furnace zone factors: (1) nitrogen concentration, (2) oxygen concentration, (3) peak temperature, and (4) time of exposure at peak temperature.

Each boiler will be equipped with a Selective Catalytic Reduction (SCR) system that reduces NO_x emissions by the injection of a reagent, ammonia in this case, into the exhaust stream prior to the exhaust passing through an activated catalyst bed where NO_x reacts with the ammonia to form diatomic nitrogen and water.

VII. General Calculations

A. Assumptions

- The heating value of natural gas is 1,000 BTU/scf.
- The f-factor of natural gas is 8,578 dscf/MMbtu
- Equipment operates 24 hours per day and 8,760 hours per year
- Total Combined Start-up and shutdown time is a maximum of 2 hours per day for the each boiler (applicant proposed 0.25 hours per startup and 0.25 hours per shutdown)

B. Emission Factors

The emission factors for NO_x, CO and VOC are proposed by the applicant. The SO_x and PM₁₀ emission factors are both based on emission factors that are generally accepted by the District.

Emission Factors for 40 MMBtu/hr Boilers			
Pollutant	EF		Source
	ppmvd @ 3% O ₂	lb/MMBtu	
NO _x	2.5 (Steady State) 30 (Startup/shutdown)	0.003 (Steady State) 0.036 (Startup/shutdown)	Application
SO _x	-	0.00285	APR-1720
PM ₁₀	-	0.003	District Practice
CO	50	0.037	Application
VOC	-	0.0055	AP-42 Table 1.4-2
NH ₃	10	0.0045	Generally Accepted

C. Calculations

1. Pre-Project Potential to Emit (PE1)

N-10207-1-0, -2-0, -3-0, and -4-0

Since this is a new emissions unit, PE1 = 0 for all pollutants.

2. Post-Project Potential to Emit (PE2)

N-10207-1-0, -2-0, -3-0, and -4-0

The potential to emit from each of the identical 40 MMBtu/hr boilers is calculated as follows and summarized in the subsequent table:

For NO_x emissions:

$$PE1_{Daily} = (\text{Heat Input}) \times \{ (EF)_{Steady\ State} \times (22\ \text{hour/day}) + (EF)_{transient} \times (2\ \text{hour/day}) \}$$

$$PE1_{Annual} = (\text{Daily PE1}) \times (365\ \text{day/year})$$

For all other pollutants:

$$PE1_{Daily} = (\text{Heat Input Rating}) \times (EF) \times (24\ \text{hour/day})$$

$$PE1_{Annual} = (\text{Daily PE1}) \times (365\ \text{day/year})$$

40 MMBtu Boiler PE2				
Pollutant	EF (lb/MMBtu)	Heat Input Rating (lb/year)	Daily (lb/day)	Annual (lb/year)
NO _x	0.003 (Steady State) 0.036 (transient)	40.0	5.5	2,008
SO _x	0.00285		2.7	986
PM ₁₀	0.003		2.9	1,059
CO	0.037		35.5	12,958
VOC	0.0055		5.3	1,935
NH ₃	0.0045		4.3	1,570

3. Pre-Project Stationary Source Potential to Emit (SSPE1)

Pursuant to District Rule 2201, the SSPE1 is the Potential to Emit (PE) from all units with valid Authorities to Construct (ATC) or Permits to Operate (PTO) at the Stationary Source and the quantity of Emission Reduction Credits (ERC) which have been banked since September 19, 1991 for Actual Emissions Reductions (AER) that have occurred at the source, and which have not been used on-site.

Since this is a new facility, there are no valid ATCs, PTOs, or ERCs at the Stationary Source; therefore, the SSPE1 is equal to zero.

4. Post-Project Stationary Source Potential to Emit (SSPE2)

Pursuant to District Rule 2201, the SSPE2 is the PE from all units with valid ATCs or PTOs at the Stationary Source and the quantity of ERCs which have been banked since September 19, 1991 for AER that have occurred at the source, and which have not been used on-site.

SSPE2 (lb/year)						
Permit Unit	NO _x	SO _x	PM ₁₀	CO	VOC	NH ₃
N-10207-1-0	2,008	986	1,059	12,958	1,935	1,570
N-10207-2-0	2,008	986	1,059	12,958	1,935	1,570
N-10207-3-0	2,008	986	1,059	12,958	1,935	1,570
N-10207-4-0	2,008	986	1,059	12,958	1,935	1,570
SSPE2	8,032	3,944	4,236	51,832	7,740	6,280

5. Major Source Determination

Rule 2201 Major Source Determination:

Pursuant to District Rule 2201, a Major Source is a stationary source with a SSPE2 equal to or exceeding one or more of the following threshold values. For the purposes of determining major source status the following shall not be included:

- any ERCs associated with the stationary source
- Emissions from non-road IC engines (i.e. IC engines at a particular site at the facility for less than 12 months), pursuant to the Clean Air Act, Title 3, Section 302, US Codes 7602(j) and (z)
- Fugitive emissions, except for the specific source categories specified in 40 CFR 70.2

Rule 2201 Major Source Determination (lb/year)						
	NO _x	SO _x	PM ₁₀	PM _{2.5}	CO	VOC
SSPE1	0	0	0	0	0	0
SSPE2	8,032	3,944	4,236	4,236	51,832	7,740
Major Source Threshold	20,000	140,000	140,000	140,000	200,000	20,000
Major Source?	No	No	No	No	No	No

Note: PM_{2.5} assumed to be equal to PM₁₀

As seen in the table above, the facility is not an existing Major Source and is not becoming a Major Source as a result of this project.

Rule 2410 Major Source Determination:

The facility or the equipment evaluated under this project is not listed as one of the categories specified in 40 CFR 52.21 (b)(1)(iii). Therefore the PSD Major Source threshold is 250 tpy for any regulated NSR pollutant.

PSD Major Source Determination (tons/year)						
	NO ₂	VOC	SO ₂	CO	PM	PM ₁₀
Estimated Facility PE before Project Increase	0	0	0	0	0	0
PSD Major Source Thresholds	250	250	250	250	250	250
PSD Major Source?	No	No	No	No	No	No

As shown above, the facility is an existing PSD major source for at least one pollutant.

6. Baseline Emissions (BE)

The BE calculation (in lb/year) is performed pollutant-by-pollutant for each unit within the project to calculate the QNEC, and if applicable, to determine the amount of offsets required.

Pursuant to District Rule 2201, BE = PE1 for:

- Any unit located at a non-Major Source,
- Any Highly-Utilized Emissions Unit, located at a Major Source,
- Any Fully-Offset Emissions Unit, located at a Major Source, or
- Any Clean Emissions Unit, located at a Major Source.

otherwise,

BE = Historic Actual Emissions (HAE), calculated pursuant to District Rule 2201.

As shown in Section VII.C.5 above, the facility is not a Major Source for any pollutant.

Therefore BE = PE1.

N-10207-1-0, N-10207-2-0, N-10207-3-0, and N-10207-4-0:

Since these are new emissions units, BE = PE1 = 0 for all pollutants.

7. SB 288 Major Modification

40 CFR Part 51.165 defines a SB 288 Major Modification as any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the Act.

Per Section VII.C.5, this facility is not a major source for any of the pollutants addressed in this project. Therefore, this project does not constitute an SB 288 major modification and no further discussion is required.

8. Federal Major Modification

District Rule 2201 states that a Federal Major Modification is the same as a “Major Modification” as defined in 40 CFR 51.165 and part D of Title I of the CAA.

As defined in 40 CFR 51.165, Section (a)(1)(v) and part D of Title I of the CAA, a Federal Major Modification is any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the Act. The significant net emission increase threshold for each criteria pollutant is included in Rule 2201.

Per Section VII.C.5, this facility is not a Major Source for any pollutants, this project does not constitute a Federal Major Modification and no further discussion is required.

9. Rule 2410 – Prevention of Significant Deterioration (PSD) Applicability Determination

Rule 2410 applies to any pollutant regulated under the Clean Air Act, except those for which the District has been classified nonattainment. The pollutants which must be addressed in the PSD applicability determination for sources located in the SJV and which are emitted in this project are: (See 52.21 (b) (23) definition of significant)

- NO2 (as a primary pollutant)
- SO2 (as a primary pollutant)
- CO
- PM
- PM10
- VOC

The facility or the equipment evaluated under this project is not listed as one of the categories specified in 40 CFR 52.21 (b)(1)(i). The PSD Major Source threshold is 250 tpy for any regulated NSR pollutant.

PSD Major Source Determination: Potential to Emit (tons/year)						
	NO₂	VOC	SO₂	CO	PM	PM₁₀
Total PE from New and Modified Units	4.0	3.9	2.0	25.9	2.1	2.1
PSD Major Source threshold	250	250	250	250	250	250

New PSD Major Source?	No	No	No	No	No	No
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As shown in the table above, the potential to emit for the project, by itself, does not exceed any PSD major source threshold. Therefore Rule 2410 is not applicable and no further analysis is required.

10. Quarterly Net Emissions Change (QNEC)

The QNEC is calculated solely to establish emissions that are used to complete the District’s PAS emissions profile screen. Detailed QNEC calculations are included in Appendix E.

VIII. Compliance Determination

Rule 2201 New and Modified Stationary Source Review Rule

A. Best Available Control Technology (BACT)

1. BACT Applicability

Pursuant to District Rule 2201, Section 4.1, BACT requirements are triggered on a pollutant-by-pollutant basis and on an emissions unit-by-emissions unit basis. Unless specifically exempted by Rule 2201, BACT shall be required for the following actions*:

- a. Any new emissions unit with a potential to emit exceeding two pounds per day,
- b. The relocation from one Stationary Source to another of an existing emissions unit with a potential to emit exceeding two pounds per day,
- c. Modifications to an existing emissions unit with a valid Permit to Operate resulting in an Adjusted Increase in Permitted Emissions (AIPE) exceeding two pounds per day, and/or
- d. Any new or modified emissions unit, in a stationary source project, which results in an SB 288 Major Modification or a Federal Major Modification, as defined by the rule.

*Except for CO emissions from a new or modified emissions unit at a Stationary Source with an SSPE2 of less than 200,000 pounds per year of CO.

a. New emissions units – PE > 2 lb/day

N-10207-1-0, ‘-2-0, -3-0, and ‘-4-0

Daily potential emissions for each pollutant from the boilers are summarized in the following table:

Daily PE for Boilers	
Pollutant	Daily Emissions (lb/day)
NO _x	5.5

SO _x	2.7
PM ₁₀	2.9
CO	35.5
VOC	5.3
NH ₃	4.3

As shown in the table, daily PE exceeds 2.0 pounds per day for NO_x, SO_x, PM₁₀, CO, and VOC. BACT is triggered for NO_x, SO_x, PM₁₀, and VOC emissions. BACT is not triggered for CO emissions since SSPE2 for CO is less than 200,000 lb/year.

The PE2 is greater than 2.0 lb/day for ammonia (NH₃) emissions from the SCR systems. The District practice is to not evaluate BACT for add-on emission control equipment for boilers. Furthermore, the ammonia emissions were not found to pose a significant health risk to the nearby public, so BACT for toxic emissions (T-BACT) is not required.

b. Relocation of emissions units – PE > 2 lb/day

As discussed in Section I above, there are no emissions units being relocated from one stationary source to another; therefore BACT is not triggered.

c. Modification of emissions units – AIPE > 2 lb/day

As discussed in Section I above, there are no modified emissions units associated with this project. Therefore BACT is not triggered.

d. SB 288/Federal Major Modification

As discussed in Sections VII.C.7 and VII.C.8 above, this project does not constitute an SB 288 and/or Federal Major Modification for any pollutant. Therefore BACT is not triggered for any pollutant.

2. BACT Guideline

BACT Guideline 1.1.2, applies to natural gas or propane fired boilers and steam generators with a heat input rate greater than 20 MMBtu/hr. (See Appendix B)

3. Top-Down BACT Analysis

Per Permit Services Policies and Procedures for BACT, a Top-Down BACT analysis shall be performed as a part of the application review for each application subject to the BACT requirements pursuant to the District's NSR Rule.

Pursuant to the attached Top-Down BACT Analysis (see Appendix C), BACT has been satisfied with the following:

NO_x: 2.5 ppmvd NO_x @ 3% O₂ (0.003 lb/MMBtu)
 SO_x: PUC quality natural gas or propane with LPG backup
 PM₁₀: PUC quality natural gas or propane with LPG backup
 VOC: PUC quality natural gas or propane with LPG backup

B. Offsets

1. Offset Applicability

Pursuant to District Rule 2201, Section 4.5, offset requirements shall be triggered on a pollutant by pollutant basis and shall be required if the SSPE2 equals or exceeds the offset threshold levels in Table 4-1 of Rule 2201.

The SSPE2 is compared to the offset thresholds in the following table.

Offset Determination (lb/year)					
	NO _x	SO _x	PM ₁₀	CO	VOC
SSPE2	8,032	3,944	4,236	51,832	7,740
Offset Thresholds	20,000	54,750	29,200	200,000	20,000
Offsets Triggered?	No	No	No	No	No

2. Quantity of District Offsets Required

As discussed above, the SSPE2 is not greater than the offset thresholds for all pollutants, therefore District offsets are not triggered. In addition, as demonstrated above, this project does not trigger Federal Major Modification or New Major Source requirements. In conclusion, offsets will not be required for this project and no further discussion is required.

C. Public Notification

1. Applicability

Pursuant to District Rule 2201, Section 5.4, public noticing is required for:

- a. New Major Sources, Federal Major Modifications, and SB 288 Major Modifications,
- b. Any new emissions unit with a Potential to Emit greater than 100 pounds during any one day for any one pollutant,
- c. Any project which results in the offset thresholds being surpassed,
- d. Any project with an SSPE2 of greater than 20,000 lb/year for any pollutant, and/or
- e. Any project which results in a Title V significant permit modification

a. New Major Sources, Federal Major Modifications, and SB 288 Major Modifications

As shown in Section VII.C.5 above, the SSPE2 of this new facility is not greater than the Major Source threshold for any pollutant. Therefore, this new facility is not a New Major Source and public noticing for this project for New Major Source, Federal Major Modification, or SB 288 Major Modification purposes is not required.

b. PE > 100 lb/day

Applications which include a new emissions unit with a PE greater than 100 pounds during any one day for any pollutant will trigger public noticing requirements. As seen in Section VII.C.2 above, this project does not include a new emissions unit which has daily emissions greater than 100 lb/day for any pollutant, therefore public noticing for PE > 100 lb/day purposes is not required.

c. Offset Threshold

Public notification is required if the pre-project Stationary Source Potential to Emit (SSPE1) is increased to a level exceeding the offset threshold levels. The following table compares the SSPE1 with the SSPE2 in order to determine if any offset thresholds have been surpassed with this project.

Offset Thresholds				
Pollutant	SSPE1 (lb/year)	SSPE2 (lb/year)	Offset Threshold	Public Notice Required?
NO _x	0	8,032	20,000 lb/year	No
SO _x	0	3,944	54,750 lb/year	No
PM ₁₀	0	4,236	29,200 lb/year	No
CO	0	51,832	200,000 lb/year	No
VOC	0	7,740	20,000 lb/year	No

As demonstrated above, there were no thresholds surpassed with this project; therefore public noticing is not required for offset purposes.

d. SSIPE > 20,000 lb/year

Public notification is required for any permitting action that results in a SSIPE of more than 20,000 lb/year of any affected pollutant. According to District policy, the SSIPE = SSPE2 – SSPE1. The SSIPE is compared to the SSIPE Public Notice thresholds in the following table.

SSIPE Public Notice Thresholds					
Pollutant	SSPE2 (lb/year)	SSPE1 (lb/year)	SSIPE (lb/year)	SSIPE Public Notice Threshold	Public Notice Required?
NO _x	8,032	0	8,032	20,000 lb/year	No
SO _x	3,944	0	3,944	20,000 lb/year	No
PM ₁₀	4,236	0	4,236	20,000 lb/year	No
CO	51,832	0	51,832	20,000 lb/year	Yes
VOC	7,740	0	7,740	20,000 lb/year	No
NH ₃	6,280	0	6,280	20,000 lb/year	No

As demonstrated above, the SSIPE for CO were greater than 20,000 lb/year; therefore public noticing for SSIPE purposes is required.

e. Title V Significant Permit Modification

Since this facility does not have a Title V operating permit, this change is not a Title V significant Modification, and therefore public noticing is not required.

2. Public Notice Action

As discussed above, public noticing is required for this project for SSIPE in excess of 20,000 lb/year for CO emissions. Therefore, public notice documents will be submitted to the California Air Resources Board (CARB) and a public notice will be electronically published on the District’s website prior to the issuance of the ATC for this equipment.

D. Daily Emission Limits (DELs)

DELs and other enforceable conditions are required by Rule 2201 to restrict a unit’s maximum daily emissions, to a level at or below the emissions associated with the maximum design capacity. The DEL must be contained in the latest ATC and contained in or enforced by the latest PTO and enforceable, in a practicable manner, on a daily basis. DELs are also required to enforce the applicability of BACT. The following DELs will be included on each permit:

Proposed Rule 2201 (DEL) Conditions:

Startup/shutdown

- During start-up or shutdown, the emissions control system shall be in operation, and emissions shall be minimized insofar as technologically possible. [District Rule 2201, 4305, 4306, and 4320]

- The total combined duration of all startup and shutdown events shall not exceed 2.0 hours on any given day. [District Rules 2201, 4306, and 4320]
- During startup and shutdown, NO_x emissions shall not exceed 30 ppmvd @ 3% O₂ or 0.036 lb/MMBtu. [District Rule 2201]

Steady state:

- Except during startup or shutdown, emissions from this unit shall not exceed any of the following limits: 2.5 ppmvd NO_x @ 3% O₂ or 0.003 lb-NO_x/MMBtu. [District Rules 2201, 4306, and 4320]
- Emissions from this unit shall not exceed any of the following limits: 0.00285 lb-SO_x/MMBtu; 0.003 lb-PM₁₀/MMBtu; 50 ppmvd CO @ 3% O₂ or 0.037 lb-CO/MMBtu; or 0.0055 lb-VOC/MMBtu. [District Rules 2201, 4306, and 4320]
- NH₃ emissions from the SCR system shall not exceed 10 ppmvd @ 3% O₂. [District Rule 2201]
- This unit shall only be fired on PUC-quality natural gas. [District Rules 2201 and 4320]

E. Compliance Assurance

1. Source Testing

District Rule 4320 requires NO_x and CO emission testing not less than once every 12 months. Gaseous fuel fired units demonstrating compliance on two consecutive compliance source tests may defer the following source test for up to thirty-six months. The District Source Test Policy (APR 1705) requires annual testing for all pollutants controlled by catalysts. The control equipment will include a SCR system and ammonia slip is an indicator of how well the SCR system is performing.

Therefore, source testing for NO_x, CO, and ammonia will be required within 60 days of initial operation and at least once every 12 months thereafter. Upon demonstrating compliance on two consecutive source tests, the following source test may be deferred for up to thirty-six months. Source testing for Rule 4320 also satisfies any source testing requirements for Rule 2201. No additional source testing is required.

2. Monitoring

District Rule 4320 requires the owner of any unit equipped with NO_x reduction technology shall either install and maintain continuous emissions monitoring equipment for NO_x, CO, and oxygen, as identified in Rule 1080 (Stack Monitoring), or install and maintain APCO-approved alternate monitoring plan. Since the boiler will be equipped with a low NO_x burner and a selective catalytic reduction system, this requirement applies.

The applicant proposed to utilize pre-approve alternate monitoring plan “A” (Periodic Monitoring NO_x, CO, and O₂ Emissions Concentrations) to meet the requirements of District Rule 4320. Monitoring for Rule 4320 also satisfies the monitoring requirements for Rule 2201. No additional monitoring is required.

3. Recordkeeping

Recordkeeping is required to demonstrate compliance with the offset, public notification and daily emission limit requirements of Rule 2201. The applicant will be required to keep records of all of the parameters that are required by Rule 4306 and 4320 alternate monitoring requirements. These requirements satisfy the recordkeeping requirements of Rule 2201.

4. Reporting

No reporting is required for Rule 2201 purposes.

F. Ambient Air Quality Analysis (AAQA)

Section 4.14 of District Rule 2201 requires that an AAQA be conducted for the purpose of determining whether a new or modified Stationary Source will cause or make worse a violation of an air quality standard. The District’s Technical Services Division conducted the required analysis. Refer to Appendix D of this document for the AAQA summary sheet.

The proposed location is in an attainment area for NO_x, CO, and SO_x. As shown by the AAQA summary sheet the proposed equipment will not cause a violation of an air quality standard for NO_x, CO, or SO_x.

The proposed location is in a non-attainment area for the state’s PM₁₀ as well as federal and state PM_{2.5} thresholds. As shown by the AAQA summary sheet the proposed equipment will not cause a violation of an air quality standard for PM₁₀ and PM_{2.5}.

Rule 2410 Prevention of Significant Deterioration

As shown in Section VII.C.9 above, this project does not result in a new PSD major source or PSD major modification. No further discussion is required.

Rule 2520 Federally Mandated Operating Permits

Since this facility’s potential emissions do not exceed any major source thresholds of Rule 2201 nor any other thresholds that would require a Federally Mandated Operating permit, this facility, Rule 2520 does not apply.

Rule 4001 New Source Performance Standards (NSPS)

40 CFR Part 60 Subpart Dc – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

This rule incorporates NSPS from Part 60, Chapter 1, Title 40, Code of Federal Regulations (CFR); and applies to all new sources of air pollution and modifications of existing sources of air pollution listed in 40 CFR Part 60. 40 CFR Part 60, Subpart Dc applies to Small Industrial-Commercial-Industrial Steam Generators between 10 MMBtu/hr and 100 MMBtu/hr. Subpart Dc has standards for SO_x and PM₁₀ emissions.

The proposed boiler is subject to the requirements of this subpart. The requirements are discussed below:

§60.42c – Standards for Sulfur Dioxide

This section outlines limits of sulfur dioxide emissions from some affected sources that combust coal or oil.

Because neither coal nor oil are combusted in the proposed boilers, the requirements of this section are not applicable.

60.43c – Standards for Particulate Matter

This section outlines limits of particulate matter emissions from some affected sources that combust any of the following fuels:

- Coal or mixtures of coal with other fuels,
- Oil or mixtures of oil with other fuels,
- Wood or mixtures of wood with other fuels (except coal)

The proposed boilers are not fired on coal, combust mixtures of coal with other fuels, combust wood, combust mixtures of wood with other fuels, or oil. Therefore, these units are not subject to the requirements of this section.

60.44c – Compliance and Performance Tests Methods and Procedures for Sulfur Dioxide

The boiler is not subject to the sulfur dioxide requirements of this subpart. Therefore, this section does not apply.

60.45c – Compliance and Performance Test Methods and Procedures for Particulate Matter

The boiler is not subject to the particulate matter requirements of this subpart. Therefore, this section does not apply.

60.46c – Emission Monitoring for Sulfur Dioxide

The boiler is not subject to the sulfur dioxide requirements of this subpart. Therefore, this section does not apply.

60.47c – Emission Monitoring for Particulate Matter

The boiler is not subject to the particulate matter requirements of this subpart. Therefore, this section does not apply.

60.48c – Reporting and Recordkeeping Requirements

Section 60.48c (a) states that the owner or operator of each affected facility shall submit notification of the date of construction or reconstruction, anticipated startup, and actual startup, as provided by §60.7 of this part. This notification shall include:

- (1) The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility.

The design heat input capacity and type of fuel combusted is listed in the equipment description of this unit. Therefore, no additional conditions are necessary.

- (2) If applicable, a copy of any federally enforceable requirement that limits the annual capacity factor for any fuel mixture of fuels under §60.42c or §40.43c.

This requirement is not applicable since the unit is not subject to §60.42c or §60.43c.

- (3) The annual capacity factor at which the owner or operator anticipates operating the affected facility based on all fuels fired and based on each individual fuel fired.

The facility is not proposing to establish an annual capacity factor for this unit.

- (4) Notification if an emerging technology will be used for controlling SO₂ emissions. The Administrator will examine the description of the control device and will determine whether the technology qualifies as an emerging technology. In making this determination, the Administrator may require the owner or operator of the affected facility to submit additional information concerning the control device. The affected facility is subject to the provisions of §60.42c(a) or (b)(1), unless and until this determination is made by the Administrator

This requirement is not applicable since the unit will not be equipped with emerging technology used to control SO₂ emissions.

Section 60.48c(g)(2), the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in §60.48c(f) to demonstrate compliance with the SO₂ standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month. The following conditions will be listed on each permit:

- A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of fuel combusted in the unit shall be installed, utilized and maintained. [District Rule 2201 and 40 CFR 60.48c(g)]
- The owner or operator shall maintain records of the amount of fuel combusted during each calendar month in this unit. [40 CFR 60.48c(g)]

Section 60.48c(i) states that all records required under this section shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record. The following condition will be listed in the permits:

- All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rules 1070, 2201, 4305, 4306 and 4320, and 40 CFR 60.48c(i)]

Compliance is expected with this regulation.

Rule 4002 National Emission Standards for Hazardous Air Pollutants (NESHAPs)

40 CFR Part 63 Subpart DDDDD National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters

This subpart is applicable to boilers and process heaters located at Major Sources of HAP emissions.

40 CFR 63.2 defines “major source” as any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit considering controls, in the aggregate, 10 tons per year or more of any hazardous air pollutant or 25 tons per year or more of any combination of hazardous air pollutants, unless the Administrator establishes a lesser quantity, or in the case of radionuclides, different criteria from those specified in this sentence.

The following HAP emission rates were calculated for the Health Risk Assessment (see Appendix D):

Pollutant	Emissions (lb/year)	Emissions (tons/year)
Acetaldehyde	4.36	0.002
Acrolein	3.78	0.002
Benzene	8.12	0.004
Ethyl Benzene	9.68	0.005
Formaldehyde	17.24	0.009
Hexane	6.44	0.003
Naphthalene	0.42	0.0002
Toluene	37.16	0.018
Xylenes	27.6	0.014
Total HAPs	114	0.05

As demonstrated in the table above, this facility is not a Major source of HAP emissions, as its HAP emissions are less than 10 tons/yr for single HAP and less than 25 tons/yr for the sum of all HAPs. Thus, the proposed unit is not subject to the requirements of this subpart

40 CFR Part 63 Subpart JJJJJ National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources

Pursuant to Section 63.1195(e) a gas-fired boiler, as defined in Subpart JJJJJ, is not subject to any requirement of this Subpart. Pursuant to the definition in the subpart, a gas-fired boiler includes any boiler that burns gaseous fuels not combined with any solid fuels and burns liquid fuel only during periods of gas curtailment, gas supply interruption, startups, or periodic testing on liquid fuel.

The boilers under this project meet the definition of a “gas-fired boiler” as the units are required to use natural gas fuel. Therefore, Subpart JJJJJJ requirements are not applicable.

Rule 4101 Visible Emissions

Rule 4101 states that no person shall discharge into the atmosphere emissions of any air contaminant aggregating more than 3 minutes in any hour which is as dark as or darker than Ringelmann 1 (or 20% opacity). The following condition will be included on each permit:

- {15} No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]

Rule 4102 Nuisance

Rule 4102 prohibits discharge of air contaminants which could cause injury, detriment, nuisance or annoyance to the public. Public nuisance conditions are not expected as a result of these operations, provided the equipment is well maintained. Therefore, compliance with this rule is expected.

California Health & Safety Code 41700 (Health Risk Assessment)

District Policy APR 1905 – *Risk Management Policy for Permitting New and Modified Sources* specifies that for an increase in emissions associated with a proposed new source or modification, the District perform an analysis to determine the possible impact to the nearest resident or worksite.

District policy APR 1905 also specifies that the increase in emissions associated with a proposed new source or modification of an existing source shall not result in an increase in cancer risk greater than the District’s significance level (20 in a million) and shall not result in acute and/or chronic risk indices greater than 1.

According to the Technical Services Memo for this project, the total facility prioritization score including this project was greater than one. Therefore, an HRA was required to determine the short-term acute and long-term chronic exposure from this project.

The resulting prioritization score, acute hazard index, chronic hazard index, and cancer risk for this project is shown below.

Health Risk Assessment Summary	
	Worst Case Potential
Prioritization Score	1.05
Cancer Risk	2.24E-07
Acute Hazard Index	0.00
Chronic Hazard Index	0.00
T-BACT Required?	No

Discussion of T-BACT

BACT for toxic emission control (T-BACT) is required if the cancer risk exceeds one in one million. As demonstrated above, T-BACT is not required for this project because the HRA indicates that the risk is not above the District’s thresholds for triggering T-BACT requirements; therefore, compliance with the District’s Risk Management Policy is expected.

In accordance with District policy APR 1905, no further analysis is required, and compliance with District Rule 4102 requirements is expected.

See Appendix D: Health Risk Assessment Summary

Rule 4201 Particulate Matter Concentration

Section 3.1 prohibits discharge of dust, fumes, or total particulate matter into the atmosphere from any single source operation in excess of 0.1 grain per dry standard cubic foot. The following calculation is identical for all four boilers.

F-factor for NG: 8,578 dscf/MMBtu at 60 °F
 PM₁₀ Emission Factor: 0.003 lb/MMBtu
 % of PM as PM₁₀: 100%
 % O₂ in Exhaust: 3%

$$\begin{aligned}
 \text{PM Conc.} &= \frac{0.003 \text{ lb-PM}}{\text{MMBtu}} \times \frac{7,000 \text{ gr}}{\text{lb-PM}} \\
 &= \frac{8,578 \text{ dscf}}{\text{MMBtu}} \times \frac{20.95}{20.95-3} \\
 &= 0.0021 \text{ gr-PM/scf}
 \end{aligned}$$

Because 0.0021 grain/dscf is less than 0.1 grain/dscf, compliance with this rule is expected.

Rule 4301 Fuel Burning Equipment

This rule applies to any fuel burning equipment except for air pollution control equipment which uses a combustion process to destroy air contaminants.

Section 5.0 outlines the following emission limits:

- Combustion contaminants (TSP) - Not to exceed 0.1 gr/dscf @ 12% CO₂ and 10 lb/hr
- SO_x emissions - Not to exceed 200 lb/hr
- NO_x emissions – Not to exceed 140 lb/hr

NO_x emissions = 1.44 lb/hr

SO_x emissions = 0.11 lb/hr

PM emissions = 0.12 lb/hr (combustion only)

$$\text{PM Conc. (gr/scf)} = \frac{(0.003 \text{ lb-PM/MMBtu}) \times (7,000 \text{ gr/lb})}{(1,024.2 \text{ dscf-CO}_2\text{/MMBtu}) \times (8.33)}$$

$$\text{PM Conc. (gr/dscf)} = 0.0025 \text{ gr/dscf}$$

Since potential emissions from the boilers are below the limits for each pollutant, compliance is expected with this rule.

Rule 4305 Boilers, Steam Generators, and Process Heaters – Phase 2

Since the emission limits of District Rule 4306 and all other requirements are equivalent or more stringent than District Rule 4305 requirements, compliance with District Rule 4306 requirements will satisfy requirements of District Rule 4305.

Rule 4306 Boilers, Steam Generators, and Process Heaters – Phase 3

This rule applies to any gaseous fuel or liquid fuel fired boiler, steam generator, or process heater with a total rated heat input greater than 5 million Btu per hour.

All four boilers addressed in this project are rated at a heat input greater than 5 million Btu per hour. Therefore, the boilers are subject to the requirements of this rule.

Section 5.1.1 limits NO_x and CO emissions to 7 ppmvd @ 3% O₂ and 400 ppmvd @ 3% O₂ respectively.

The applicant has proposed to achieve 2.5 ppmvd NO_x @ 3% O₂ (or less) and 50 ppmvd CO @ 3% O₂ (or less) for the boiler being permitted in this project. Because the proposed limits are below the rule limits, compliance is expected with this section.

Section 5.3 states that the NO_x and CO emission limits shall not apply to this unit during startup and shutdown period provided that the duration of each start-up or each shutdown is not greater than 2.0 hours, and the emission control system is utilized during these periods. An operator may submit a request to allow more than two hours for each startup or each shutdown provided the operator meets all of the conditions specified in sections 5.3.3.1 to 5.3.3.3.

The following conditions will be included on the permits:

- During start-up or shutdown, the emissions control system shall be in operation, and emissions shall be minimized insofar as technologically possible. [District Rule 2201, 4305, 4306, and 4320]
- The total combined duration of all startup and shutdown events shall not exceed 2.0 hours on any given day. [District Rules 2201, 4306, and 4320]

Section 5.4.1 requires the operator to install and maintain a non-resettable, totalizing mass or volumetric flow meter for the units, which simultaneously uses gaseous and liquid fuels and is subject to the requirements of Section 5.1. The applicant is proposing to use gaseous fuel only. Therefore, they are not required to install and maintain a fuel flow meter under this section.

Section 5.4.2 requires that the units subject to District Rule 4306, Section 5.1 emissions limits, shall either install and maintain Continuous Emission Monitoring (CEM) equipment for NO_x, CO and O₂, or install and maintain APCO-approved alternate monitoring. In order to satisfy the requirements of District Rule 4306, the applicant has proposed to use pre-approved alternate monitoring scheme "H" of District Policy SSP-1105, which requires periodic monitoring of NO_x, CO, NH₃ and O₂ exhaust emissions concentrations. The following conditions will be included in the permit:

- The permittee shall monitor and record the stack concentration of NO_x, CO, NH₃ and O₂ at least once during each month in which source testing is not performed. NO_x, CO and O₂ monitoring shall be conducted utilizing a portable analyzer that meets District specifications. NH₃ monitoring shall be conducted utilizing gas detection tubes (Draeger brand or District approved equivalent). Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless it has been performed within the last month. [District Rules 2201, 4305, 4306 and 4320]
- If either the NO_x, CO or NH₃ concentrations, as measured by the portable analyzer or the District approved ammonia monitoring equipment, exceed the permitted levels, the permittee shall return the emissions to compliant levels as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer or the ammonia monitoring equipment continue to show emission limit violations after 1 hour of operation following detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation that is subject to enforcement action has occurred. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 2201, 4305, 4306 and 4320]

- All NO_x, CO, O₂ and ammonia emission readings shall be taken with the unit operating at conditions representative of normal operation or under the conditions specified in the Permit to Operate. The NO_x, CO and O₂ analyzer as well as the NH₃ emission monitoring equipment shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Analyzer readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 2201, 4305, 4306 and 4320]
- Ammonia emissions readings shall be conducted at the same time the NO_x, CO and O₂ readings are taken. The readings shall be converted to ppmvd @ 3% O₂. [District Rules 2201, 4305 and 4306]
- The permittee shall maintain records of: (1) the date and time of NO_x, CO, NH₃ and O₂ measurements, (2) the O₂ concentration in percent by volume and the measured NO_x, CO and NH₃ concentrations corrected to 3% O₂, (3) make and model of the portable analyzer, (4) portable analyzer calibration records, (5) the method of determining the NH₃ emission concentration, and (6) a description of any corrective action taken to maintain the emissions at or below the acceptable levels. [District Rules 2201, 4305, 4306 and 4320]

Section 5.5.1 states the operator of any unit have the option of complying with either the applicable heat input (lb/MMBtu) emission limits or the concentration (ppmv) emission limit. The following condition will be included in the permit:

- The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306 and 4320]

Section 5.5.2 requires all emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0. The following condition will be included in the permit:

- All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 4306 and 4320]

Section 5.5.3 requires that all CEMS data shall be averaged over a period of 15-consecutive minutes to demonstrate compliance with the applicable emission limits in this rule. The proposed boiler emissions will not be measured using CEMS system; therefore, this section is not applicable.

Section 5.5.4 requires emissions monitoring pursuant to Sections 5.4.2, 5.4.2.1, and 6.3.1 using a portable NO_x analyzer as part of an APCO approved Alternate Emissions Monitoring System, emission readings shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15-consecutive-minute sample reading or by taking at least five readings evenly spaced out over the 15-consecutive-minute period. The following condition will be included in the permit:

- All NO_x, CO, O₂ and ammonia emission readings shall be taken with the unit operating at conditions representative of normal operation or under the conditions specified in the Permit to Operate. The NO_x, CO and O₂ analyzer as well as the NH₃ emission monitoring equipment shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Analyzer readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 2201, 4305, 4306 and 4320]

Section 5.5.5 requires that for emissions source testing performed pursuant to Section 6.3.1 for the purpose of determining compliance with an applicable standard or numerical limitation of this rule, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. The following condition will be included in each permit:

- For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 4306 and 4320]

Section 6.1 requires that the records required by Sections 6.1.1 through 6.1.3 shall be maintained for five calendar years and shall be made available to the APCO upon request. Failure to maintain records or information contained in the records that demonstrate noncompliance with the applicable requirements of this rule shall constitute a violation of this rule. The following condition will be included in each permit:

- All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rules 1070, 2201, 4305, 4306 and 4320, and 40 CFR 60.48c(i)]

Section 6.2 identifies the test methods for determining higher heating value of fuel, NO_x, CO, O₂, stack gas velocities, and stack gas moisture content. The following conditions will be included in each permit:

- NO_x emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305, 4306 and 4320]

- CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305, 4306 and 4320]
- Stack gas oxygen (O₂) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306 and 4320]

In addition, the ammonia slip is required to be measured using BAAQMD Method ST-1B. The following condition will be included in each permit:

- Source testing for ammonia slip shall be conducted utilizing BAAQMD Method ST-1B. [District Rule 2201]

Section 6.3.1 requires that this unit be tested to determine compliance with the applicable requirements of section 5.1 and 5.2.3 not less than once every 12 months. Units that demonstrate compliance on two consecutive 12-month source tests may defer the following 12-month source test for up to 36 months (no more than 30 days before or after the required 36-month source test date). During the 36-month source testing interval, the operator shall tune the unit in accordance with the provisions of Section 5.2.1, and shall monitor, on a monthly basis, the unit's operational characteristics recommended by the manufacturer to ensure compliance with the applicable emission limits specified in Sections 5.1 or 5.2.3. Tune-ups required by Sections 5.2.1 and 6.3.1 do not need to be performed for units that operate and maintain an APCO approved CEMS or an APCO approved Alternate Monitoring System where the applicable emission limits are periodically monitored.

NO_x, CO and O₂ concentrations will be measured on monthly basis using portable analyzer. Therefore, no periodic tune-ups are required. The following conditions will be included in the permit:

- Source testing to measure steady state NO_x, CO and NH₃ emissions shall be conducted within 60 days of initial startup. [District Rules 2201, 4305, 4306 and 4320]
- Source testing to measure NO_x, CO and NH₃ emissions during steady state operation shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 4306 and 4320]

Section 6.3.2 lists compliance testing procedure for units that represent a group of units. The applicant has not elected to pursue this option; therefore, group testing is not considered.

Section 6.4 discusses submitting an emission control plan (ECP). The permit application for the proposed boiler satisfies the requirements of the Emission Control Plan, as listed in Section 6.4 of District Rule 4306. No further discussion is necessary.

Section 7.0 outlines the compliance schedule for units subject to emission limits in Section 5.1 and operators that must submit an ECP.

The proposed boilers are expected to be operating in compliance with this rule after initial startup. Therefore, no further discussion is required.

Compliance is expected with this Rule.

Rule 4320 Advanced Emission Reduction Options for Boilers, Steam Generators, and Process Heaters Greater than 5.0 MMBtu/hr

This rule applies to any gaseous fuel or liquid fuel fired boiler, steam generator, or process heater with a total rated heat input greater than 5 million Btu per hour.

The heat input rate of each of the proposed boilers is greater than 5 MMBtu/hr. Therefore, these units are subject to the requirements of this rule.

Section 5.1 states that an operator of a unit(s) subject to this rule shall comply with all applicable requirements of the rule and one of the following, on a unit-by-unit basis:

- Operate the unit to comply with the emission limits specified in Sections 5.2 and 5.4; or
- Pay an annual emissions fee to the District as specified in Section 5.3 and comply with the control requirements specified in Section 5.4; or
- Comply with the applicable Low-use Unit requirements of Section 5.5.

The facility had chosen to comply with the emission limits specified in Section 5.2 and 5.4. The applicable limits are summarized below:

NO_x: 2.5 ppmvd @ 3% O₂

CO: 400 ppmvd @ 3% O₂

Particulate Matter: Use PUC-quality natural gas, commercial propane, butane, or LPG, or combination of such gases with fuel sulfur content of 5 grains/100 scf or less.

Note that these limits apply during normal source operation (excluding startup and shutdown period). The applicant has proposed the following limits during steady-state operation:

- Except during startup or shutdown, emissions from this unit shall not exceed any of the following limits: 2.5 ppmvd NO_x @ 3% O₂ or 0.003 lb-NO_x/MMBtu. [District Rules 2201, 4306, and 4320]
- Emissions from this unit shall not exceed any of the following limits: 0.00285 lb-SO_x/MMBtu; 0.003 lb-PM₁₀/MMBtu; 50 ppmvd CO @ 3% O₂ or 0.037 lb-CO/MMBtu; or 0.0055 lb-VOC/MMBtu. [District Rules 2201, 4306, and 4320]
- This unit shall only be fired on PUC-quality natural gas. [District Rules 2201 and 4320]

Therefore, compliance is expected with this section.

Section 5.6 states that the NO_x and CO emission limits shall not apply to this unit during start-up and shutdown period provided that the duration of each start-up or each shutdown is not greater than 2.0 hours, and the emission control system is utilized during these periods.

The following conditions will be included on the permits:

- During start-up or shutdown, the emissions control system shall be in operation, and emissions shall be minimized insofar as technologically possible. [District Rule 2201, 4305, 4306, and 4320]
- The total combined duration of all startup and shutdown events shall not exceed 2.0 hours on any given day. [District Rules 2201, 4306, and 4320]

Section 5.7 discusses monitoring provisions to comply with NO_x and CO limits. These provisions are similar to the provisions in Rule 4306 (discussed previously).

Section 5.7.6 requires the operator to provide annual fuel sulfur content analysis. The following conditions will satisfy the requirements of this section:

- Fuel sulfur content shall be determined using EPA Method 11 or Method 15. [District Rule 4320]
- {4356} Permittee shall determine sulfur content of combusted gas annually or shall demonstrate that the combusted gas is provided from a PUC or FERC regulated source. [District Rules 1081 and 4320]

Section 5.8 discusses compliance determination. The requirements in this section are similar to the requirements in Rule 4306 (discussed previously).

Section 6.0 – Administrative Requirements

Recordkeeping requirements of this Rule are similar to that of the Rule 4306. Please refer to section 6.0 of Rule 4306.

Section 7.0 – Compliance Schedule

This section refers to “Authority to Construct” and “Compliance Deadline” dates for existing units. The proposed units are new emission units and are expected to comply with the requirements of this rule.

Compliance is expected with this Rule.

Rule 4801 Sulfur Compounds

Section 3.1 states that a person shall not discharge into the atmosphere sulfur compounds, which would exist as a liquid or gas at standard conditions, exceeding a concentration of two-tenths (0.2) percent by volume calculated as sulfur dioxide (SO₂) at the point of discharge on a dry basis averaged over 15 consecutive minutes.

$$\frac{(2,000 \text{ ppmvd}) \left(8,578 \frac{\text{dscf}}{\text{MMBtu}} \right) \left(64 \frac{\text{lb-SO}_x}{\text{lb-mol}} \right)}{\left(379.5 \frac{\text{dscf}}{\text{lb-mol}} \right) (10^6)} \cong 2.9 \frac{\text{lb-SO}_x}{\text{MMBtu}}$$

Because the proposed SO_x emission factor for the boilers is less than 2.9 lb/MMBtu compliance is expected with this rule.

California Health & Safety Code 42301.6 (School Notice)

The District has verified that this site is not located within 1,000 feet of a school. Therefore, pursuant to California Health and Safety Code 42301.6, a school notice is not required.

California Environmental Quality Act (CEQA)

CEQA requires each public agency to adopt objectives, criteria, and specific procedures consistent with CEQA Statutes and the CEQA Guidelines for administering its responsibilities under CEQA, including the orderly evaluation of projects and preparation of environmental documents. The District adopted its *Environmental Review Guidelines* (ERG) in 2001. The basic purposes of CEQA are to:

- Inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities;
- Identify the ways that environmental damage can be avoided or significantly reduced;
- Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible; and
- Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

Greenhouse Gas (GHG) Significance Determination

It is determined that another agency has prepared an environmental review document for the project. The District is a Responsible Agency for the project because of its discretionary approval power over the project via its Permits Rule (Rule 2010) and New Source Review Rule (Rule 2201), (CEQA Guidelines §15381). As a Responsible Agency, the District is limited to mitigating or avoiding impacts for which it has statutory authority. The District does not have statutory authority for regulating greenhouse gas emissions. The District has determined that the applicant is responsible for implementing greenhouse gas mitigation measures, if any, imposed by the Lead Agency.

District CEQA Findings

The City of Stockton (City) is the public agency having principle responsibility for approving the Sanchez-Hoggan Annexation project. As such, the City served as the Lead Agency for the project, which covers this ATC project. On June 23, 2020, the City certified

the Environmental Impact Report (EIR) and adopted a Statement of Overriding Considerations (SOC).

Pursuant to CEQA Guidelines §15250, the District is a Responsible Agency for the ATC project via its Permits Rule (Rule 2010) and New Source Review Rule (Rule 2201), (CEQA Guidelines §15381). As a Responsible Agency, the District complies with CEQA by considering the SEIR prepared by the Lead Agency, and reaching its own conclusion on whether and how to approve the project involved (CEQA Guidelines §15096). The District has considered the EIR certified by the City and prepared findings pursuant to CEQA. As a single purpose agency, the District lacks the Lead Agency's broader scope of authority over the project and does not believe that it should overrule the decisions made by the Lead Agency. Accordingly, after considering the Lead Agency's EIR, the SOC, and the substantial evidence the Lead Agency relied on in adopting the SOC, the District finds that it had no basis on which to disagree with the SOC and evidence relied on therein. The District therefore adopts the Lead Agency's SOC by reference as its own.

Furthermore, the Districts engineering evaluation of the project (this document) demonstrates that the District would impose permit conditions requiring the applicant to meet BACT. Thus, the District concludes that through a combination of project design elements and permit conditions, project specific stationary source emissions will be reduced to less than significant levels.

Indemnification Agreement/Letter of Credit Determination

According to District Policy APR 2010 (CEQA Implementation Policy), when the District is the Lead or Responsible Agency for CEQA purposes, an indemnification agreement and/or a letter of credit may be required. The decision to require an indemnity agreement and/or a letter of credit is based on a case-by-case analysis of a particular project's potential for litigation risk, which in turn may be based on a project's potential to generate public concern, its potential for significant impacts, and the project proponent's ability to pay for the costs of litigation without a letter of credit, among other factors.

The criteria pollutant emissions and toxic air contaminant emissions associated with the proposed project are not significant, and there is minimal potential for public concern for this particular type of facility/operation. Therefore, an Indemnification Agreement and/or a Letter of Credit will not be required for this project in the absence of expressed public concern.

IX. Recommendation

Compliance with all applicable rules and regulations is expected. Pending a successful NSR Public Noticing period, issue ATCs N-10207-1-0, N-10207-2-0, N-10207-3-0, and N-10207-4-0 subject to the permit conditions on the attached draft ATC in Appendix A.

X. Billing Information

Annual Permit Fees			
Permit Number	Fee Schedule	Fee Description	Annual Fee
N-10207-1-0	3020-02-H	40 MMBtu/hr boiler	\$1,238
N-10207-2-0	3020-02-H	40 MMBtu/hr boiler	\$1,238
N-10207-3-0	3020-02-H	40 MMBtu/hr boiler	\$1,238
N-10207-4-0	3020-02-H	40 MMBtu/hr boiler	\$1,238

Appendices

- A: Draft ATC
- B: BACT Guideline
- C: BACT Analysis
- D: HRA Summary
- E: Quarterly Net Emissions Change

APPENDIX A
Draft ATCs

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
DRAFT

PERMIT NO: N-10207-1-0

LEGAL OWNER OR OPERATOR: NIAGARA BOTTLING, LLC

MAILING ADDRESS: 1440 BRIDGEGATE DR
DIAMOND BAR, CA 91765

LOCATION: 4800 LOGISTICS DRIVE
STOCKTON, CA 95215

EQUIPMENT DESCRIPTION:

40 MMBTU/HR HURST BOILER AND WELDING COMPANY MODEL SERIES EURO 1000 NATURAL GAS-FIRED BOILER EQUIPPED WITH A WEISHAUPT MODEL WKMONO-G 80 LOW-NOX BURNER AND AN SCR SYSTEM

CONDITIONS

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. {15} No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
3. {14} Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
4. {1407} All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201]
5. {4355} The unit shall only be fired on PUC-quality natural gas. [District Rules 2201 and 4320]
6. During start-up or shutdown, the emissions control system shall be in operation, and emissions shall be minimized insofar as technologically possible. [District Rules 2201, 4305, 4306, and 4320]
7. The total combined duration of all startup and shutdown events shall not exceed 2.0 hours on any given day. [District Rules 2201, 4306, and 4320]
8. During startup and shutdown, NOx emissions shall not exceed 30 ppmvd @ 3% O2 or 0.036 lb/MMBtu. [District Rule 2201]
9. Except during startup or shutdown, emissions from this unit shall not exceed any of the following limits: 2.5 ppmvd NOx @ 3% O2 or 0.003 lb-NOx/MMBtu. [District Rules 2201, 4306, and 4320]

CONDITIONS CONTINUE ON NEXT PAGE

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Samir Sheikh, Executive Director / APCO

Brian Clements, Director of Permit Services

N-10207-1-0: Jan 5 2023 2:04PM -- PEREZK : Joint Inspection NOT Required

10. Emissions from this unit shall not exceed any of the following limits: 0.00285 lb-SO_x/MMBtu; 0.003 lb-PM₁₀/MMBtu; 50 ppmvd CO @ 3% O₂ or 0.037 lb-CO/MMBtu; or 0.0055 lb-VOC/MMBtu. [District Rules 2201, 4306, and 4320]
11. {109} Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
12. {4350} The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306, and 4320]
13. Source testing to measure steady state NO_x, CO and NH₃ emissions shall be conducted within 60 days of initial startup. [District Rules 2201, 4305, 4306, and 4320]
14. Source testing to measure NO_x, CO and NH₃ emissions during steady state operation shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 4306, and 4320]
15. {4346} NO_x emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305, 4306, and 4320]
16. {4347} CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305, 4306, and 4320]
17. {4348} Stack gas oxygen (O₂) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306, and 4320]
18. Source testing for ammonia slip shall be conducted utilizing BAAQMD Method ST-1B. [District Rule 2201]
19. {4349} Fuel sulfur content shall be determined using EPA Method 11 or Method 15. [District Rule 4320]
20. {4351} All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4320. [District Rules 4305, 4306, and 4320]
21. {4352} For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 4306, and 4320]
22. {110} The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
23. A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of fuel combusted in the unit shall be installed, utilized and maintained. [District Rule 2201 and 40 CFR 60.48c(g)]
24. The permittee shall monitor and record the stack concentration of NO_x, CO, NH₃ and O₂ at least once during each month in which source testing is not performed. NO_x, CO and O₂ monitoring shall be conducted utilizing a portable analyzer that meets District specifications. NH₃ monitoring shall be conducted utilizing gas detection tubes (Draeger brand or District approved equivalent). Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless it has been performed within the last month. [District Rules 2201, 4305, 4306, and 4320]

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CONDITIONS CONTINUE ON NEXT PAGE

25. If either the NO_x, CO or NH₃ concentrations, as measured by the portable analyzer or the District approved ammonia monitoring equipment, exceed the permitted levels, the permittee shall return the emissions to compliant levels as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer or the ammonia monitoring equipment continue to show emission limit violations after 1 hour of operation following detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation that is subject to enforcement action has occurred. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 2201, 4305, 4306, and 4320]
26. All NO_x, CO, O₂ and ammonia emission readings shall be taken with the unit operating at conditions representative of normal operation or under the conditions specified in the Permit to Operate. The NO_x, CO and O₂ analyzer as well as the NH₃ emission monitoring equipment shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Analyzer readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 2201, 4305, 4306, and 4320]
27. Ammonia emissions readings shall be conducted at the same time the NO_x, CO and O₂ readings are taken. The readings shall be converted to ppmvd @ 3% O₂. [District Rules 2201, 4305 and 4306]
28. {4356} Permittee shall determine sulfur content of combusted gas annually or shall demonstrate that the combusted gas is provided from a PUC or FERC regulated source. [District Rules 1081 and 4320]
29. The permittee shall maintain records of: (1) the date and time of NO_x, CO, NH₃ and O₂ measurements, (2) the O₂ concentration in percent by volume and the measured NO_x, CO and NH₃ concentrations corrected to 3% O₂, (3) make and model of the portable analyzer, (4) portable analyzer calibration records, (5) the method of determining the NH₃ emission concentration, and (6) a description of any corrective action taken to maintain the emissions at or below the acceptable levels. [District Rules 2201, 4305, 4306, and 4320]
30. The permittee shall maintain records of the amount of fuel combusted during each calendar month in this unit. [40 CFR 60.48c(i)]
31. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rules 2201, 4305, 4306, and 4320, and 40 CFR 60.48c(i)]

DRAFT

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
DRAFT

PERMIT NO: N-10207-2-0

LEGAL OWNER OR OPERATOR: NIAGARA BOTTLING, LLC

MAILING ADDRESS: 1440 BRIDGEGATE DR
DIAMOND BAR, CA 91765

LOCATION: 4800 LOGISTICS DRIVE
STOCKTON, CA 95215

EQUIPMENT DESCRIPTION:

40 MMBTU/HR HURST BOILER AND WELDING COMPANY MODEL SERIES EURO 1000 NATURAL GAS-FIRED BOILER EQUIPPED WITH A WEISHAUPPT MODEL WKMONO-G 80 LOW-NOX BURNER AND AN SCR SYSTEM

CONDITIONS

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. {15} No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
3. {14} Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
4. {1407} All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201]
5. {4355} The unit shall only be fired on PUC-quality natural gas. [District Rules 2201 and 4320]
6. During start-up or shutdown, the emissions control system shall be in operation, and emissions shall be minimized insofar as technologically possible. [District Rules 2201, 4305, 4306, and 4320]
7. The total combined duration of all startup and shutdown events shall not exceed 2.0 hours on any given day. [District Rules 2201, 4306, and 4320]
8. During startup and shutdown, NOx emissions shall not exceed 30 ppmvd @ 3% O2 or 0.036 lb/MMBtu. [District Rule 2201]
9. Except during startup or shutdown, emissions from this unit shall not exceed any of the following limits: 2.5 ppmvd NOx @ 3% O2 or 0.003 lb-NOx/MMBtu. [District Rules 2201, 4306, and 4320]

CONDITIONS CONTINUE ON NEXT PAGE

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Samir Sheikh, Executive Director / APCO

Brian Clements, Director of Permit Services

N-10207-2-0: Jan 5 2023 2:04PM -- PEREZK : Joint Inspection NOT Required

10. Emissions from this unit shall not exceed any of the following limits: 0.00285 lb-SO_x/MMBtu; 0.003 lb-PM₁₀/MMBtu; 50 ppmvd CO @ 3% O₂ or 0.037 lb-CO/MMBtu; or 0.0055 lb-VOC/MMBtu. [District Rules 2201, 4306, and 4320]
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19. {4349} Fuel sulfur content shall be determined using EPA Method 11 or Method 15. [District Rule 4320]
20. {4351} All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4320. [District Rules 4305, 4306, and 4320]
21. {4352} For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 4306, and 4320]
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23. A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of fuel combusted in the unit shall be installed, utilized and maintained. [District Rule 2201 and 40 CFR 60.48c(g)]
24. The permittee shall monitor and record the stack concentration of NO_x, CO, NH₃ and O₂ at least once during each month in which source testing is not performed. NO_x, CO and O₂ monitoring shall be conducted utilizing a portable analyzer that meets District specifications. NH₃ monitoring shall be conducted utilizing gas detection tubes (Draeger brand or District approved equivalent). Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless it has been performed within the last month. [District Rules 2201, 4305, 4306, and 4320]

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CONDITIONS CONTINUE ON NEXT PAGE

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30. The permittee shall maintain records of the amount of fuel combusted during each calendar month in this unit. [40 CFR 60.48c(i)]
31. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rules 2201, 4305, 4306, and 4320, and 40 CFR 60.48c(i)]

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
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PERMIT NO: N-10207-3-0

LEGAL OWNER OR OPERATOR: NIAGARA BOTTLING, LLC

MAILING ADDRESS: 1440 BRIDGEGATE DR
DIAMOND BAR, CA 91765

LOCATION: 4800 LOGISTICS DRIVE
STOCKTON, CA 95215

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Brian Clements, Director of Permit Services

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DRAFT

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
DRAFT

PERMIT NO: N-10207-4-0

LEGAL OWNER OR OPERATOR: NIAGARA BOTTLING, LLC

MAILING ADDRESS: 1440 BRIDGEGATE DR
DIAMOND BAR, CA 91765

LOCATION: 4800 LOGISTICS DRIVE
STOCKTON, CA 95215

EQUIPMENT DESCRIPTION:

40 MMBTU/HR HURST BOILER AND WELDING COMPANY MODEL SERIES EURO 1000 NATURAL GAS-FIRED BOILER EQUIPPED WITH A WEISHAUPT MODEL WKMONO-G 80 LOW-NOX BURNER AND AN SCR SYSTEM

CONDITIONS

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. {15} No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
3. {14} Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
4. {1407} All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201]
5. {4355} The unit shall only be fired on PUC-quality natural gas. [District Rules 2201 and 4320]
6. During start-up or shutdown, the emissions control system shall be in operation, and emissions shall be minimized insofar as technologically possible. [District Rules 2201, 4305, 4306, and 4320]
7. The total combined duration of all startup and shutdown events shall not exceed 2.0 hours on any given day. [District Rules 2201, 4306, and 4320]
8. During startup and shutdown, NOx emissions shall not exceed 30 ppmvd @ 3% O2 or 0.036 lb/MMBtu. [District Rule 2201]
9. Except during startup or shutdown, emissions from this unit shall not exceed any of the following limits: 2.5 ppmvd NOx @ 3% O2 or 0.003 lb-NOx/MMBtu. [District Rules 2201, 4306, and 4320]

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 557-6400 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Samir Sheikh, Executive Director / APCO

Brian Clements, Director of Permit Services

N-10207-4-0: Jan 5 2023 2:04PM -- PEREZK : Joint Inspection NOT Required

10. Emissions from this unit shall not exceed any of the following limits: 0.00285 lb-SO_x/MMBtu; 0.003 lb-PM₁₀/MMBtu; 50 ppmvd CO @ 3% O₂ or 0.037 lb-CO/MMBtu; or 0.0055 lb-VOC/MMBtu. [District Rules 2201, 4306, and 4320]
11. {109} Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
12. {4350} The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306, and 4320]
13. Source testing to measure steady state NO_x, CO and NH₃ emissions shall be conducted within 60 days of initial startup. [District Rules 2201, 4305, 4306, and 4320]
14. Source testing to measure NO_x, CO and NH₃ emissions during steady state operation shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 4306, and 4320]
15. {4346} NO_x emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305, 4306, and 4320]
16. {4347} CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305, 4306, and 4320]
17. {4348} Stack gas oxygen (O₂) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306, and 4320]
18. Source testing for ammonia slip shall be conducted utilizing BAAQMD Method ST-1B. [District Rule 2201]
19. {4349} Fuel sulfur content shall be determined using EPA Method 11 or Method 15. [District Rule 4320]
20. {4351} All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4320. [District Rules 4305, 4306, and 4320]
21. {4352} For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 4306, and 4320]
22. {110} The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
23. A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of fuel combusted in the unit shall be installed, utilized and maintained. [District Rule 2201 and 40 CFR 60.48c(g)]
24. The permittee shall monitor and record the stack concentration of NO_x, CO, NH₃ and O₂ at least once during each month in which source testing is not performed. NO_x, CO and O₂ monitoring shall be conducted utilizing a portable analyzer that meets District specifications. NH₃ monitoring shall be conducted utilizing gas detection tubes (Draeger brand or District approved equivalent). Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless it has been performed within the last month. [District Rules 2201, 4305, 4306, and 4320]

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CONDITIONS CONTINUE ON NEXT PAGE

25. If either the NO_x, CO or NH₃ concentrations, as measured by the portable analyzer or the District approved ammonia monitoring equipment, exceed the permitted levels, the permittee shall return the emissions to compliant levels as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer or the ammonia monitoring equipment continue to show emission limit violations after 1 hour of operation following detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation that is subject to enforcement action has occurred. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 2201, 4305, 4306, and 4320]
26. All NO_x, CO, O₂ and ammonia emission readings shall be taken with the unit operating at conditions representative of normal operation or under the conditions specified in the Permit to Operate. The NO_x, CO and O₂ analyzer as well as the NH₃ emission monitoring equipment shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Analyzer readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 2201, 4305, 4306, and 4320]
27. Ammonia emissions readings shall be conducted at the same time the NO_x, CO and O₂ readings are taken. The readings shall be converted to ppmvd @ 3% O₂. [District Rules 2201, 4305 and 4306]
28. {4356} Permittee shall determine sulfur content of combusted gas annually or shall demonstrate that the combusted gas is provided from a PUC or FERC regulated source. [District Rules 1081 and 4320]
29. The permittee shall maintain records of: (1) the date and time of NO_x, CO, NH₃ and O₂ measurements, (2) the O₂ concentration in percent by volume and the measured NO_x, CO and NH₃ concentrations corrected to 3% O₂, (3) make and model of the portable analyzer, (4) portable analyzer calibration records, (5) the method of determining the NH₃ emission concentration, and (6) a description of any corrective action taken to maintain the emissions at or below the acceptable levels. [District Rules 2201, 4305, 4306, and 4320]
30. The permittee shall maintain records of the amount of fuel combusted during each calendar month in this unit. [40 CFR 60.48c(i)]
31. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rules 2201, 4305, 4306, and 4320, and 40 CFR 60.48c(i)]

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APPENDIX B
BACT Guideline

San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 1.1.2*

Last Update: 11/30/2022

Natural gas or propane fired boilers/steam generators with heat input rate
greater than 20 MMBtu/hr**

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	PUC quality natural gas or propane with LPG backup		
SOx	PUC quality natural gas or propane with LPG backup		
PM10	PUC quality natural gas or propane with LPG backup		
NOx	2.5 ppmvd @ 3% O2 (0.003 lb/MMBtu)		
CO	50 ppmvd @ 3% O2 (0.037 lb/MMBtu)		

* This is a Summary Page for this Class of Source.

** This guideline is applicable to units fired solely on natural gas from a PUC or FERC regulated source or propane/LPG. This guideline is not applicable to Oilfield Steam Generators or Electric Utility Steam Generating Units.

BACT is the most stringent control technique for the emissions unit and class of source. Control techniques that are not achieved in practice or contained in a State Implementation Plan must be cost effective as well as feasible. Economic analysis to demonstrate cost effectiveness is required for all determinations that are not achieved in practice or contained in an EPA approved State Implementation Plan.

***This is a Summary Page for this Class of Source**

APPENDIX C
BACT Analysis

Top-Down BACT Analysis

The proposed project was deemed complete on September 15, 2022. Because there was no applicable BACT Guideline at the time the project was deemed complete, BACT Guideline 1.1.2 (11/30/22) will be used to address BACT for the boilers.

NO_x:

Step 1 - Identify all control technologies

BACT Guideline 1.1.2 lists the following options for control of NO_x emissions from natural gas-fired boilers with a heat input rating greater than 20 MMBtu/hr.

Achieved in Practice or contained in the SIP:

- 2.5 ppmvd @ 3% O₂ (0.003 lb-MMBtu)

Technologically Feasible:

None

Alternate Basic Equipment:

None

Step 2 - Eliminate technologically infeasible options

There is no technologically infeasible option listed above.

Step 3 - Rank remaining options by control effectiveness

1. 2.5 ppmvd @ 3% O₂ (0.003 lb-MMBtu)

Step 4 - Cost Effectiveness Analysis

There is no technologically feasible option or alternate basic equipment listed in Step 3 (above). Therefore, no further discussion is required.

Step 5 - Select BACT

BACT for the NO_x emissions from the boilers for ATCs N-10207-1-0, '-2-0, '-3-0, and '-4-0 is to achieve NO_x emissions at or below 2.5 ppmvd @ 3% O₂. The applicant has proposed such emission levels. Therefore, BACT is satisfied.

SO_x:

Step 1 - Identify all control technologies

BACT Guideline 1.1.2 lists the following options for control of SO_x emissions from natural gas-fired boilers with a heat input rating greater than 20 MMBtu/hr.

Achieved in Practice or contained in the SIP:

- PUC quality natural gas or propane with LPG backup

Technologically Feasible:

None

Alternate Basic Equipment:

None

Step 2 - Eliminate technologically infeasible options

There is no technologically infeasible option.

Step 3 - Rank remaining options by control effectiveness

1. PUC quality natural gas or propane with LPG backup

Step 4 - Cost Effectiveness Analysis

There is no technologically feasible option or alternate basic equipment listed in Step 3 (above). Therefore, no further discussion is required.

Step 5 – Select BACT

BACT for the SO_x emissions from the boilers for ATCs N-10207-1-0, '-2-0, '-3-0, and '-4-0 is to use PUC quality natural gas or propane with LPG backup. The applicant has proposed to use only PUC quality natural gas. Therefore, BACT is satisfied.

PM₁₀:

Step 1 - Identify all control technologies

BACT Guideline 1.1.2 lists the following options for control of PM₁₀ emissions from natural gas-fired boilers with a heat input rating greater than 20 MMBtu/hr.

Achieved in Practice or contained in the SIP:

- PUC quality natural gas or propane with LPG backup

Technologically Feasible:

None

Alternate Basic Equipment:

None

Step 2 - Eliminate technologically infeasible options

There is no technologically infeasible option.

Step 3 - Rank remaining options by control effectiveness

1. PUC quality natural gas or propane with LPG backup

Step 4 - Cost Effectiveness Analysis

There is no technologically feasible option or alternate basic equipment listed in Step 3 (above). Therefore, no further discussion is required.

Step 5 – Select BACT

BACT for the PM₁₀ emissions from the boilers for ATCs N-10207-1-0, '-2-0, '-3-0, and '-4-0 is to use PUC quality natural gas or propane with LPG backup. The applicant has proposed to use only PUC quality natural gas. Therefore, BACT is satisfied.

VOC:

Step 1 - Identify all control technologies

BACT Guideline 1.1.2 lists the following options for control of PM₁₀ emissions from natural gas-fired boilers with a heat input rating greater than 20 MMBtu/hr.

Achieved in Practice or contained in the SIP:

- PUC quality natural gas or propane with LPG backup

Technologically Feasible:

None

Alternate Basic Equipment:

None

Step 2 - Eliminate technologically infeasible options

There is no technologically infeasible option.

Step 3 - Rank remaining options by control effectiveness

1. PUC quality natural gas or propane with LPG backup

Step 4 - Cost Effectiveness Analysis

There is no technologically feasible option or alternate basic equipment listed in Step 3 (above). Therefore, no further discussion is required.

Step 5 – Select BACT

BACT for the VOC emissions from the boilers for ATCs N-10207-1-0, '-2-0, '-3-0, and '-4-0 is to use PUC quality natural gas or propane with LPG backup. The applicant has proposed to use only PUC quality natural gas. Therefore, BACT is satisfied.

APPENDIX D
HRA Summary and AAQA

San Joaquin Valley Air Pollution Control District

Risk Management Review and Ambient Air Quality Analysis

To: Kevin Perez – Permit Services
 From: Kim Farrar – Technical Services
 Date: September 22, 2022
 Facility Name: NIAGARA BOTTLING, LLC
 Location: 4800 LOGISTICS DRIVE, STOCKTON
 Application #(s): N-10207-1-0, -2-0, -3-0, -4-0
 Project #: N-1223922

1. Summary

1.1 Risk Management Review (RMR)

Units	Prioritization Score	Acute Hazard Index	Chronic Hazard Index	Maximum Individual Cancer Risk	T-BACT Required	Special Permit Requirements
1	0.26	0.00	0.00	5.71E-08	No	No
2	0.26	0.00	0.00	5.63E-08	No	No
3	0.26	0.00	0.00	5.57E-08	No	No
4	0.26	0.00	0.00	5.50E-08	No	No
Project Totals	1.05	0.00	0.00	2.24E-07		
Facility Totals	>1	0.00	0.00	2.24E-07		

1.2 Ambient Air Quality Analysis (AAQA)

Pollutant	Air Quality Standard (State/Federal)				
	1 Hour	3 Hours	8 Hours	24 Hours	Annual
CO	Pass		Pass		
NO_x	Pass				Pass
SO_x	Pass	Pass		Pass	Pass
PM10				Pass	Pass
PM2.5				Pass	Pass

Notes:

- Results were taken from the attached AAQA Report.
- The criteria pollutants are below EPA's level of significance as found in 40 CFR Part 51.165 (b)(2) unless otherwise noted below.
- Modeled PM10 concentrations were below the District SIL for non-fugitive sources of 5 µg/m³ for the 24-hour average concentration and 1 µg/m³ for the annual concentration.
- Modeled PM2.5 concentrations were below the District SIL for non-fugitive sources of 1.2 µg/m³ for the 24-hour average concentration and 0.2 µg/m³ for the annual concentration.

To ensure that human health risks will not exceed District allowable levels; the following shall be included as requirements for:

Unit # 1, 2, 3, 4-0

1. No special requirements.

2. Project Description

Technical Services received a request on September 15, 2022 to perform a Risk Management Review (RMR) and Ambient Air Quality Analysis (AAQA) for the following:

- Unit -1-0: 40 MMBTU/HR HURST BOILER AND WELDING COMPANY MODEL SERIES EURO 1000 NATURAL GAS-FIRED BOILER EQUIPPED WITH A WEISHAAPT MODEL WKMONO-G 80 LOW-NOX BURNER AND AN SCR SYSTEM
- Unit -2-0: 40 MMBTU/HR HURST BOILER AND WELDING COMPANY MODEL SERIES EURO 1000 NATURAL GAS-FIRED BOILER EQUIPPED WITH A WEISHAAPT MODEL WKMONO-G 80 LOW-NOX BURNER AND AN SCR SYSTEM
- Unit -3-0: 40 MMBTU/HR HURST BOILER AND WELDING COMPANY MODEL SERIES EURO 1000 NATURAL GAS-FIRED BOILER EQUIPPED WITH A WEISHAAPT MODEL WKMONO-G 80 LOW-NOX BURNER AND AN SCR SYSTEM
- Unit -4-0: 40 MMBTU/HR HURST BOILER AND WELDING COMPANY MODEL SERIES EURO 1000 NATURAL GAS-FIRED BOILER EQUIPPED WITH A WEISHAAPT MODEL WKMONO-G 80 LOW-NOX BURNER AND AN SCR SYSTEM

3. RMR Report

3.1 Analysis

The District performed an analysis pursuant to the District's Risk Management Policy for Permitting New and Modified Sources (APR 1905, May 28, 2015) to determine the possible cancer and non-cancer health impact to the nearest resident or worksite. This policy requires that an assessment be performed on a unit by unit basis, project basis, and on a facility-wide basis. If a preliminary prioritization analysis demonstrates that:

- A unit's prioritization score is less than the District's significance threshold and;
- The project's prioritization score is less than the District's significance threshold and;
- The facility's total prioritization score is less than the District's significance threshold

Then, generally no further analysis is required.

The District's significant prioritization score threshold is defined as being equal to or greater than 1.0. If a preliminary analysis demonstrates that either the units', the project's or the facility's total prioritization score is greater than the District threshold, a screening or a refined assessment is required.

If a refined assessment is greater than one in a million but less than 20 in a million for carcinogenic impacts (cancer risk) and less than 1.0 for the acute and chronic hazard indices (non-carcinogenic) on a unit by unit basis, project basis and on a facility-wide basis the proposed application is considered less than significant. For units that exceed a cancer risk of one in a million, Toxic Best Available Control Technology (TBACT) must be implemented.

Toxic emissions for this project were calculated using the following methods:

- Natural gas usage rates and ammonia emissions for the proposed operation were provided by the Permit Engineer. These usage rates were speciated into toxic air contaminants using emission factors derived from the table, "Natural Gas Fired External Combustion Equipment", in the 2001 report, Ventura County Air Pollution Control District AB 2588 Combustion Emission Factors.

These emissions were input into the San Joaquin Valley APCD's Hazard Assessment and Reporting Program (SHARP). In accordance with the District's Risk Management Policy, risks from the proposed unit's toxic emissions were prioritized using the procedure in the 2016 CAPCOA Facility Prioritization Guidelines. The prioritization score for this proposed facility was greater than 1.0 (see RMR Summary Table). Therefore, a refined health risk assessment was required.

The AERMOD model was used, with the parameters outlined below and meteorological data for 2013-2017 from Stockton (rural dispersion coefficient selected) to determine the dispersion factors (i.e., the predicted concentration or X divided by the normalized source strength or Q) for a receptor grid. These dispersion factors were input into the SHARP Program, which then used the Air Dispersion Modeling and Risk Tool (ADMRT) of the Hot Spots Analysis and Reporting Program Version 2 (HARP 2) to calculate the chronic and acute hazard indices and the carcinogenic risk for the project.

The following parameters were used for the review:

Source Process Rates					
Unit ID	Process ID	Process Material	Process Units	Hourly Process Rate	Annual Process Rate
1	1	Natural Gas Combustion	MMscf	0.04	350.4
1	2	Ammonia	lb	0.18	1,570
2	1	Natural Gas Combustion	MMscf	0.04	350.4
2	2	Ammonia	lb	0.18	1,570
3	1	Natural Gas Combustion	MMscf	0.04	350.4
3	2	Ammonia	lb	0.18	1,570
4	1	Natural Gas Combustion	MMscf	0.04	350.4
4	2	Ammonia	lb	0.18	1,570

Point Source Parameters						
Unit ID	Unit Description	Release Height (m)	Temp. (°K)	Exit Velocity (m/sec)	Stack Diameter (m)	Vertical/Horizontal/Capped
1	1-0, 40 MMBtu NG Boiler	20.03	499	6.85	0.86	Capped
2	2-0, 40 MMBtu NG Boiler	20.03	499	6.85	0.86	Capped
3	3-0, 40 MMBtu NG Boiler	20.03	499	6.85	0.86	Capped
4	4-0, 40 MMBtu NG Boiler	20.03	499	6.85	0.86	Capped

4. AAQA Report

The District modeled the impact of the proposed project on the National Ambient Air Quality Standard (NAAQS) and/or California Ambient Air Quality Standard (CAAQS) in accordance with District Policy APR-1925 (Policy for District Rule 2201 AAQA Modeling) and EPA's Guideline for Air Quality Modeling (Appendix W of 40 CFR Part 51). The District uses a progressive three level approach to perform AAQAs. The first level (Level 1) uses a very conservative approach. If this analysis indicates a likely exceedance of an AAQS or Significant Impact Level (SIL), the analysis proceeds to the second level (Level 2) which implements a more refined approach. For the 1-hour NO₂ standard, there is also a third level that can be implemented if the Level 2 analysis indicates a likely exceedance of an AAQS or SIL.

The modeling analyses predicts the maximum air quality impacts using the appropriate emissions for each standard's averaging period. Required model inputs for a refined AAQA include background ambient air quality data, land characteristics, meteorological inputs, a receptor grid, and source parameters including emissions. These inputs are described in the sections that follow.

Ambient air concentrations of criteria pollutants are recorded at monitoring stations throughout the San Joaquin Valley. Monitoring stations may not measure all necessary pollutants, so background data may need to be collected from multiple sources. The following stations were used for this evaluation:

Monitoring Stations				
Pollutant	Station Name	County	City	Measurement Year
CO	HAZELTON-HD, STOCKTON	San Joaquin	Stockton	2018
NO _x	HAZELTON-HD, STOCKTON	San Joaquin	Stockton	2018
PM10	HAZELTON-HD, STOCKTON	San Joaquin	Stockton	2018
PM2.5	HAZELTON-HD, STOCKTON	San Joaquin	Stockton	2018
SO _x	FRESNO - GARLAND	Fresno	Fresno	2018

Technical Services performed modeling for directly emitted criteria pollutants with the emission rates below:

Emission Rates (lbs/hour)						
Unit ID	Process	NO _x	SO _x	CO	PM10	PM2.5
1	1	1.44	0.11	1.48	0.12	0.12
2	1	1.44	0.11	1.48	0.12	0.12
3	1	1.44	0.11	1.48	0.12	0.12
4	1	1.44	0.11	1.48	0.12	0.12

Emission Rates (lbs/year)						
Unit ID	Process	NO _x	SO _x	CO	PM10	PM2.5
1	1	2,008	986	12,965	1,059	1,059
2	1	2,008	986	12,965	1,059	1,059
3	1	2,008	986	12,965	1,059	1,059
4	1	2,008	986	12,965	1,059	1,059

The AERMOD model was used to determine if emissions from the project would cause or contribute to an exceedance of any state of federal air quality standard. The parameters outlined below and meteorological data for 2013-2017 from Stockton (rural dispersion coefficient selected) were used for the analysis:

The following parameters were used for the review:

Point Source Parameters						
Unit ID	Unit Description	Release Height (m)	Temp. (°K)	Exit Velocity (m/sec)	Stack Diameter (m)	Vertical/Horizontal/Capped
1	40 MMBtu/hr NG Boiler	20.03	499	6.85	0.86	Capped
2	40 MMBtu/hr NG Boiler	20.03	499	6.85	0.86	Capped
3	40 MMBtu/hr NG Boiler	20.03	499	6.85	0.86	Capped
4	40 MMBtu/hr NG Boiler	20.03	499	6.85	0.86	Capped

5. Conclusion

5.1 RMR

The cumulative acute and chronic indices for this facility, including this project, are below 1.0; and the cumulative cancer risk for this facility, including this project, is less than 20 in a million. In addition, the cancer risk for each unit in this project is less than 1.0 in a million. **In accordance with the District's Risk Management Policy, the project is approved without Toxic Best Available Control Technology (T-BACT).**

To ensure that human health risks will not exceed District allowable levels; the permit requirements listed on page 1 of this report must be included for this proposed unit.

These conclusions are based on the data provided by the applicant and the project engineer. Therefore, this analysis is valid only as long as the proposed data and parameters do not change.

5.2 AAQA

The emissions from the proposed equipment will not cause or contribute significantly to a violation of the State and National AAQS.

6. Attachments

- A. Modeling request from the project engineer
- B. Additional information from the applicant/project engineer
- C. Prioritization score w/ toxic emissions summary
- D. Facility Summary
- E. AAQA results

APPENDIX E
Quarterly Net Emissions Change (QNEC)

Quarterly Net Emissions Change (QNEC)

The Quarterly Net Emissions Change is used to complete the emission profile screen for the District’s PAS database. The QNEC shall be calculated as follows:

QNEC = PE2 - PE1, where:

- QNEC = Quarterly Net Emissions Change for each emissions unit, lb/qtr.
- PE2 = Post-Project Potential to Emit for each emissions unit, lb/qtr.
- PE1 = Pre-Project Potential to Emit for each emissions unit, lb/qtr.

Using the values in Sections VII.C.2 and VII.C.1 in the evaluation above, quarterly PE2 and quarterly PE1 can be calculated as follows:

$$PE2_{quarterly} = PE2_{annual} \div 4 \text{ quarters/year}$$

$$PE1_{quarterly} = PE1_{annual} \div 4 \text{ quarters/year}$$

N-10207-1-0, '-2-0, '-3-0, and '-4-0

Quarterly NEC [QNEC]			
Pollutant	PE2 (lb/qtr)	PE1 (lb/qtr)	QNEC (lb/qtr)
NO _x	502	0	502
SO _x	247	0	247
PM ₁₀	265	0	265
CO	3,240	0	3,240
VOC	484	0	484