FEB 19 2013

Mr. Paul Franzia
Bronco Wine Co, Inc
PO Box 789
Ceres, CA 95307

Re: Proposed ATC / Certificate of Conformity (Significant Mod)
District Facility # N-1665
Project # 1123083

Dear Mr. Franzia:

Enclosed for your review is the District’s analysis of an application for Authority to Construct for the facility identified above. The applicant is requesting that a Certificate of Conformity with the procedural requirements of 40 CFR Part 70 be issued with this project. The project authorizes installation of a 15.75 MMBtu/hr natural gas-fired boiler.

After addressing any EPA comments made during the 45-day comment period, the Authority to Construct will be issued to the facility with a Certificate of Conformity. Prior to operating with modifications authorized by the Authority to Construct, the facility must submit an application to modify the Title V permit as an administrative amendment, in accordance with District Rule 2520, Section 11.5.

If you have any questions, please contact Mr. Leonard Scandura, Permit Services Manager, at (661) 392-5500.

Thank you for your cooperation in this matter.

Sincerely,

David Warner
Director of Permit Services

DW:RE/st
Enclosures
FEB 19 2013

Gerardo C. Rios, Chief
Permits Office
Air Division
U.S. EPA - Region IX
75 Hawthorne St.
San Francisco, CA 94105

Re: Proposed ATC / Certificate of Conformity (Significant Mod)
District Facility # N-1665
Project # 1123083

Dear Mr. Rios:

Enclosed for your review is the District’s engineering evaluation of an application for Authority to Construct for Bronco Wine Co, Inc 6342 Bystrum Rd, Ceres, CA, which has been issued a Title V permit. Bronco Wine Co, Inc is requesting that a Certificate of Conformity, with the procedural requirements of 40 CFR Part 70, be issued with this project. The project authorizes installation of a 15.75 MMBtu/hr natural gas-fired boiler.

Enclosed is the engineering evaluation of this application and proposed Authority to Construct # N-1665-514-0 with Certificate of Conformity. After demonstrating compliance with the Authority to Construct, the conditions will be incorporated into the facility’s Title V permit through an administrative amendment.

Please submit your written comments on this project within the 45-day comment period that begins on the date you receive this letter. If you have any questions, please contact Mr. Leonard Scandura, Permit Services Manager, at (661) 392-5500.

Thank you for your cooperation in this matter.

Sincerely,

David Warner
Director of Permit Services

DW:RE/st

Enclosures
FEB 19 2013

Mike Tollstrup, Chief
Project Assessment Branch
Air Resources Board
P O Box 2815
Sacramento, CA 95812-2815

Re: Proposed ATC / Certificate of Conformity (Significant Mod)
District Facility # N-1665
Project # 1123083

Dear Mr. Tollstrup:

Enclosed for your review is the District's analysis of an application for Authority to Construct for the facility identified above. The applicant is requesting that a Certificate of Conformity with the procedural requirements of 40 CFR Part 70 be issued with this project. The project authorizes installation of a 15.75 MMBtu/hr natural gas-fired boiler.

Enclosed is the engineering evaluation of this application and proposed Authority to Construct # N-1665-514-0 with Certificate of Conformity. After demonstrating compliance with the Authority to Construct, the conditions will be incorporated into the facility's Title V permit through an administrative amendment.

Please submit your written comments on this project within the 30-day comment period that begins on the date you receive this letter. If you have any questions, please contact Mr. Leonard Scandura, Permit Services Manager, at (661) 392-5500.

Thank you for your cooperation in this matter.

Sincerely,

[Signature]

David Warner
Director of Permit Services

DW:RE/st

Enclosures
NOTICE OF PRELIMINARY DECISION
FOR THE ISSUANCE OF AUTHORITY TO CONSTRUCT AND
THE PROPOSED SIGNIFICANT MODIFICATION OF FEDERALLY
MANDATED OPERATING PERMIT

NOTICE IS HEREBY GIVEN that the San Joaquin Valley Air Pollution Control District
solicits public comment on the proposed significant modification of Bronco Wine Co, Inc
for its winery located at 6342 Bystrum Rd, Ceres, California. The project authorizes
installation of a 15.75 MMBtu/hr natural gas-fired boiler.

The District’s analysis of the legal and factual basis for this proposed action, project
#1123083, is available for public inspection at
http://www.valleyair.org/notices/public_notices_idx.htm and the District office at the
address below. This will be the public’s only opportunity to comment on the specific
conditions of the modification. If requested by the public, the District will hold a public
hearing regarding issuance of this modification. For additional information, please
contact Mr. Leonard Scandura, Permit Services Manager, at (661) 392-5500. Written
comments on the proposed initial permit must be submitted within 30 days of the
publication date of this notice to DAVID WARNER, DIRECTOR OF PERMIT
SERVICES, SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT, 34946
FLYOVER COURT, BAKERSFIELD, CA 93308.
San Joaquin Valley Air Pollution Control District
Authority to Construct Application Review
15.75 MMBtu/hr Natural Gas-Fired Boiler

Facility Name: Bronco Wine Co., Inc
Mailing Address: PO Box 789
              Ceres, CA 95307
Contact Person: Paul W. Franzia
Telephone: (209) 585-5287
Fax:
E-Mail: Paul.franzia@broncowine.com
Application #(s): N-1665-514-0
Project #: 1123083
Deemed Complete: January 10, 2013

Date: February 11, 2013
Engineer: Richard Edgehill
Lead Engineer: Allan Phillips

I. Proposal

Bronco Wine Company (Bronco) has requested an Authority to Construct (ATC) permit for the installation of a 15.75 MMBtu/hr natural gas fired boiler with a Clayton Industries Model 404-FMB low NOx burner. Emissions from the new boiler trigger BACT, offsets, and public notice.

Bronco received their Title V Permit on April 30, 2008. The project is a Federal Major Modification and therefore it is classified as a Title V Significant Modification pursuant to Rule 2520, Section 3.20, and can be processed with a Certificate of Conformity (COC). Since the facility has specifically requested that this project be processed in that manner, the 45-day EPA comment period will be satisfied prior to the issuance of the Authority to Construct. VPC must apply to administratively amend their Title V Operating Permit to include the requirements of the ATC(s) issued with this project.

II. Applicable Rules

Rule 2201      New and Modified Stationary Source Review Rule (4/21/11)
Rule 2410      Prevention of Significant Deterioration (June 16, 2011)
Rule 2520      Federally Mandated Operating Permits (6/21/01)
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 II (8/21/03)
Rule 4306      Boilers, Steam Generators and Process Heaters – Phase III (3/17/05)
Rule 4320      Advanced Emission Reduction Options for Boilers, Steam Generators, and Process Heaters Greater than 5.0 MMBtu/hr (10/16/08)
III. Project Location

The facility is located at 6342 Bystrum Rd, Ceres, CA which 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

Bronco has proposed to install a natural gas-fired boiler to provide steam to the facility. The boiler is equipped with a low NOx burner capable of achieving 7 ppmv NOx @ 3% O2 and 50 ppmv CO @ 3% O2 CO.

Best Performance Standard (BPS)

Note that the new steam generator differs from a traditional boiler in that there is no pressure vessel utilized to generate the steam. Rather, the Clayton design utilizes a continuous coil design with a controlled flow rate of water through the coil to produce steam. The unit includes a new de-aerator tank. Feed water from the de-aerator tank will be pre-heated using a double stack economizer.

Applicant has stated that the Clayton steam generator will be in compliance with the BPS for Steam Generators and that it is likely that the stack exhaust gas from the economizers will be no greater than 90 degree F above feed water temperature. The anticipated flue gas temperature is 319 degrees F.

Manufacturer's details on the boiler are included in Attachment 1.

V. Equipment Listing

N-1665-514-0: 15.75 MMBTU/HR NATURAL GAS FIRED CLAYTON SSEG-404-FMB-1 BOILER

VI. Emission Control Technology Evaluation

Emissions from natural gas-fired boilers include NOx, CO, VOC, PM10, and SOx. The proposed boiler is equipped with an ultra-low NOx burner.

Low-NOX burners reduce NOx formation by producing lower flame temperatures (and longer flames) than conventional burners. Conventional burners thoroughly mix all the fuel and air in a single stage just prior to combustion, whereas low-NOX burners delay the mixing of fuel and air by introducing the fuel (or sometimes the air) in multiple stages. Generally, in the first
combustion stage, the air-fuel mixture is fuel rich. In a fuel rich environment, all the oxygen will be consumed in reactions with the fuel, leaving no excess oxygen available to react with nitrogen to produce thermal NOₓ. In the secondary and tertiary stages, the combustion zone is maintained in a fuel-lean environment. The excess air in these stages helps to reduce the flame temperature so that the reaction between the excess oxygen with nitrogen is minimized.

### VII. General Calculations

#### A. Assumptions

- The maximum operating schedule is 24 hours per day (per applicant)
- EPA F-factor for natural gas is 8,578 dscf/MMBtu (40 CFR 60, Appendix B)
- Molar Specific Volume of a gas @ 60 °F is 379.5 ft³/lb-mol
- Natural Gas Heating Value: 1,000 Btu/scf (District Practice)
- Daily heat input limited to 15.75 MMBtu/hr
- Steam pressure up to 100 psig (10/17/12 applicant telephone call)

#### B. Emission Factors

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Emission Factors (EF)</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOₓ</td>
<td>8.0 lb-NOₓ/MMscf</td>
<td>0.008 lb-NOₓ/MMBtu</td>
</tr>
<tr>
<td>CO</td>
<td>37 lb-CO/MMscf</td>
<td>0.037 lb-CO/MMBtu</td>
</tr>
<tr>
<td>SOₓ</td>
<td>2.85 lb-SOₓ/MMscf</td>
<td>0.00285 lb SO₂/MMBtu</td>
</tr>
<tr>
<td>PM10</td>
<td>7.6 lb-PM10/MMscf</td>
<td>0.0076 lb-PM10/MMBtu</td>
</tr>
<tr>
<td>VOC</td>
<td>5.5 lb-VOC/MMscf</td>
<td>0.0055 lb-VOC/MMBtu</td>
</tr>
</tbody>
</table>

#### C. Calculations

1. **Pre-Project Potential to Emit (PE1)**

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

2. **Post Project Potential to Emit (PE2)**

   The potential to emit for the boiler is calculated as follows, and summarized in the table below:
### Daily PE2

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>EF2 (lb/MMBtu)</th>
<th>Heat Input (MMBtu/hr)</th>
<th>Operating Schedule (hr/day)</th>
<th>Daily PE2 (lb/day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO\textsubscript{X}</td>
<td>0.0080</td>
<td>15.75</td>
<td>24</td>
<td>3.0</td>
</tr>
<tr>
<td>SO\textsubscript{X}</td>
<td>0.00285</td>
<td>15.75</td>
<td>24</td>
<td>1.1</td>
</tr>
<tr>
<td>PM\textsubscript{10}</td>
<td>0.0076</td>
<td>15.75</td>
<td>24</td>
<td>2.9</td>
</tr>
<tr>
<td>CO</td>
<td>0.037</td>
<td>15.75</td>
<td>24</td>
<td>14.0</td>
</tr>
<tr>
<td>VOC</td>
<td>0.0055</td>
<td>15.75</td>
<td>24</td>
<td>2.1</td>
</tr>
</tbody>
</table>

### Annual PE2

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>EF2 (lb/MMBtu)</th>
<th>Heat Input (MMBtu/hr)</th>
<th>Operating Schedule (hr/year)</th>
<th>Annual PE2 (lb/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO\textsubscript{X}</td>
<td>0.008</td>
<td>15.75</td>
<td>8,760</td>
<td>1,104</td>
</tr>
<tr>
<td>SO\textsubscript{X}</td>
<td>0.00285</td>
<td>15.75</td>
<td>8,760</td>
<td>393</td>
</tr>
<tr>
<td>PM\textsubscript{10}</td>
<td>0.0076</td>
<td>15.75</td>
<td>8,760</td>
<td>1,049</td>
</tr>
<tr>
<td>CO</td>
<td>0.037</td>
<td>15.75</td>
<td>8,760</td>
<td>5,105</td>
</tr>
<tr>
<td>VOC</td>
<td>0.0055</td>
<td>15.75</td>
<td>8,760</td>
<td>759</td>
</tr>
</tbody>
</table>

### Greenhouse Gas (GHG) Emissions

CO\textsubscript{2} 53.06 kg/MMBtu (HHV) natural gas (116.7 lb/MMBtu)
CH\textsubscript{4} 0.005 kg/MMBtu (HHV) natural gas (0.011 lb/MMBtu)
N\textsubscript{2}O 0.0001 kg/MMBtu (HHV) natural gas (0.00022 lb/MMBtu)

GWP for CH\textsubscript{4} = 21 lb-CO\textsubscript{2}e per lb-CH\textsubscript{4}
GWP for N\textsubscript{2}O = 310 lb-CO\textsubscript{2}e per lb-N\textsubscript{2}O

### Calculations

#### Hourly Emissions

CO\textsubscript{2} Emissions = 15.75 MMBtu/hr x 116.7 lb/MMBtu = 1838 lb-CO\textsubscript{2}e/hour
CH\textsubscript{4} Emissions = 15.75 MMBtu/hr x 0.011 lb/MMBtu x 21 lb-CO\textsubscript{2}e per lb-CH\textsubscript{4} = 3.63 lb-CO\textsubscript{2}e/hour
N\textsubscript{2}O Emissions = 15.75 MMBtu/hr x 0.00022 lb/Btu x 296 lb-CO\textsubscript{2}e per lb-N\textsubscript{2}O = 1.02 lb-CO\textsubscript{2}e/hour

Total = 1838 + 3.63 + 1.02 = 1843 lb-CO\textsubscript{2}e/hour

#### Annual Emissions

1843 lb-CO\textsubscript{2}e/hour x 8,760 hr/year ÷ 2,000 lb/ton = 8972 tons-CO\textsubscript{2}e/year

#### Metric Conversion

8072 short tons-CO\textsubscript{2}e/year x 0.9072 metric tons/short ton = 7,323 metric tons
CO\textsubscript{2}e/year emissions for the facility exceed the zero equivalency level of 230 metric tons-CO\textsubscript{2}e/year.

Emissions Profiles are included in Attachment II.

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. There no ERCs listed for N-1665.

<table>
<thead>
<tr>
<th>Permit Unit</th>
<th>NO\textsubscript{X}</th>
<th>SO\textsubscript{X}</th>
<th>PM\textsubscript{10}</th>
<th>CO</th>
<th>VOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current PTOs</td>
<td>2,118</td>
<td>315</td>
<td>557</td>
<td>16,365</td>
<td>660,973</td>
</tr>
<tr>
<td>ATCs N-1665-508-0 through '513-0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>180</td>
</tr>
<tr>
<td>SSPE1</td>
<td>2,118</td>
<td>315</td>
<td>557</td>
<td>16,365</td>
<td>661,153</td>
</tr>
</tbody>
</table>

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. There no ERCs listed for N-1665.

<table>
<thead>
<tr>
<th>Permit Unit</th>
<th>NO\textsubscript{X}</th>
<th>SO\textsubscript{X}</th>
<th>PM\textsubscript{10}</th>
<th>CO</th>
<th>VOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSPE 1</td>
<td>2,118</td>
<td>315</td>
<td>557</td>
<td>16,365</td>
<td>661,153</td>
</tr>
<tr>
<td>ATC N-1665-514-0</td>
<td>1104</td>
<td>393</td>
<td>1049</td>
<td>5,105</td>
<td>759</td>
</tr>
<tr>
<td>SSPE2</td>
<td>3,222</td>
<td>708</td>
<td>1606</td>
<td>21,470</td>
<td>661,912</td>
</tr>
</tbody>
</table>

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)
• Fugitive emissions, except for the specific source categories specified in 40 CFR 51.165

<table>
<thead>
<tr>
<th>Rule 2201 Major Source Determination (lb/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO\textsubscript{x}</td>
</tr>
<tr>
<td>Facility emissions pre-project</td>
</tr>
<tr>
<td>Facility emissions – post project</td>
</tr>
<tr>
<td>Major Source Threshold</td>
</tr>
<tr>
<td>Major Source?</td>
</tr>
</tbody>
</table>

As seen in the table above, the facility is an existing Major Source for VOCs and is not becoming a Major Source for NO\textsubscript{x}, SO\textsubscript{x}, PM\textsubscript{10}, or CO 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)(i). Therefore the following PSD Major Source thresholds are applicable.

<table>
<thead>
<tr>
<th>PSD Major Source Determination (tons/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO\textsubscript{2}</td>
</tr>
<tr>
<td>Estimated Facility PE before Project Increase</td>
</tr>
<tr>
<td>PSD Major Source Thresholds</td>
</tr>
<tr>
<td>PSD Major Source? (Y/N)</td>
</tr>
</tbody>
</table>

*assumed to be > 100,000 tons/yr with production of CO\textsubscript{2} in wine fermentation

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

6. **Baseline Emissions (BE)**

The BE calculation (in lbs/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.

N-1665-514-0:
Since this is a new emissions unit, BE = PE1 = 0 for all pollutants.

7. SB 288 Major Modification

SB 288 Major Modification is defined in 40 CFR Part 51.165 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."

Since this facility is not a major source for NOx, SOx, PM10, or CO, this project does not constitute an SB 288 major modification for these air contaminants.

Since this facility is a major source for VOCs, the project’s PE2 is compared to the SB 288 Major Modification Thresholds in the following table in order to determine if the SB 288 Major Modification calculation is required.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Project PE2 (lb/year)</th>
<th>Threshold (lb/year)</th>
<th>SB 288 Major Modification Calculation Required?</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC</td>
<td>759</td>
<td>50,000</td>
<td>No</td>
</tr>
</tbody>
</table>

Since the SB 288 Major Modification Threshold for VOCs is not surpassed with this project, this project does not constitute an SB 288 Major Modification.

8. Federal Major Modification

Since this facility is not a Major Source for NOx, SOx, and PM10 this project does not constitute a Federal Major Modification for these air contaminants.

For new emissions units, the increase in emissions is equal to the PE2 for each new unit included in this project.

The project’s combined total emission increases are compared to the Federal Major Modification Thresholds in the following table.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Total Emissions Increases (lb/yr)</th>
<th>Thresholds (lb/yr)</th>
<th>Federal Major Modification?</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC*</td>
<td>759</td>
<td>0</td>
<td>Yes</td>
</tr>
</tbody>
</table>

7
*If there is any emission increases in VOC, this project is a Federal Major Modification and no further analysis is required.

Since there is an increase in VOC emissions, this project constitutes a Federal Major Modification, and no further analysis is required.

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

Rule 2410 applies to pollutants for which the District is in attainment or for unclassified pollutants. The pollutants addressed in the PSD applicability determination are listed as follows:

- NO2 (as a primary pollutant)
- SO2 (as a primary pollutant)
- CO
- PM
- PM10
- Greenhouse gases (GHG): CO2, N2O, CH4, HFCs, PFCs, and SF6

The first step of this PSD evaluation consists of determining whether the facility is an existing PSD Major Source or not (See Section VII.C.5 of this document).

Note that in the case the facility is an existing PSD Major Source, the second step of the PSD evaluation is to determine if the project results in a PSD significant increase.

I. Project Location Relative to Class 1 Area

As demonstrated in the "PSD Major Source Determination" Section above, the facility was determined to be a existing major source for PSD. Because the project is not located within 10 km of a Class 1 area – modeling of the emission increase is not required to determine if the project is subject to the requirements of Rule 2410.

II. Significance of Project Emission Increase Determination

a. Potential to Emit of attainment/unclassified pollutant for New or Modified Emission Units vs PSD Significant Emission Increase Thresholds

As a screening tool, the potential to emit from all new and modified units is compared to the PSD significant emission increase thresholds, and if total potential to emit from all new and modified units is below this threshold, no further analysis will be needed.
### PSD Significant Emission Increase Determination: Potential to Emit (tons/year)

<table>
<thead>
<tr>
<th></th>
<th>NO2</th>
<th>SO2</th>
<th>CO</th>
<th>PM</th>
<th>PM10</th>
<th>CO2e</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total PE from New and Modified Units</td>
<td>0.5</td>
<td>0.2</td>
<td>3</td>
<td>0.5</td>
<td>0.5</td>
<td>8972*</td>
</tr>
<tr>
<td>PSD Significant Emission Increase Thresholds</td>
<td>40</td>
<td>40</td>
<td>100</td>
<td>25</td>
<td>15</td>
<td>75,000</td>
</tr>
<tr>
<td>PSD Significant Emission Increase?</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
</tbody>
</table>

*Calculation in Section VII C above

As demonstrated above, because the project has a total potential to emit from all new and modified emission units below the PSD significant emission increase thresholds, this project is not subject to the requirements of Rule 2410 due to a significant emission increase and no further discussion is required.

### 10. Quarterly Net Emissions Change (QNEC)

The QNEC will be calculated for each pollutant, for each unit, as the difference between the quarterly PE2 and the quarterly PE1. The QNEC for each pollutant is shown in the table(s) below:

**N-1665-514**

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>PE2 (lb/yr)</th>
<th>PE1 (lb/yr)</th>
<th>QNEC (lb/qtr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOx</td>
<td>1,104</td>
<td>0</td>
<td>276</td>
</tr>
<tr>
<td>VOC</td>
<td>393</td>
<td>0</td>
<td>98</td>
</tr>
<tr>
<td>CO</td>
<td>1,049</td>
<td>0</td>
<td>262</td>
</tr>
<tr>
<td>PM10</td>
<td>11,589</td>
<td>0</td>
<td>2897</td>
</tr>
<tr>
<td>SOx</td>
<td>759</td>
<td>0</td>
<td>190</td>
</tr>
</tbody>
</table>

### VIII. Compliance

**Rule 2201 New and Modified Stationary Source Review Rule**

**A. Best Available Control Technology (BACT)**

1. **BACT Applicability**

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
   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

As seen in Section VII.C.2 of this evaluation, the project authorizes a natural gas-
fi red boiler with a PE greater than 2 lb/day for NOx, PM10, CO, and VOC. However
BACT is not triggered for CO since the SSPE2 for CO is not greater than 200,000
lbs/year, as demonstrated in Section VII.C.5 above.

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 Section VII.C.7 above, this project does constitute a Federal Major
Modification for VOC emissions. Therefore BACT is triggered for VOC for all
emissions units in the project for which there is an emission increase (> 0.5 lb/day).

2. BACT Guideline

Please note that BACT Guideline 1.1.1, Boiler: ≤ 20.0 MMBtu/hr, Natural Gas or
Propane-Fired has been rescinded. The Achieved-in-Practice BACT requirement for
NOx is the District Rule 4320 Standard Schedule limit of 9 ppmv @ 3% O2. The
Technologically Feasible requirement is the District Rule 4320 Enhanced Schedule limit
of 6 ppmv NOx @ 3% O2. A project specific BACT analysis based on these
requirements (table below) is included in Attachment III.
Rule 4320 Emissions Limits

<table>
<thead>
<tr>
<th>Category</th>
<th>Operated on gaseous fuel</th>
<th>Operated on liquid fuel</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NO$_x$ Limit</td>
<td>CO Limit</td>
</tr>
<tr>
<td>A. Units with a total rated heat input &gt; 5.0 MMBtu/hr to &lt; 20.0 MMBtu/hr,</td>
<td>400 ppmv</td>
<td></td>
</tr>
<tr>
<td>except for Categories C through G units</td>
<td>a) Standard Schedule 9 ppmv or 0.011 lb/MMBtu; or 400 ppmv</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) Enhanced Schedule 6 ppmv or 0.007 lb/MMBtu</td>
<td></td>
</tr>
</tbody>
</table>

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 Attachment III), BACT has been satisfied with the following:

- NO$_x$: 7 ppmvd @ 3% O$_2$
- SO$_x$ and PM10: Natural gas containing a sulfur content not exceeding 1.0 gr S/100 scf.
- CO: 50 ppmvd @ 3% O$_2$
- VOC: Gaseous fuel

B. Offsets

1. Offset Applicability

Offset requirements shall be triggered on a pollutant by pollutant basis and shall be required if the SSPE2 equals to 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                         | 3,222          | 708            | 1,606      | 27,954    | 661,912   |
| Offset Thresholds             | 20,000         | 54,750         | 29,200     | 200,000   | 20,000    |
| Offsets triggered?            | No             | No             | No         | No        | Yes       |
2. Quantity of Offsets Required

As seen above, the SSPE2 is greater than the offset thresholds for VOCs only. Therefore offset calculations will be required for this project.

The quantity of offsets in pounds per year for VOCs is calculated as follows for sources with an SSPE1 greater than the offset threshold levels before implementing the project being evaluated.

Offsets Required (lb/year) = (Σ[PE2 - BE] + ICCE) x DOR, for all new or modified emissions units in the project,

Where,
PE2 = Post Project Potential to Emit, (lb/year)
BE = Baseline Emissions, (lb/year)
ICCE = Increase in Cargo Carrier Emissions, (lb/year)
DOR = Distance Offset Ratio, determined pursuant to Section 4.8

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 = HAE

As calculated in Section VII.C.6 above, the BE from this unit is zero as it is new.

Also, there is only one emissions unit associated with this project and there are no increases in cargo carrier emissions. Also, the DOR is 1.5:1 as the project is a Federal Major Modification. The quantity of offsets required for the project is calculated below.

Offsets Required (lb/year) = ([PE2 - BE] + ICCE) x DOR

PE2 (VOC) = 759 lb/year
BE (VOC) = 0 lb/year
ICCE = 0 lb/year

Offsets Required (lb/year) = ([759 - 0] + 0) x 1.5
= 1139 lb VOC/year

Calculating the appropriate quarterly emissions to be offset is as follows:

<table>
<thead>
<tr>
<th>1st Quarter</th>
<th>2nd Quarter</th>
<th>3rd Quarter</th>
<th>4th Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>285</td>
<td>285</td>
<td>285</td>
<td>285</td>
</tr>
</tbody>
</table>
The applicant has stated that the facility plans to use ERC certificate S-3442-1 which will be purchased from Heck Cellars S-381 (Attachment IV) to offset the increases in VOC emissions associated with this project. The above certificate has available quarterly NOX credits as follows:

<table>
<thead>
<tr>
<th>ERC #S-3442-1</th>
<th>1st Quarter</th>
<th>2nd Quarter</th>
<th>3rd Quarter</th>
<th>4th Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10,000</td>
<td>10,000</td>
<td>10,000</td>
<td>10,000</td>
</tr>
</tbody>
</table>

As seen above, the facility has sufficient credits to fully offset the quarterly VOC emissions increases associated with this project.

**Proposed Rule 2201 (offset) Conditions:**

- Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantity of emissions: 1st quarter - 285 lb, 2nd quarter - 285 lb, 3rd quarter - 285 lb, and fourth quarter - 285 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 4/21/11) for the ERC specified below. [District Rule 2201]

- ERC Certificate Number S-3442-1 (or a certificate split from this certificate) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201]

C. Public Notification

1. Applicability

Public noticing is required for:
- New Major Sources, Federal Major Modifications, and SB 288 Major Modifications,
- Any new emissions unit with a Potential to Emit greater than 100 pounds during any one day for any one pollutant,
- Any project which results in the offset thresholds being surpassed, and/or
- Any project with an SSIEP of greater than 20,000 lb/year for any pollutant.

- **New Major Sources, Federal Major Modifications, and SB 288 Major Modifications**

New Major Sources are new facilities, which are also Major Sources. Since this is not a new facility, public noticing is not required for this project for New Major Source purposes.

As demonstrated in VII.C.7, this project is a Federal Major Modification. Therefore, public noticing for Federal Major Modification purposes is 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. There are no new emissions units associated with this project. Therefore public noticing is not required for this project for PE > 100 lb/day.

c. Offset Threshold

The SSPE1 and SSPE2 are compared to the offset thresholds in the following table.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>SSPE1 (lb/year)</th>
<th>SSPE2 (lb/year)</th>
<th>Offset Threshold</th>
<th>Public Notice Required?</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOₓ</td>
<td>2,118</td>
<td>3,222</td>
<td>20,000 lb/year</td>
<td>No</td>
</tr>
<tr>
<td>SOₓ</td>
<td>315</td>
<td>708</td>
<td>54,750 lb/year</td>
<td>No</td>
</tr>
<tr>
<td>PM₁₀</td>
<td>557</td>
<td>1,606</td>
<td>29,200 lb/year</td>
<td>No</td>
</tr>
<tr>
<td>CO</td>
<td>16,365</td>
<td>21,470</td>
<td>200,000 lb/year</td>
<td>No</td>
</tr>
<tr>
<td>VOC</td>
<td>661,153</td>
<td>661,912</td>
<td>20,000 lb/year</td>
<td>No</td>
</tr>
</tbody>
</table>

As detailed 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.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>SSPE2 (lb/year)</th>
<th>SSPE1 (lb/year)</th>
<th>SSIPE (lb/year)</th>
<th>SSIPE Public Notice Threshold</th>
<th>Public Notice Required?</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOₓ</td>
<td>3,222</td>
<td>2,118</td>
<td>1,104</td>
<td>20,000 lb/year</td>
<td>No</td>
</tr>
<tr>
<td>SOₓ</td>
<td>708</td>
<td>315</td>
<td>393</td>
<td>20,000 lb/year</td>
<td>No</td>
</tr>
<tr>
<td>PM₁₀</td>
<td>1,606</td>
<td>557</td>
<td>1,049</td>
<td>20,000 lb/year</td>
<td>No</td>
</tr>
<tr>
<td>CO</td>
<td>21,470</td>
<td>16,365</td>
<td>5,105</td>
<td>20,000 lb/year</td>
<td>No</td>
</tr>
<tr>
<td>VOC</td>
<td>661,912</td>
<td>661,153</td>
<td>759</td>
<td>20,000 lb/year</td>
<td>No</td>
</tr>
</tbody>
</table>

As demonstrated above, the SSIPEs for all pollutants were less than 20,000 lb/year; therefore public noticing for SSIPE purposes is not required.
2. Public Notice Action

As discussed above, public noticing is required for this project as it is a Federal Major Modification. Therefore, public notice documents will be submitted to the California Air Resources Board (CARB) and a public notice will be published in a local newspaper of general circulation 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.

*Proposed Rule 2201 (DEL) Conditions:*

The unit shall only be fired on PUC-regulated natural gas. [District Rule 2201] Y

Emissions rates from the natural gas-fired unit shall not exceed any of the following limits: 7ppmv NOx @ 3% O2 or 0.008 lb-NOx/MMBtu, 0.00285 lb-SOx/MMBtu, 0.0076 lb-PM10/MMBtu, 50 ppmv CO @ 3% O2 or 0.037 lb-CO/MMBtu, 0.0055 lb-VOC/MMBtu. [District Rules 2201, 4305, 4306, and 4320] Y

E. Compliance Assurance

1. Source Testing

Source testing will be required within 60 days of startup.

District Rules 4305, 4306 and 4320 require NOx 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. Source testing for Rules 4305, 4306, and 4320 also satisfies any source testing requirements for Rule 2201. No additional source testing is required.

2. Monitoring

No monitoring is required to demonstrate compliance with Rule 2201.

3. Recordkeeping

Recordkeeping is required to demonstrate compliance with the offset, public notification and daily emission limit requirements of Rule 2201. The following condition(s) are listed on the permit to operate:

{3246} 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 Rule 1070] Y
4. Reporting

No reporting is required to demonstrate compliance with Rule 2201.

F. Ambient Air Quality Analysis

Section 4.14 of this Rule requires that an ambient air quality analysis (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. Technical Services Division performed modeling for criteria pollutants CO, NOx, SOx and PM10. The results are as follows:

Criteria Pollutant Modeling Results*

The results from the Criteria Pollutant Modeling are as follows:

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>1 Hour</th>
<th>3 Hours</th>
<th>8 Hours</th>
<th>24 Hours</th>
<th>Annual</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO</td>
<td>Pass</td>
<td>X</td>
<td>Pass</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>NOx</td>
<td>Pass(^1)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Pass</td>
</tr>
<tr>
<td>SOx</td>
<td>Pass</td>
<td>Pass</td>
<td>X</td>
<td>Pass</td>
<td>Pass</td>
</tr>
<tr>
<td>PM(_{2.5})</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Pass(^2)</td>
<td>Pass(^2)</td>
</tr>
<tr>
<td>PM(_{10})</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Pass(^2)</td>
<td>Pass(^2)</td>
</tr>
</tbody>
</table>

*Results were taken from the attached spreadsheet
\(^1\)The project was compared to the 1-hour NO2 National Ambient Air Quality Standard that became effective on April 12, 2020, using the District's approved procedures.
\(^2\)The criteria pollutants are below EPA's level of significance as found in 40 CFR Part 51.165 (b) (2).

As shown by the AAQA summary sheet the proposed equipment will not cause a violation of an air quality standard for NOx, CO, PM10, or SOx. Refer to Attachment V of this document for the full AAQA report from Technical Services.

G. Compliance Certification

The compliance certification is required for any project, which constitutes a New Major Source or a Federal Major Modification.

Section 4.15.2 of this Rule requires the owner of a new Major Source or a source undergoing a Federal Major Modification to demonstrate to the satisfaction of the District that all other Major Sources owned by such person and operating in California are in compliance or are on a schedule for compliance with all applicable emission limitations and standards. As discussed in Sections VIII-Rule 2201-C.1.a and VIII-Rule 2201-C.1.b, this project does constitute a Federal, therefore this requirement is applicable. Included in Attachment VI is the Compliance Certification Statement.
H. Alternate Siting Analysis

Since the project will provide a new boiler to be used at the same location, the existing site will result in the least possible impact from the project. Alternative sites would involve the relocation and/or construction of various support structures on a much greater scale, and would therefore result in a much greater impact.

Rule 2520  Federally Mandated Operating Permits

This facility is subject to this Rule, and has received their Title V Operating Permit. Section 3.29 defines a significant permit modification as a “permit amendment that does not qualify as a minor permit modification or administrative amendment.”

The project is Federal Major Modification and therefore is also a Title V Significant Modification. As discussed above, the facility has applied for a Certificate of Conformity (COC); therefore, the facility must apply to modify their Title V permit with an administrative amendment, prior to operating with the proposed modifications. Included in Attachment VI is Bronco’s Title V Compliance Certification form. Continued compliance with this rule is expected.

Rule 4001  New Source Performance Standards

40 CFR Part 60, Subpart Dc applies to Small Industrial-Commercial-Industrial Steam Generators between 10 MMBtu/hr and 100 MMBtu/hr (post-6/9/89 construction, modification or, reconstruction).

The subject steam generators have a rating of 15.75 MMBtu/hr and is fired on natural gas. Subpart Dc has no standards for gas-fired steam generators. Therefore the subject steam generator is not an affected facility and subpart Dc does not apply.

Rule 4101  Visible Emissions

Per Section 5.0, 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 unit is fired on natural gas only and visible emissions are not expected.

Therefore, compliance with the requirements of this rule is expected.

Rule 4102  Nuisance

Section 4.0 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 Analysis**

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.

An HRA is not required for a project with a total facility prioritization score of less than one. According to the Technical Services Memo for this project (Attachment V, the prioritization score for the project was less than 1.0; however, the facility’s score was over 1.0. Therefore, a refined analysis was required and performed.

The acute and chronic hazard indices were below 1.0; and the cancer risk is less than 1 in a million. In accordance with the District’s Risk Management Policy, the project is approved without Toxic Best Available Control Technology (T-BACT). The following special condition is required:

The unit shall always operate at least 487 feet away from the nearest property boundary. [District Rule 4102]

**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.

F-Factor for NG: 8,578 dscf/MMBtu at 60 °F

PM_{10} Emission Factor: 0.005 lb-PM_{10}/MMBtu

Percentage of PM as PM_{10} in Exhaust: 100%

Exhaust Oxygen (O_2) Concentration: 3%

Excess Air Correction to F Factor = \( \frac{20.9}{20.9 - 3} = 1.17 \)

\[
GL = \left( \frac{0.0076 \text{ lb-PM} \times 7,000 \text{ grain}}{\text{MMBtu}} \right) / \left( 8,578 \text{ ft}^3 \text{ lb-PM / MMBtu} \times 1.17 \right)
\]

GL = 0.0053 grain/dscf < 0.1 grain/dscf

Therefore, compliance with the requirements of this rule is expected.

**Rule 4301  Fuel Burning Equipment**

Rule 4301 limits air contaminant emissions from fuel burning equipment as defined in the rule. Section 3.1 defines fuel burning equipment as “any furnace, boiler, apparatus, stack, and all appurtenances thereto, used in the process of burning fuel for the primary purpose of producing heat or power by indirect heat transfer”.

Section 5.0 gives the requirements of the rule.

A person shall not discharge into the atmosphere combustion contaminants exceeding in concentration at the point of discharge, 0.1 grain per cubic foot of gas calculated to 12% of carbon dioxide at dry standard conditions.
Bronco Wine Co. Inc
N-1665, 1123083

A person shall not build, erect, install or expand any non-mobile fuel burning equipment unit unless the discharge into the atmosphere of contaminants will not and does not exceed any one or more of the following rates:

- 200 pound per hour of sulfur compounds, calculated as sulfur dioxide (SO₂)
- 140 pounds per hour of nitrogen oxides, calculated as nitrogen dioxide (NO₂)
- Ten pounds per hour of combustion contaminants as defined in Rule 1020 and derived from the fuel.

<table>
<thead>
<tr>
<th>District Rule 4301 Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit</td>
</tr>
<tr>
<td>--------------------------</td>
</tr>
<tr>
<td>N-1665-514 (lb/hr)</td>
</tr>
<tr>
<td>Rule Limit (lb/hr)</td>
</tr>
</tbody>
</table>

The particulate emissions from the boiler will not exceed 0.1 gr/dscf at 12% CO2 or 10 lb/hr. Further, the emissions of SOx and NOx will not exceed 200 lb/hr or 140 lb/hr, respectively.

Therefore, compliance with the requirements of this rule is expected.

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

The unit is natural gas-fired with a maximum heat input of 15.75 MMBtu/hr. Pursuant to Section 2.0 of District Rule 4305, the unit is subject to District Rule 4305, Boilers, Steam Generators and Process Heaters – Phase 2.

In addition, the unit is also subject to District Rule 4306, Boilers, Steam Generators and Process Heaters – Phase 3.

Since emissions limits of District Rule 4320 and all other requirements are equivalent or more stringent than District Rule 4305 requirements, compliance with District Rule 4320 requirements will satisfy requirements of District Rule 4305.

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

The unit is natural gas-fired with a maximum heat input of 15.75 MMBtu/hr. Pursuant to Section 2.0 of District Rule 4306, the unit is subject to District Rule 4306, Boilers, Steam Generators and Process Heaters – Phase 3.

Since emissions limits of District Rule 4320 and all other requirements are equivalent or more stringent than District Rule 4306 requirements, compliance with District Rule 4320 requirements will satisfy requirements of District Rule 4306.
Rule 4320 – Advanced Emission Reduction Options for Boilers, Steam Generators, and Process Heaters Greater than 5.0 MMBtu/hr

This rule limits NOx, CO, SO2 and PM10 emissions from boilers, steam generators and process heaters rated greater than 5 MMBtu/hr. This rule also provides a compliance option of payment of fees in proportion to the actual amount of NOx emitted over the previous year.

The units in this project are all rated at greater than 5 MMBtu/hr heat input and are subject to this rule.

Section 5.1 NOx Emission Limits

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:

5.1.1 Operate the unit to comply with the emission limits specified in Sections 5.2 and 5.4; or
5.1.2 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
5.1.3 Comply with the applicable Low-use Unit requirements of Section 5.5.

Section 5.2.1 states that on and after the indicated Compliance Deadline, units shall not be operated in a manner which exceeds the applicable NOx limit specified in Table 1 of this rule, shown below. On and after October 1, 2008, units shall not be operated in a manner to which exceeds a carbon dioxide (CO) emissions limit of 400 ppmv.

<table>
<thead>
<tr>
<th>Category</th>
<th>Operated on gaseous fuel</th>
<th>Operated on liquid fuel</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NOx Limit</td>
<td>CO Limit</td>
</tr>
<tr>
<td>A. Units with a total rated heat input &gt; 5.0 MMBtu/hr to &lt; 20.0 MMBtu/hr, except for Categories C through G units</td>
<td>a) Standard Schedule 9 ppmv or 0.011 lb/MMBtu; or b) Enhanced Schedule 6 ppmv or 0.007 lb/MMBtu</td>
<td>400 ppmv</td>
</tr>
</tbody>
</table>

The proposed NOx and CO emissions limits are 7 ppmv NOx @ 3% O2 and 50 ppmv CO @ 3% O2.

Therefore, compliance with the emissions limits of Section 5.2 of District Rule 4320 is expected.
A permit condition listing the emissions limits will be listed on permit as shown in the DEL section above.

**Section 5.4 Particulate Matter Control Requirements**

Section 5.4.1 states that to limit particulate matter emissions, an operator shall comply with one of the options listed in the rule.

Section 5.4.1.1 provides option for the operator to comply with the rule by firing the unit exclusively on PUC-quality gas, commercial propane, butane, or liquefied petroleum gas, or a combination of such gases;

Section 5.4.1.2 provides option for the operator to comply with the rule by limiting the fuel sulfur content to no more than five (5) grains of total sulfur per hundred (100) standard cubic feet.

Section 5.4.1.3 provides option for the operator to comply with the rule by installing and properly operating an emissions control system that reduces SO2 emissions by at least 95% by weight; or limit exhaust SO2 to less than or equal to 9 ppmv corrected to 3 % O2.

The boiler will combust gas containing no more than 1 gr S/100 scf. Therefore, compliance with this section of the rule is expected.

**Section 5.5 Low-Use Unit**

This section discusses the requirements of low-use units. Vintage is not requesting low-use status; therefore, this section of the rule is not applicable to this project.

**Section 5.7 Monitoring Provisions**

Section 5.7.1 requires that permit units subject to District Rule 4320, Section 5.2 shall either install or maintain an operational APCO approved Continuous Emission Monitoring System (CEMS) for NOx, CO and O2, or implement an APCO-approved alternate monitoring.

Bronco will implement Alternate Monitoring Scheme A (pursuant to District Policy SSP-1105), which requires periodic monitoring of NOx, CO, and O2 concentrations at least once a month using a portable analyzer. The following conditions will be placed in the permits to ensure compliance with the requirements of this alternate monitoring plan:

The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. 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 monitoring has been performed within the last month. [District Rules 4305, 4306, and 4320] Y

If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after 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 has occurred, subject to enforcement action. 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 the performing the notification and testing required by this condition. [District Rules 4305, 4306, and 4320] Y

All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer’s specifications and recommendations or a protocol approved by the APCO. Emission 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 (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306, and 4320] Y

The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306, and 4320] Y

Section 5.7.6.1 requires that operators complying with Sections 5.4.1.1 or 5.4.1.2 shall provide an annual fuel analysis to the District unless a more frequent sampling and reporting period is included in the Permit To Operate. Sulfur analysis shall be performed in accordance with the test methods in Section 6.2. The following condition will be included on the ATC for compliance with this rule requirement:

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] Y

Section 5.8 Compliance Determination

Section 5.8.1 requires that 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 limits specified in Section 5.2. The emission limits selected to demonstrate compliance shall be specified in the source test proposal pursuant to Rule 1081 (Source Sampling). Therefore, the following condition will be retained or listed on the permits as follows:

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

Section 5.8.2 requires that 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. Unless otherwise 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. Therefore, the following permit condition will be listed on the permits as follows:

(2972) 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. Unless otherwise 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. For the purposes of permittee-performed alternate monitoring, emissions measurements may be performed at any time after the unit reaches conditions representative of normal operation. [District Rules 4305, 4306 and 4320]
Section 5.8.4 requires that for emissions monitoring pursuant to Sections 5.7.1 and 6.3.1 using a portable NOx 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 (5) readings evenly spaced out over the 15-consecutive-minute period. Therefore, the following condition will be on the ATC:

(2937) All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer’s specifications and recommendations or a protocol approved by the APCO. Emission 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 (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306 and 4320]

Section 5.8.5 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 (3) 30-consecutive-minute test runs shall apply. If two (2) of three (3) runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. Therefore, the following permit condition will be listed on the permit as follows:

(2980) 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 Recordkeeping

Section 6.1 requires that the records required by Sections 6.1.1 through 6.1.5 shall be maintained for five calendar years and shall be made available to the APCO and EPA 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. Therefore, the following permit condition will be listed on the permit as follows:

(3246) 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 Rule 1070]

Section 6.2, Test Methods

Section 6.2 identifies test methods to be used when determining compliance with the rule. The following conditions will be listed on the permits:

(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]

NOx 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] Y

Fuel sulfur content shall be determined using EPA Method 11 or Method 15. [District Rule 4320] Y

Section 6.3, Compliance Testing

Section 6.3.1 requires that each unit subject to the requirements in Section 5.2 shall be source tested at least once every 12 months, except if two consecutive annual source tests demonstrate compliance, source testing may be performed every 36 months. If such a source test demonstrates non-compliance, source testing shall revert to every 12 months. The following conditions will be included in the permits:

A source test to demonstrate compliance with NOx and CO emission limits shall be performed within 60 days of startup of this unit. [District Rules 2201 and 4320]

Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months (no more than 30 days before or after the required annual source test date). After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months (no more than 30 days before or after the required 36-month source test date). 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 2201, 4305, 4306 and 4320]

(110) The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]

Sections 6.3.2.1 through 6.3.2.7 address the requirements of group testing which is not proposed in this project. Therefore these sections are not applicable.

Conclusion

Conditions will be incorporated into the permit in order to ensure compliance with each section of this rule, see attached draft permits. Therefore, compliance with District Rule 4320 requirements is expected.

Rule 4801 Sulfur Compounds

A person shall not discharge into the atmosphere sulfur compounds, which would exist as a liquid or gas at standard conditions, exceeding in concentration at the point of discharge: 0.2 % by volume calculated as SO2, on a dry basis averaged over 15 consecutive minutes. The boiler will combust natural gas containing no more than 1.0 gr S/100 scf. Compliance is expected.

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 no other agency has or will prepare an environmental review document for the project. Thus the District is the Lead Agency for this project. Project specific impacts on global climate change were evaluated consistent with the adopted District policy – Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as the Lead Agency. The District’s engineering evaluation (this document – Attachment VII) demonstrates that the project includes Best Performance Standards (BPS) for each class and category of greenhouse gas emissions unit. The District therefore concludes that the project would have a less than cumulatively significant impact on global climate change.

District CEQA Findings

The District is the Lead Agency for this project because there is no other agency with broader statutory authority over this project. The District performed an Engineering Evaluation (this document) for the proposed project and determined that the activity will occur at an existing facility and the project involves negligible expansion of the existing use. Furthermore, the District determined that the activity will not have a significant effect on the environment. The District finds that the activity is categorically exempt from the provisions of CEQA pursuant to CEQA Guideline § 15031 (Existing Facilities), and finds that the project is exempt per the general rule that CEQA applies only to projects which have the potential for causing a significant effect on the environment (CEQA Guidelines §15061(b)(3)).

IX. Recommendation

Compliance with all applicable rules and regulations is expected. Pending a successful NSR Public Noticing period, issue ATC N-1665-514-0 subject to the permit conditions on the attached draft ATC in Attachment VIII.
X. Billing Information

<table>
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Attachments

I. Manufacturer’s Information on Boiler
II. Emissions Profiles
III. BACT Analysis
IV. ERC Agreement
V: HRA and AAQA Modelling
VI: Title V Compliance Certification Form and Statewide Compliance Statement
VII: BPS Analysis
VIII: Draft ATCS
ATTACHMENT I
Manufacturer’s Details
Clayton's Low NOx - Low CO Fiber Metal Burner (FMB) system achieves low emissions through a combination of technologies including improved fuel and air mixing, ultra lean flame design and a low flame residence time. The fiber metal allows for a very short flame length which results in ultra low NOx emissions.

The system consists of a high pressure combustion air blower, fuel/air premixing chamber, modulating air/fuel damper, premix plenum, fiber metal burner manifold and an advanced micro-ratio adjustable fuel flow control system. Air and gas are thoroughly mixed in the premix chamber and air/fuel damper and then introduced into the combustion chamber via the premix plenum and burner manifold.

The system is automatically controlled and is capable of a nominal 4:1 turn-down ratio.

The Clayton low emissions fiber metal burner is available for use on natural gas and propane gas only in sizes from 50 BHP to 750 BHP.

Typical emissions are 9 ppm NOx and 50 ppm CO, or lower, corrected to 3% O2.
Clayton INDUSTRIES

Your Single Worldwide Source For Steam Technology

- STEAM GENERATORS & WASTE HEAT BOILERS
- FEEDWATER COMPONENTS
- CHEMICALS
- SERVICE

The Inside Story on Advanced Steam Technology...
Increasing the Productivity of Steam

Making steam is not difficult.
In a manufacturing environment, however, the challenge lies in harnessing the energy of steam in a manner that makes it available quickly, cost-effectively and safely.

This is where Clayton Industries excels.
The design of conventional boilers has changed little since the 19th Century. In simplistic terms, water in a vessel or tube is heated by surrounding hot gases. After sufficient heating, the resultant steam is discharged.

All Clayton steam generators and waste heat boilers employ more sophisticated principles: Controlled Circulation and Counterflow heat transfer. A pump continuously supplies feed water to a helical coil heat exchanger, which transfers its heat to the water. The flow of feedwater is counter to the flow of combustion gases, an engineering principle that contributes to high fuel-to-steam efficiency. Water leaving the heat exchanger passes through a mechanical separator where the liquid and vapor are separated. Steam exits the separator to the steam header. The principles of Controlled Circulation and Counterflow and the resultant low water content result in many of the advantages provided by Clayton Steam Generators.

Making steam is simple. Making steam with maximum efficiency is Clayton's specialty.
Performing With Drill Team Precision

Each component of a Clayton steam generator is designed for optimal utility. The result is a remarkably efficient unit that functions as smoothly and precisely as a drill team. A heavy-duty positive displacement diaphragm pump provides precise water control.

Superbly engineered and ruggedly constructed, a Clayton pump is pack-less and seal-less: features that contribute to its remarkable dependability.

A single high-grade carbon steel continuous-coil heat exchanger employs a staggered configuration and spacing of coil sections to help ensure turbulent and high velocity gas flows that facilitate high rates of heat transfer.

A feedwater cooled combustion chamber extracts radiant energy and maintains a cool outer shell.

The third critical component in a Clayton steam generator is a fixed-vane separator that yields the driest saturated steam available. Exceptional water separation is achieved at all steam production rates when high velocities of steam and water pass through the separator nozzle. A steam trap diverts excess water to a feedwater receiver where it is used to preheat feedwater.

Other components include a burner and blower assembly that assure complete combustion and delivery of maximum heat to the coil.

Staggered tube spacing creates turbulent gas flow

Varying tube spacing ensures high gas velocity
Efficiency by Design
Fuel Efficient, Quality Steam, Low Blowdown

The Clayton focus on innovation in steam generation technology pays off for users in an abundance of very practical ways ... benefits that translate into improved performance on the production or processing line, and in measurable cost savings as well.

As a result of unique design and easily proven operational advantages, Clayton steam generators are noted for fuel efficiency, rapid start-ups, compact size and reduced weight, delivery of high quality steam, safety, and fuel burning versatility. Clayton generators run on natural gas, light oil, heavy oil, propane, bio-gas, hydrogen, or combinations of these fuels.

Another benefit of innovative design: reduced blowdown. The amount of water removed from the system to maintain an acceptable level of total dissolved solids (TDS) is greatly reduced compared to conventional boilers. This results in significant savings in fuel, water and chemicals – savings in blowdown are typically 90% or greater.

Clayton delivers efficiency by design.

Wide Range of Sizes, Uses
Clayton steam generators and fluid heaters are available in 15 sizes, ranging from 10 to 700 Boiler Horsepower (BHP), 100 to 6800 KW and producing from 345 to 24,150 pounds of high quality steam per hour. Steam design pressures range up to 3,000 psig. Clayton Superheat Units deliver superheated steam and are also available in a variety of sizes, and for a range of steam pressures and temperatures. Clayton equipment provides steam for many purposes, including processing, building heating and equipment cleaning.

Typical Efficiency vs Firing Rate, Gas Fired

Beijing CCTV Installation.
Start Fast, Finish Strong
Fast Start, Rapid Response

Efficiency is proven on the factory floor. Among the operating features of Clayton steam generators that are valued most by industrial customers are quick starts and rapid response to changing load demands.

Where conventional boilers require extended start-ups, a Clayton steam generator can be brought to a full head of steam in as little as five minutes. The quick start and response capabilities result primarily from the low water content, forced circulation and helical coil design.

What's more, corporations worldwide frequently favor multiple Clayton generators over a single, high capacity conventional boiler. Why? Because Clayton units, with their small "footprints," can be added to a production line with minimal disruption. Steam remains available when a single unit is down for maintenance or repair. Best of all, fluctuating loads are not a problem. A single Clayton generator can be fired to meet low demand, and others brought on line rapidly as steam requirements increase.

Clayton steam generators are conclusive proof that time saved is fuel saved and time and fuel cost money.
Preventing Problems Boosts Efficiency

Scale and Soot Control

Clayton recognizes that controlling familiar steam production problems contributes to production or processing line efficiency. That's why a Clayton steam generator has features designed to inhibit the build-up of scale and soot.

Because scale and soot act as insulators that inhibit heat transfer, both result in wasted fuel. One-sixteenth of an inch of scale requires 15% more fuel; 1/32 of an inch of soot requires 12% more. Thicker build-ups affect fuel consumption more drastically.

Further, a Clayton steam generator provides an automatic indication of scale build-up: an increase in feed pump pressure. When a pressure increase is noted, the operator can take immediate corrective action. In addition, Clayton offers an optional built-in steam soot-blower that permits fast, easy cleaning of the heating surface.

Two 100 BHP steam generators mounted on a single skid with the feedwater components operating in a U.S. candy manufacturing plant.

Three 600 BHP and one 300 BHP steam generators in a midwestern utility plant.
Consider the Advantages of Small
Low Weight/Space, Safety

"Good things come in small packages," right? And if proof is ever needed, it's as close as the nearest Clayton steam generator.

Because every Clayton unit, from smallest to largest, incorporates counterflow and controlled circulation design, they occupy considerably less floor space than conventional boilers of equal capacity. Additionally, a Clayton steam generator is considerably lighter than its conventional counterpart. The weight difference can be as much as 75%.

The economic advantages to the user are apparent. Clayton steam generators can be installed more quickly. Their small footprint requires less space on the plant floor or utility room.

Another advantage: The Clayton design provides unparalleled safety. There has never been, nor can there be, a steam explosion of a Clayton steam generator.

Clayton steam generators: Smaller size. Bigger results.

Three 250 BHP, 450 psig, steam generators in a steel vacuum de-gassing application.

100 BHP SigmaFire packaged boiler room.

A Single Source Satisfies
Heat Recovery Delivers Additional Cost Benefits

In a great many applications, heat is a necessity. In any application, wasted heat is wasted money. That's why Clayton offers a complete line of heat recovery systems used worldwide in marine, industrial and power plant operations.

Recovering heat from engines, turbines, ovens and furnaces, Clayton Waste Heat Steam Generators (WHSGs) and Exhaust Gas Boilers (EGBs) work with input temperatures as low as 480°F (250°C), and as high as 3,500°F (1,925°C). Available in a variety of steam/water flow configurations, WHSGs and EGBs, like the company's standard steam generators, employ the proven Counterflow and Controlled Circulation heat exchanger concept. They are equally simple, durable and reliable.

Co-generation makes extensive use of this Clayton technology. Here EGB systems recover heat from reciprocating engines and put it to work meeting a factory's processing or production needs.

Recovering heat for productive purposes: another Clayton specialty.
Among the Reasons A Single Source Satisfies

A single source satisfies in a multitude of ways. Among the variety of creatively designed products and responsive services designed to meet the special needs of industry:

- **SigmaFire™**, a line of steam generators in the 10 to 200 boiler horsepower range (100 to 1,940 KW). SigmaFire steam generators use proven Clayton design features in small, light, quiet-running modular units that are quickly and easily installed.

- Emissions control units designed to meet whatever your emissions restrictions may be. These optional systems can reduce NOx levels to as low as 9 ppmv and CO to 50, depending on the particular generator and the emission control system chosen.

- Fluid heaters that produce steam in a manner that frequently eliminates the need for licensed boiler operators, that may be required by the operation of conventional boilers.

- Rental skid-mounted steam generation systems configured to meet emergency or temporary steam requirements. This popular program includes packages from 30 to 300 BHP.

- **CompuSteam PLC Control Systems** for automated steam generator control, standard on many models. This system offers numerous advantages, including a simplified panel, improved steam pressure management, and compatibility with remote monitoring and plant control systems.

- Feedwater analysis and treatment that prolongs equipment life and helps assure optimal steam production. Specially trained Clayton personnel can recommend a program customized to meet your requirements and arrange delivery of the only chemicals compounded specifically for Clayton steam generators.

---

Fiber Metal Low NOx Burner

**A Single Source Satisfies**
You're Covered by Clayton Service Every Step of the Way

Need help? We'll be right there. Wherever "there" may be.

Clayton delivers factory-direct service throughout North America, Mexico and most of Western Europe, and assistance is available in many other parts of the world through an extensive network of distributors.

Clayton service is available 24 hours per day, 7 days per week. As a customer you'll gain the benefits of service that continues through installation, training and start-up. Want supplemental training for your operators? That's available, too. Preventive maintenance contracts that help keep your equipment operating at peak efficiency can be tailored to your specific needs.

Further, Clayton's Chemical Division offers analysis and treatment of feed-water, essential for maximizing steam production and prolonging equipment life. You'll receive a scientifically prepared optimal treatment program, and Colliguard chemicals formulated specifically for Clayton steam generators.

You're covered in emergencies, too, with rental generators available in the United States, Mexico and Western Europe. Often you can have steam on-line within hours after a unit arrives on site.

Around the world and around the clock, Clayton service is happy to help.

Clayton's friendly customer service is available 24 hours per day, 365 days per year.

Clayton also supplies a complete line of boiler feedwater treatment chemicals.
Serving Major Industries

Since 1930 Clayton steam generators have met the needs of a multitude of industries and facilities around the world, including:

- Aerospace
- Animal Feed
- Automotive
- Beverage
- Chemical
- Construction
- Dairy
- Food Processing
- Hospitals/Hotels
- Marine & Offshore
- Mining
- Paper
- Petroleum
- Pharmaceutical
- Power Generation Plants
- Rubber
- Steel
- Textile
- Tobacco
- Wire & Cable
- General Manufacturing

Two 300 BHP steam generators in a Romanian soap plant.

Three 350 BHP steam generators in a Spanish pharmaceutical plant.

A 250 BHP steam generator in a U.S. food manufacturing plant.

A Single Source Satisfies
We're Here to Help

Call on us for individualized applications engineering help based on the experience we've gained since 1930.

Visit our Web site for informative technical specifications:

www.claytonindustries.com

AROUND THE GLOBE: A Single Source Satisfies

Clayton
INDUSTRIES

Your Single Source for Steam Technology Since 1930

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www.claytonindustries.com

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Clayton de France S.A.R.L.
Clayton Sales & Service Canada

World Leaders in Precision Steam Generators, Fluid Heaters, Heat Recovery Systems and Customer Service

Printed in U.S.A. 9/2006
The Advantages of the Clayton Super Economizer (SE) include:

**IMPROVED EFFICIENCY**
Provides an additional 3% to 4% thermal efficiency with additional 35% heating surface.

**RAPID PAYBACK**
As little as 15 to 18 months, depending upon fuel costs and operation.

**SIMPLE INSTALLATION**
No intervening stack connectors or additional support structure required.

**COMPACT DESIGN**
Integrally mounted to reduce installation costs and space requirements.

**AVAILABILITY**
Available on new units, 60 BHP and above, or in field retrofit kits.

Steam Generator Model SE with Super Economizer Installed
The Clayton Super Economizer (SE) coil assemblies are constructed in a similar fashion to the main heating coil section. The typical SE coil assembly has six (6) coils enclosed in a carbon steel jacket surrounded by insulation and a sheet metal outer shell. Each coil is a spirally wound, tube section constructed of SA178 carbon steel tubing. The assembly is welded with clips and spacers in a monotube coil design to optimize heat transfer between combustion gas and water flow. Water flow in the SE section is counter to the exhaust gas flow, with the feedwater entering at the top and exiting at the bottom. Exhaust gases flow from the bottom to the top.

On a Steam Generator, the SE section is mounted on top of the main heating coil and adds approximately 15” to 36” to the overall height, depending on the model selected. No special supports are required as the weight of the SE section is supported by the main heating coil. SE sections are factory mounted and tested with the unit. Depending upon height restrictions for shipment, the SE section can be removed for shipment and reinstalled on site by the installing contractor.

SE sections increase the heating surface by approximately 35% and can increase unit thermal efficiency by 3% to 4%. By using exhaust gas flow to heat the feedwater going to the main heating coil, an SE section will decrease stack temperature by a nominal 100°F to 150°F at full load, depending on the model selected.
17477 MURLFY STREET, CITY OF INDUSTRY, CALIFORNIA 91744 TEL: (626) 672-0709 FAX: (925) 672-4866

To: Bronco Wine Company
6342 Bystrum Rd
Ceres, CA 95307

Paul Franzia
209-556-6731 tel.
paul.franzia@broncowine.com

Terms: 20% with Order, 70% prior to shipment, 10% balance net 30 days
Subject to Credit Approval

FOB: Factory - Prepaid and Added
Approx. Ship Date: 12 weeks
After Receipt and Acceptance of Order

REF: SSEG-404-FMB-1 Steam Generator with Feed water Components

1 MODEL SSEG404-1-FMB STEAM GENERATOR

Rated Boiler Horsepower: 400 BHP
Equivalent Steam Output: 13,800 pph
(from and at 212° F feedwater and 0 psig steam)
Design Pressure: 150 psig
Operating pressure: 125 psig
Safety Valve Set: 150 psig
Fuel Specification: Natural Gas (1,000 BTU/CF)
Required Minimum Gas Pressure (at gas train inlet): 5 psig
Electrical Requirements: Voltage 460/60/3

Steamed per ASME Section I and National Electric Code
Hartford Tested and Inspected

STEAM GENERATOR SHALL HAVE THE FOLLOWING COMPONENTS
MOUNTED ON A SINGLE FRAME:
Monotube Heating Coil with Integral Burner Base
95.5% Quality Steam Separator,
ASME stamped w/Safety Relief Valves
Natural Gas Fuel Train
and Modulating Low NOx, Fiber Metal Burner w/ 4:1 turndown ratio
Forced Draft Blower and Motor
Cooling Air Blower and Motor
Two (2) 50% Positive Displacement Main Feedwater Pumps
and Variable Speed Motor (on separate skid)
Control Cabinet with Operator Interface Keypads
Compusteam PLC Controls
Hour Meter and Alarm Horn
Feedwater, Steam & Trap Pressure Gauges (locally mounted)

(Continued on Following Page)

THIS QUOTATION EXPIRES IN 30 DAYS AND IS SUBJECT TO THE TERMS AND CONDITIONS ATTACHED. SUCH TERMS AND CONDITIONS LIMIT ACCEPTANCE OF THIS QUOTATION TO THE TERMS CONTAINED HEREBIN. EXCLUDES ANY ADDITIONAL TERMS PROPOSED BY THE PURCHASER, AND PROVIDES THAT ANY ORDER BY PURCHASER BASED ON THIS QUOTATION (OR ACCEPTANCE BY PURCHASER OF THE GOODS DESCRIBED HEREBIN) SHALL CONSTITUTE AN UNCONDITIONAL ACCEPTANCE BY PURCHASER OF EACH AND ALL OF THE TERMS AND CONDITIONS CONTAINED HEREBIN, AND A WAIVER BY PURCHASER OF ANY CONFLICTING OR ADDITIONAL PROVISIONS CONTAINED IN ANY OR PURCHASER'S DOCUMENTS RELATING TO THIS TRANSACTION.

Acceptance: This Quotation is Accepted by:

[Signature]

Chip Maguire, Sr. Thermal Sales Engineer 5/22/2012

Name: ____________________________
Title: ____________________________
Date: ____________________________

WORLDWIDE SALES AND SERVICE: STEAM GENERATORS - EXHAUST GAS & WASTE HEAT BOILERS
COMPLETE WATER TREATMENT
Fibermetal Ultra-Low NOx with radiant sneck technology delivers less than 9 ppmv of NOx output and less than 50 ppmv CO output.

99.5% Quality Fixed Vane Steam Separator in lieu of standard 98% Quality Tangential Steam Separator. Design offers dryer steam output and improved separation during load swings.

Pilot Gas Regulator, for 5-10 psig inlet pressure

Main Gas Regulator, for 5-10 psig inlet pressure

Installation Valve Kit: includes Coll Gravity Drain, Coil Drain (back flow), Separator Drain and Trap Outlet Valve.

Feedwater Valve and Strainer Kit, includes shutoff valve and V-type strainer. Shipped loose to be mounted in the inlet piping prior to the main feedwater pump.

Steam Header Valve for manual opening and closing of the steam supply to the the main header system.

Back Pressure Regulator. Provides stable operation of any steam generator when loads fluctuate or during start up. Shipped loose for mounting in customer's steam piping.

Auxiliary Relay dry contact for activation of booster pumps and chemical pump circuit when power is applied to the unit.

TEFC Modification Kit, includes TEFC motors and water tight ignition transformer box. Modification provides an extra degree of protection against dirt and dripping water. Note this modification does not make the unit suitable for outdoor, un-protected installation.

Ethernet connectivity module for remote access to control system parameters. EMI module requires software to access data and display it.

Remote Start/Stop option consists of an additional relay, solenoid operated dump valve and programming of a post-fill timer circuit. A “Dry contact” signal is required from the customer to either remotely start or stop the unit. Unit must be set up for wet lay-up condition.

Auxiliary Pressure Control Systems, including auxiliary steam pressure sensor, separator dump valve and post run timer.

Super Economizer Coil Section, Provides additional heating surface to improve combustion efficiency to 84 per cent. Supported by main heating section, includes outer shell and interconnecting piping. Economizer section is covered by Clayton's 5 year coil warranty.

Dual Steam traps on Steam separator for smoother trap return flow on D/A feedwater systems.

Feedwater Pump Head Cooling. Includes pump modifications for water cooling of pump heads. For use with SCR, Deaerator and high pressure systems. Customer must cooling water supply lines, except on generator skid packages.

Steam Header Check Valve to isolate two units from each other during operation.

Subtotal: $225,613.00

Deaerator Tank with Trim Kits Assembly includes: Level controller, make-up control valve, overflow drain, high and low level alarm contacts, safety relief valve(s), vent valve, water level gauge glass and cocks, pressure gauge with syphon pipe and clock, thermometer, back pressure regulator, and pressure reducing valve. ASME Coded and National Board Stamped for 50 psig. Suitable for up to 600 connected BHP.

(Continued on Following Page)
2 Booster Pump(s), to provide sufficient NPSH for main positive displacement feedwater pump(s), vertical, in-line, multi-stage centrifugal with stainless steel components and motor(s). Suitable for up to 500 connected BHP, 460 V/ 60Hz/ 3 ph.

1 Feedwater Sample Cooler Assembly. For cooling of feedwater samples prior to testing, normally shipped loose for mounting by customer, except on generator or water skid package were it is factory mounted in piping.

1 Blowdown Tank with automatic discharge temperature control valve, for collection and cooling of blowdown water. Constructed per ASME, National Board stamped and approved.

1 Chemical Treatment Startup package which includes:
5 gallon pail - Collguard 1 for boil out procedure
5 gallon pail - Collguard 2 for metal passivating procedure
Technical services for application of Coll Guard 1 & 2
55 gallon drum - Coll Guard 200, 300 or 400 for scale & corrosion protection
On-site Water Treatment Training Seminar
Chemical treatment start-up service
Implementation of Clayton's AWARE Program
Customized Chemical Operations Manual

1 Liquid Chemical Injection Pump, positive displacement with ceramic ball valves & Teflon seats. Pump capacity: 14 g.p.d., 115 V/50-60hz/1ph.

Subtotal: $ 54,677.00

Total of SSEG-404-FWB Steam Generator Feedwater Components & Startup Package: $ 274,450.00

Optional items:

1 Upgrade to PLC Level II sensors to include: stack temperature, coil temperature, feedwater inlet temperature and pressure.

Subtotal: $ 2,200.00

1 Clayton Industries provides preventative maintenance programs tailored to fit your company's specific needs. The following is a proposed Annual Preventive Maintenance and Inspection contract by factory direct service technician. The contract would include: Twelve visits. During four visits, a multi-point check of mechanical and electrical components to optimize the operation and reliability of your boiler system will be performed (including emission testing). Eight extra (monthly visits) are included for emission tests only for SJAPCD monitoring requirements. Also, included is operator training and consultation as needed.

Subtotal: $ 4,840.00

NOTES:

1) Freight, Sales Tax, and any other applicable fees are extra.

2) Time required from placement of order to actual shipping date shown on first page is approximate. Actual shipping date will be based on receipt and acceptance of order, receipt of down payment and full engineering details to complete order entry. If approval drawings are required, shipment time will be from the date of receipt of final drawing approvals.

3) Pre-installation consultation and site survey, equipment check-out, Start-up and personnel training (at time and place of start-up) for up to two consecutive normal working days for installations within 150 miles of an authorized Clayton Service branch is included in the base price. (Normal working hours are 8:00 AM to 5:00 PM Monday through Friday). If the location is outside 150 miles, there will be additional charges for travel and living expenses. If additional labor time is required or if work is to be performed outside normal working hours, additional time would be billed at prevailing Clayton service rates.

(Continued on Following Page)

Terms and Conditions at the end of Quote
Factory fire-testing: One (1) Set of Standard Plan-Installation and Electrical drawings, Installation, Feedwater Treatment, and Operation and Maintenance manuals. Documentation will be issued in electronic Adobe "PDF" file format. Drawings will also be issued in AutoCAD "DWG" format where available. CD will be supplied with final submittal. Paper copies require an additional charge per set.

Clayton warrants its equipment to be free from defects in material and/or workmanship for a period of 1 year from date of original installation, or 15 months from date of shipment from the factory, whichever is shorter. Equipment installed in the continental U.S. also includes CLAYTON'S FIVE (5) YEAR LIMITED COIL WARRANTY. This warranty covers defects in material and/or workmanship, and is based on an analysis by an independent engineering company for metallurgical analysis. Warranty covers parts only, labor is not included.
Terms & Conditions

1. MODIFICATION, AMENDMENT, DELETION

This document is subject to modification, amendment, or deletion by Coyle and/or licensors without notice. Any changes to this document will be posted on the Coyle website. Coyle reserves the right to modify, amend, or delete any information contained herein. In the event of any conflict between this document and Coyle’s website, the information on the website shall govern.

2. PRICES AND TERMS OF SALE

a) All sales are subject to the price current at the time of order confirmation as reflected in Coyle Price List. Subject to change without notice.

b) All prices quoted include freight transportation. Coyle will not be responsible for any delays in delivery or any other charges incurred by the carrier.

3. PAYMENT TERMS

a) Payment for all orders must be made in advance by bank draft, certified check, or credit card. Coyle reserves the right to require payment in advance for orders over a certain amount.

b) Payment is due within 30 days of invoice date. Failure to make payment on time may result in the suspension of future orders.

4. CANCELLATION, ALTERATIONS AND RETURNS

Coyle reserves the right to cancel or alter any order at any time, for any reason, without notice. Coyle may cancel an order if it is unable to fulfill the order due to unforeseen circumstances.

5. PATENT INFRINGEMENT

Coyle shall not be held liable for any claims arising from the use of the products sold by Coyle. Coyle shall not be required to indemnify or hold Coyle harmless against any claims or lawsuits arising from the use of the products sold by Coyle.

6. SECURITY

Coyle shall not be responsible for any information or other security breaches that may occur during the use of the products sold by Coyle. Coyle shall not be responsible for any claims or losses arising from such breaches.

7. LIMITATION OF LIABILITY

Coyle shall not be liable for any damages, losses, or expenses that may arise from the use of the products sold by Coyle. Coyle shall not be liable for any indirect, incidental, special, or consequential damages.

8. GOVERNING LAW

This document shall be governed by the laws of the State of California, without regard to its principles of conflict of laws.

9. ENTIRE AGREEMENT

This document constitutes the entire agreement between Coyle and the customer. It supersedes all prior agreements, understandings, and communications between Coyle and the customer.

10. MODIFICATIONS

Coyle reserves the right to modify these terms and conditions at any time. The most current version of these terms and conditions shall govern all orders placed by the customer.

11. ATTORNEY'S FEES

In the event of any legal action or arbitration arising out of this agreement, the prevailing party shall be entitled to recover its reasonable attorney's fees and costs.

12. CAPTIONS

The captions in this document are intended for convenience only and do not define or limit the provisions of this agreement.

13. APPLICABLE LAW

The laws of the State of California shall govern this agreement. Any disputes arising under this agreement shall be resolved in the state or federal courts located in the county or state where Coyle is located.

14. SEVERABILITY

If any provision of this agreement is found to be invalid or unenforceable, such provision shall be deemed severable and the remaining provisions shall remain in full force and effect.

15. SIGNATURE

By signing this document, the customer agrees to be bound by its terms and conditions.

Coyle

Signature

Date
Top Ten Reasons To Buy A Clayton Steam Generator

The Clayton Steam Generator has been designed to provide high quality, dry steam rapidly and efficiently. The patented controlled circulation and counterclockwise heat exchanger design is the heart of the Clayton Steam Generator. The Clayton design offers substantial fuel savings and size/weight advantages. Clayton Steam generators are available to burn natural gas and fuel oil or a combination of the two. Sizes range from 20 to 600 bhp with design pressures of up to 2600 psi.

The Clayton design is inherently safe, with no possibility of a hazardous steam explosion and a flawless 70 year safety record. When you specify Clayton for your complete steam system you gain the advantage of a highly experienced engineering team and factory-direct service for ongoing support. We are proud to be able to provide you with the most fuel efficient and thoroughly proven steam generation system available.

1. Rapid Start-Up The Clayton Steam Generator can go from cold to making steam in less than 15 minutes.

2. Compact Design A Clayton Steam Generator requires only 1/3 the floor space of a traditional boiler.

3. Fuel Efficiency The Clayton design produces higher fuel-to-steam efficiencies even when operated at less than the full firing rate.

4. High Quality Steam The fixed vane steam separator yields the driest saturated steam available in the industry today - typically less than 0.5 percent at all loads.

5. Factory Direct Clayton provides factory direct sales and service with branch offices located in major metropolitan areas.

6. Unsurpassed Safety The unique Clayton design is inherently safe with no possibility of a hazardous steam explosion.

7. Packaged Systems The Clayton Steam generator is available as a complete skidded system with all components within the skid pre-wired and pre-plumbed for easy installation. Skidded systems can include the Steam Generator, feedwater pump, feedwater tanks, water treatment and blowdown tank.

8. Single Source Clayton designs, manufactures and supplies complete systems including hotwells, deaerators, blowdown tanks, water softeners and our own range of feedwater chemicals specially formulated for the Clayton Steam Generator.

9. Low Emissions Clayton offers "state of the art" low NOx - low CO burners as well as flue gas recirculation systems to meet strict air quality standards throughout the country.

10. Waste Heat Recovery All of the heat in the gas above 390 Deg F can be recovered and converted into either steam or hot water.

Clayton Industries, Inc.
4213 N. Temple City Blvd., El Monte, CA 91731
Tel: 800-423-4585 Fax: 626-442-1701
www.claytonindustries.com
E-mail: sales@claytonindustries.com
ATTACHMENT II
Emissions Profile
<table>
<thead>
<tr>
<th>Equipment Pre-Baselined: NO</th>
<th>NOX</th>
<th>SOX</th>
<th>PM10</th>
<th>CO</th>
<th>VOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential to Emit (lb/yr)</td>
<td>1104.0</td>
<td>393.0</td>
<td>1049.0</td>
<td>5105.0</td>
<td>759.0</td>
</tr>
<tr>
<td>Daily Emissions Limit (lb/day)</td>
<td>3.0</td>
<td>1.1</td>
<td>2.9</td>
<td>14.0</td>
<td>2.1</td>
</tr>
<tr>
<td>Quarterly Net Emissions Change (lb/quarter)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q1:</td>
<td>276.0</td>
<td>98.0</td>
<td>262.0</td>
<td>1276.0</td>
<td>189.0</td>
</tr>
<tr>
<td>Q2:</td>
<td>276.0</td>
<td>98.0</td>
<td>262.0</td>
<td>1276.0</td>
<td>190.0</td>
</tr>
<tr>
<td>Q3:</td>
<td>276.0</td>
<td>99.0</td>
<td>262.0</td>
<td>1276.0</td>
<td>190.0</td>
</tr>
<tr>
<td>Q4:</td>
<td>276.0</td>
<td>99.0</td>
<td>263.0</td>
<td>1277.0</td>
<td>190.0</td>
</tr>
<tr>
<td>Check if offsets are triggered but exemption applies</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Offset Ratio</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quarterly Offset Amounts (lb/quarter)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q1:</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Q2:</td>
<td></td>
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<tr>
<td>Q3:</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Q4:</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
ATTACHMENT III
BACT Analysis

Top Down BACT Analysis for the Boiler

1. BACT Analysis for NO\textsubscript{x} Emissions:
   
a. Step 1 - Identify all control technologies

   BACT Clearinghouse Guideline 1.1.1 was rescinded as requirements were less stringent than District Rule 4320 which was adopted on October 16, 2008. Therefore, the current BACT requirements reflect District Rule 4320 Emissions Limits for steam generators with heat input ratings greater than 5 MMBtu/hr and less than 20 MMBtu/hr. The Standard and Enhanced Schedule options of 9 ppm @ 3% O\textsubscript{2} and 6 ppm @ 3% O\textsubscript{2} (listed in the table below) are considered Achieved in Practice and Technologically feasible BACT requirements, respectively.

<table>
<thead>
<tr>
<th>Rule 4320 Emissions Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
</tr>
<tr>
<td>Operated on gaseous fuel</td>
</tr>
<tr>
<td>Operated on liquid fuel</td>
</tr>
<tr>
<td>NO\textsubscript{x} Limit</td>
</tr>
<tr>
<td>---------------------------</td>
</tr>
<tr>
<td>A. Units with a total rated heat input &gt; 5.0 MMBtu/hr to &lt; 20.0 MMBtu/hr, except for Categories C through G units</td>
</tr>
<tr>
<td>a) Standard Schedule</td>
</tr>
<tr>
<td>9 ppmv or 0.011 lb/MMBtu; or</td>
</tr>
<tr>
<td>b) Enhanced Schedule 6 ppmv or 0.007 lb/MMBtu</td>
</tr>
</tbody>
</table>

Therefore, the following are possible control technologies:

1) 6 ppmvd @ 3% O\textsubscript{2} with SCR – Technologically Feasible
2) 9 ppmvd @ 3% O\textsubscript{2} – Achieved-in-Practice

b. Step 2 - Eliminate technically infeasible options

There are no technically infeasible options to eliminate from step 1.

c. Step 3 - Rank remaining options by control effectiveness

1) 6 ppmvd @ 3% O\textsubscript{2} with SCR – Technologically Feasible
2) 9 ppmvd @ 3% O\textsubscript{2} – Achieved-in-Practice
d. Step 4 - Cost Effectiveness Analysis

A cost effective analysis is required for technologically feasible control options that are not proposed. The applicant is proposing a NOx limit of 7 ppmvd @ 3% O2; therefore, a cost effective analysis is required for the 6 ppmvd option (SCR).

SCR Cost Effectiveness Analysis

The SCR installation cost were obtained from project C-3280, 1121211 (Golden Valley Grape Juice) for a 19.5 MMBtu/hr boiler. Please note that project C-3280, 1121211 was received on May 23, 2012 and therefore the cost estimate is considered current (< than 1 year old). The installed cost estimate is $127,844. A detailed cost breakdown follows. An annual operating cost (ammonia purchase, maintenance, etc) of $130,000/yr was provided for project S1327, 1123645 which was received September 28, 2012 for a 85 MMBtu/hr steam generator.

The equivalent cost for a 15.75 MMBtu/hr boiler is obtained from the 6/10th rule as follows:

\[
\text{Cost} = (15.75/19.5)^{0.6} \times 127,844 \\
= $112,467
\]

Equivalent Annual Capital Cost (ACC, Capital Recovery)

\[
A = \frac{P (1+i)^n}{(1+i)^n - 1} \quad \text{where;}
\]

\[
A = \text{Equivalent Annual Control Equipment Capital Cost} \\
P = \text{Present value of the control equipment, including installation cost} \\
i = \text{interest rate (use 10%, or demonstrate why alternate is more representative of the specific operation).} \\
n = \text{equipment life (assume 10 years or demonstrate why alternate is more representative of the specific operation.)}
\]

Where

\[
A = P \times 0.163 \\
P = $112,467 \\
i = 10\% \\
n = 10 \text{ years}
\]

\[
A = 112,467 \times 0.163 \\
= $18,332/yr
\]

The industry standard (IS) assumed to be a NOx emission rate of 15 ppmv @ 3% O2 in accordance with District Rule 4306.
Unit's maximum emissions are defined by the burner size multiplied by the emissions factor and a maximum annual operating schedule of 8,760 hr/year.

Note that an annual SCR operating cost for a 85 MMBtu/hr steam generator (ammonia purchase, maintenance, etc) of $130,000/yr was provided for project S1327, 1123645 which was received September 28, 2012. Assuming a conservatively (very) low operating cost (ammonia purchase, etc) of $5000/yr the total annualized cost is

\[
\text{Annualized cost} = \$18,332/\text{yr} + 5,000/\text{yr} \\
= \$23,332/\text{yr}
\]

**Calculations:**

Industrial Standard NO\textsubscript{X} Emissions = 15.75 MMBtu/hr \times 0.018 \text{ lb/MMBtu} \times 8760 \text{ hrs/year} \\
= 2,483 \text{ lb/year}

Tech. Feasible NO\textsubscript{X} Emissions = 15.75 MMBtu/hr \times 0.007 \text{ lb/MMBtu} \times 8760 \text{ hrs/year} \\
= 966 \text{ lb/year}

**NO\textsubscript{x} reduction due to SCR:**

Total reduction = Emissions \textsubscript{15 ppmv} – Emissions \textsubscript{5 ppmv} \\
Total reduction = 2,483 \text{ lb/yr} – 966 \text{ lb/yr} \\
Total reduction = 1517 \text{ lb/yr} = 0.76 \text{ ton/yr}

**Cost effectiveness:**

Cost effectiveness = $23,332/ 0.76 \text{ tpy}$ 
Cost effectiveness = $30,700/ \text{ ton}$

The cost effectiveness is greater than the $24,500/\text{ton}$ cost effectiveness threshold of the District BACT policy. Therefore the use of SCR to achieve 6 ppmv for NO\textsubscript{x} is not cost effective and is not required as BACT.

e. **Step 5 - Select BACT**

BACT for NO\textsubscript{x} emissions from the boiler is a NO\textsubscript{x} limit of 9 ppmvd @ 3% O\textsubscript{2}. The applicant has proposed to install a boiler with a NO\textsubscript{x} limit of 7 ppmvd @ 3% O\textsubscript{2}; therefore BACT for NO\textsubscript{x} emissions is satisfied.
2. BACT Analysis for SO\textsubscript{X} Emissions:

Oxides of sulfur (SO\textsubscript{X}) emissions occur from the combustion of the sulfur, which is present in the fuel.

a. Step 1 - Identify all control technologies

The SJVUAPCD BACT Clearinghouse guideline 1.2.1, 1\textsuperscript{st} quarter 2005, identifies for accomplished in practice BACT for SO\textsubscript{X} emissions from oil field steam generators ≥5 MMBtu/hr as follows:

1) Natural gas, LPG, waste gas treated to remove 95% by weight of sulfur compounds or treated such that the sulfur content does not exceed 1 gr of sulfur compounds (as S) per 100 scf, or use of a continuously operating SO\textsubscript{2} scrubber and either achieving 95% by weight control of sulfur compounds or achieving an emission rate of 30 ppmvd SO\textsubscript{2} at stack O\textsubscript{2}

No technologically feasible alternatives or control alternatives identified as alternate basic equipment for this class and category of source are listed.

b. Step 2 - Eliminate technologically infeasible options

There are no technologically infeasible options to eliminate from step 1.

c. Step 3 - Rank remaining options by control effectiveness

1) Natural gas, LPG, waste gas treated to remove 95% by weight of sulfur compounds or treated such that the sulfur content does not exceed 1 gr of sulfur compounds (as S) per 100 scf, or use of a continuously operating SO\textsubscript{2} scrubber and either achieving 95% by weight control of sulfur compounds or achieving an emission rate of 30 ppmvd SO\textsubscript{2} at stack O\textsubscript{2}

d. Step 4 - Cost Effectiveness Analysis

The only control technology in the ranking list from Step 3 has been achieved in practice. Therefore, per the District’s BACT Policy (dated 11/9/99) Section IX.D.2, the cost effectiveness analysis is not required.

e. Step 5 - Select BACT

BACT for SO\textsubscript{X} emissions is natural gas fuel with a sulfur content ≤1 gr-S/100 scf; therefore BACT for SO\textsubscript{X} emissions is satisfied.
3. **BACT Analysis for PM$_{10}$ Emissions:**

Particulate matter (PM$_{10}$) emissions result from the incomplete combustion of various elements in the fuel.

**a. Step 1 - Identify all control technologies**

The SJVUAPCD BACT Clearinghouse guideline 1.2.1, 1$^{st}$ quarter 2005, identifies for achieved in practice BACT for CO$_{10}$ emissions from oil field steam generators $\geq$5 MMBtu/hr as follows:

1) Natural gas, LPG, waste gas treated to remove 95% by weight of sulfur compounds or treated such that the sulfur content does not exceed 1 gr of sulfur compounds (as S) per 100 scf, or use of a continuously operating SO$_{2}$ scrubber and either achieving 95% by weight control of sulfur compounds or achieving an emission rate of 30 ppmvd SO$_{2}$ at stack O$_{2}$

No technologically feasible alternatives or control alternatives identified as alternate basic equipment for this class and category of source are listed.

**b. Step 2 - Eliminate technologically infeasible options**

There are no technologically infeasible options to eliminate from step 1.

**c. Step 3 - Rank remaining options by control effectiveness**

1) Natural gas, LPG, waste gas treated to remove 95% by weight of sulfur compounds or treated such that the sulfur content does not exceed 1 gr of sulfur compounds (as S) per 100 scf, or use of a continuously operating SO$_{2}$ scrubber and either achieving 95% by weight control of sulfur compounds or achieving an emission rate of 30 ppmvd SO$_{2}$ at stack O$_{2}$

**d. Step 4 - Cost Effectiveness Analysis**

The only control technology in the ranking list from Step 3 has been achieved in practice. Therefore, per the District's BACT Policy (dated 11/9/99) Section IX.D.2, the cost effectiveness analysis is not required.

**e. Step 5 - Select BACT**

BACT for PM10 emissions is natural gas fuel with a sulfur content $\leq$1 gr-S/100 scf; therefore BACT for PM10 emissions is satisfied.
4. BACT Analysis for CO Emissions:

Carbon monoxide (CO) emissions are generated from the incomplete combustion of air and fuel.

a. Step 1 - Identify all control technologies

The SJVUAPCD BACT Clearinghouse guideline 1.2.1, 1st quarter 2005, identifies for achieved in practice BACT for CO emissions from oil field steam generators ≥5 MMBtu/hr as follows:

1) 50 ppmvd @ 3% O₂

No technologically feasible alternatives or control alternatives identified as alternate basic equipment for this class and category of source are listed.

b. Step 2 - Eliminate technologically infeasible options

There are no technologically infeasible options to eliminate from step 1.

c. Step 3 - Rank remaining options by control effectiveness

1) 50 ppmvd @ 3% O₂

d. Step 4 - Cost Effectiveness Analysis

The only control technology in the ranking list from Step 3 has been achieved in practice. Therefore, per the District's BACT Policy (dated 11/9/99) Section IX.D.2, the cost effectiveness analysis is not required.

e. Step 5 - Select BACT

BACT for CO emissions is a CO limit of 50ppmvd @ 3% O₂ which has been proposed. Therefore BACT for CO emissions is satisfied.
5. BACT Analysis for VOC Emissions:

Volatile organic compounds (VOC) emissions are generated from the incomplete combustion of the fuel.

a. Step 1 - Identify all control technologies

The SJVUAPCD BACT Clearinghouse guideline 1.2.1, 1st quarter 2005, identifies for achieved in practice BACT for VOC emissions from oil field steam generators ≥5 MMBtu/hr as follows:

1) Gaseous fuel

No technologically feasible alternatives or control alternatives identified as alternate basic equipment for this class and category of source are listed.

b. Step 2 - Eliminate technologically infeasible options

There are no technologically infeasible options to eliminate from step 1.

c. Step 3 - Rank remaining options by control effectiveness

1) Gaseous fuel

d. Step 4 - Cost effectiveness analysis

The only control technology in the ranking list from Step 3 has been achieved in practice. Therefore, per the District's BACT Policy (dated 11/9/99) Section IX.D.2, the cost effectiveness analysis is not required.

e. Step 5 - Select BACT

BACT for VOC emissions for the boiler is gaseous fuel. The applicant has proposed to install a boiler fired on gaseous fuel; therefore BACT for VOC emissions is satisfied.
Quotation To
Golden Valley Grape Juice
11767 Rd 27 1/2
Madera, CA 93637

<table>
<thead>
<tr>
<th>PO#</th>
<th>Qty</th>
<th>Cost</th>
<th>Total</th>
</tr>
</thead>
</table>

- **B-8991-1 4" IRI natural gas train component (shipped loose)**
- **SKP25 Gas PRV with proving sensor**

**Specifications:**
- **Motor Voltage:** 460-3-60
- **Firing Rate:** 21.0 mmBtu/hr on natural gas
- **Turndown:** 3:1
- **Emissions:**
  - NOx < 6 ppm @ 3% O2 (natural gas)
  - CO < 100 ppm @ 3% O2 (natural gas)
- **Gas Pressure:** 5 psig min up to 10 psig max

**Notes:**
1. NOXmatic burners use full premix technology and require accurate combustion air control to operate properly and safely. Changes in ambient pressure at the air filter inlet, beyond normal changes in barometric pressure, such as those caused by air extraction fans in boiler rooms, will negatively affect the burner performance and could create a hazardous condition. NOXmatic burners for such applications should be equipped with Oxygen trim systems to automatically correct air flow under drastically changing ambient air conditions.
2. NOXmatic burner guarantees and warranty are contingent upon burner startup and servicing being performed by a ST Johnson certified contractor.

Approval Signature ____________________

Subtotal

Sales Tax (0.0%)

Total
CA Contractor Lic#920614
PO Box 27854
Fresno, CA 93729
559.438.4383/559.438.4389 Fax

Energy Resources Corporation

Quotation To

Golden Valley Grape Juice
11767 Rd 27 1/2
Madera, CA 93637

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Qty</th>
<th>Cost</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>QuotetNT</td>
<td>Thank you for the opportunity to provide this proposal for the supply of S.T. Johnson NOXmastic burner for one 500 HP Hurst Steam Boiler. Burner to operate at less than 6PPM NOx.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
|            | PRICE TO INCLUDE LABOR AND MATERIALS  
SALES TAX NOT INCLUDED  
1) This burner does NOT require FGR on natural gas.  
2) A Variable Speed Drive (VFD) for energy efficiency is included.  
3) Stainless Steel Natural Gas Firing Head  
4) Swing open housing for ease of maintenance.  
5) Rugged Construction  
6) Fully enclosed efficient in-line fan.  
The burner will be an S.T. Johnson Ultra Low NOx Burner (ULNB) designed to meet the applicable AQMD requirements of 6 ppm NOx and 100 ppm CO corrected to 3 % O2 at full firing rate. The burner will be model number NOXMATIC NM500, designed to fire on natural gas only. It will be completely pre-packaged, and pre-wired to the practical extent.  
The burner will be shop assembled and ready for field mounting on the boiler. It will be designed according to UL approval, Low Fire Hold, and Cat Code as required.  
Features include:  
• Parallel Positioning Control System with O2 Trim  
• Gas electric pilot ignition  
• Gas Control Valve  
• 50 HP 3600 rpm Axial Flow Blower  
• Complete gas fuel train with dual shutoff and safety valves  
The burner will be supplied complete with a remote mounted, Burner Management System and parallel positioning combustion control system, UV flame detection, and panel annunciating lights.  
• Siemens FSG and fuel management  
• Variable Speed Motor Control VFD  
• 5 kva Control Circuit transformer  
• Audible alarm and silencing switch.  | 1  | 127,843.75 | 127,843.75 |

Subtotal

Sales Tax (0.0%)

Total

Approval Signature __________________________

Page 1
ATTACHMENT IV
ERC Agreement
January 23, 2013

Paul Franzia
Bronco Wine Company
Ceres, CA

Paul,

As we have discussed, F. Korbel & Bros., Inc. dba Heck Cellars Winery agrees to sell Bronco 700 lbs or some similar amount of ERCs. The price to be determined from like sales that occur around the time of this sale and agreed upon by both parties.

This sale does not constitute any kind of partnership between Bronco and Heck.

If for some reason beyond the control of either party this sale cannot occur neither party will be held liable by the other.

If you agree to the above sign and return a copy at your convenience.

Guy Ruhland

Heck Cellars Winery Mgr.

Paul Franzia
Bronco Wine Company

Date 2/1/13
ATTACHMENT V
HRA and AAQA Modelling
San Joaquin Valley Air Pollution Control District
Risk Management Review

To: Mark Schonhoff - Permit Services
From: Kyle Melching - Technical Services
Date: January 14, 2013
Facility Name: Broncc Wine
Location: 6342 Bystrum Road, Ceres
Application #: N-1665-514-0
Project #: N-1123083

A. RMR SUMMARY

<table>
<thead>
<tr>
<th>Categories</th>
<th>NG Boiler (Unit 514-0)</th>
<th>Project Totals</th>
<th>Facility Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prioritization Score</td>
<td>0.00</td>
<td>0.00</td>
<td>&gt;1</td>
</tr>
<tr>
<td>Acute Hazard Index</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Chronic Hazard Index</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Maximum Individual Cancer Risk</td>
<td>5.41E-08</td>
<td>5.41E-08</td>
<td>5.41E-07</td>
</tr>
<tr>
<td>T-BACT Required?</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special Permit Conditions?</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Proposed Permit Conditions

To ensure that human health risks will not exceed District allowable levels; the following permit conditions must be included for:

Unit 514-0

1. The unit shall always operate at least 487 feet away from the nearest property boundary line.

B. RMR REPORT

I. Project Description

Technical Services received a request on January 12, 2013, to perform a Risk Management Review (RMR) and Ambient Air Quality Analysis (AAQA) for a 15.75 mmBtu/hr natural gas-fired boiler.
II. Analysis

For the Risk Management Review, toxic emissions for this proposed unit were calculated using 2001 Ventura County’s Air Pollution Control District’s emission factors for Natural Gas Fired external combustion. In accordance with the District’s Risk Management Policy for Permitting New and Modified Sources (APR 1905-1, March 2, 2001), risks from the proposed project were prioritized using the procedures in the 1990 CAPCOA Facility Prioritization Guidelines and incorporated in the District’s HEART’s database. The project’s prioritization score was less than 1.0, (see RMR Summary Table); however, the facility’s combined prioritization scores totaled to greater than one. Therefore, a refined Health Risk Assessment was required and performed for the project. AERMOD was used with point source parameters outlined below and concatenated 5-year meteorological data from Modesto to determine maximum dispersion factors at the nearest residential and business receptors. The dispersion factors were input into the HARP model to calculate the Chronic and Acute Hazard Indices and the Carcinogenic Risk.

The following parameters were used for the review:

<table>
<thead>
<tr>
<th>Analysis Parameters (Unit 514-0)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source Type</td>
</tr>
<tr>
<td>Stack Height (m)</td>
</tr>
<tr>
<td>Stack Diameter (m)</td>
</tr>
<tr>
<td>Stack Exit Velocity (m/s)</td>
</tr>
<tr>
<td>Stack Exit Temperature (K)</td>
</tr>
</tbody>
</table>

Technical Services also performed modeling for criteria pollutants CO, NOx, SOx, PM10, and PM2.5, as well as the RMR. Emission rates used for criteria pollutant modeling were 0.58 lb/hr CO, 0.13 lb/hr and 1,170 lb/yr NOx, 0.045 lb/hr and 393 lb/yr SOx, 0.12 lb/hr and 1,049 lb/yr PM10, and 0.12 lb/hr and 1,049 lb/yr PM2.5.

The results from the Criteria Pollutant Modeling are as follows:

Criteria Pollutant Modeling Results*
Values are in µg/m³

<table>
<thead>
<tr>
<th>NG-Fired Boiler</th>
<th>1 Hour</th>
<th>3 Hours</th>
<th>8 Hours</th>
<th>24 Hours</th>
<th>Annual</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO</td>
<td>Pass</td>
<td>X</td>
<td>Pass</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>NOx</td>
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<td>X</td>
<td></td>
<td>X</td>
<td>Pass</td>
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<tr>
<td>SOx</td>
<td>Pass</td>
<td>Pass</td>
<td>X</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>PM10</td>
<td>X</td>
<td>X</td>
<td>Pass</td>
<td>Pass²</td>
<td></td>
</tr>
<tr>
<td>PM2.5</td>
<td>X</td>
<td>X</td>
<td>Pass²</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Results were taken from the attached PSD spreadsheet.

¹The project was compared to the 1-hour NO2 National Ambient Air Quality Standard that became effective on April 12, 2010, using the District’s approved procedures.

²The criteria pollutants are below EPA’s level of significance as found in 40 CFR Part 51.165 (b)(2).
III. Conclusion

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

The acute and chronic indices are below 1.0; and the maximum individual cancer risk associated with the project is 5.41E-08, which is less than the 1 in a million threshold. 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 conditions listed on Page 1 of this report must be included for the 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.

Attachments:

A. RMR request from the project engineer
B. Prioritization score with toxic emissions summary
C. HEARTS – Facility Summary
D. HARP Risk Report
E. AAQA spreadsheet
ATTACHMENT VI
Title V Compliance Certification Form
Statewide Compliance Statement
February 1, 2013

Richard Edgehill
San Joaquin Valley Air Pollution Control District
34946 Flyover Ct.,
Bakersfield, CA 93308-9725

Re. Project Number N-1123083 for Bronco Wine Co. (Facility I.D. #N-1665)

Dear Mr. Edgehill,

Bronco Wine Co. (BWC) and the California business entities controlled by its’ principles, that are subject to emissions limitations, are in compliance with all applicable emission limitations and standards.

Sincerely,

[Signature]

Paul W. Franzia
Director of Engineering, Maintenance and Environmental Affairs
Bronco Wine Co.
San Joaquin Valley
Unified Air Pollution Control District

TITLE V MODIFICATION - COMPLIANCE CERTIFICATION FORM

I. TYPE OF PERMIT ACTION (Check appropriate box)

[ ] SIGNIFICANT PERMIT MODIFICATION          [ ] ADMINISTRATIVE AMENDMENT
[ ] MINOR PERMIT MODIFICATION

<table>
<thead>
<tr>
<th>COMPANY NAME:</th>
<th>Co.</th>
<th>FACILITY ID: N-1865</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Type of Organization: Corporation [ ] Sole Ownership [ ] Government [ ] Partnership [ ] Utility</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Owner's Name:</td>
<td>John Fronzia, Jr.</td>
<td></td>
</tr>
<tr>
<td>3. Agent to the Owner: Paul W. Fronzio</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

II. COMPLIANCE CERTIFICATION (Read each statement carefully and initial all circles for confirmation):

[✓] Based on information and belief formed after reasonable inquiry, the equipment identified in this application will continue to comply with the applicable federal requirement(s).

[✓] Based on information and belief formed after reasonable inquiry, the equipment identified in this application will comply with applicable federal requirement(s) that will become effective during the permit term, on a timely basis.

[✓] Corrected information will be provided to the District when I become aware that incorrect or incomplete information has been submitted.

[✓] Based on information and belief formed after reasonable inquiry, information and statements in the submitted application package, including all accompanying reports, and required certifications are true accurate and complete.

I declare, under penalty of perjury under the laws of the state of California, that the foregoing is correct and true:

[Signature]
Signature of Responsible Official

[Date]

[Name]
Name of Responsible Official (please print)

[Title]
Title of Responsible Official (please print)

Mailing Address: Central Regional Office * 1990 E. Gettysburg Avenue * Fresno, California 93726-0244 * (559) 233-5900 * FAX (559) 230-6661
TVFORM-009
3/22/1998
ATTACHMENT VII
BPS Analysis
### San Joaquin Valley
**Unified Air Pollution Control District**

**Best Performance Standard (BPS) x.x.xx**

<table>
<thead>
<tr>
<th>Class</th>
<th>Steam Generators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
<td><strong>New Industrial Steam Generators Fired Exclusively on Natural Gas or LPG</strong></td>
</tr>
</tbody>
</table>

**Applicability Note:** Steam generators fired with gaseous fuels other than natural gas or LPG (either exclusively or mixed with natural gas or LPG) and which meet the following standards shall be considered to meet BPS for their respective category.

Steam generators meeting this Best Performance Standard must comply with both elements of this BPS (items 1 and 2 listed below) where applicable:

1. The steam generator shall be either equipped with an economizer system meeting the following design criteria or shall be equipped with an approved alternate heat recovery system which will collectively provide heat recovery from the boiler flue gas which is equivalent. Equivalent heat recovery systems may utilize recovered heat for purposes other than steam generation provided such uses offset other fuel usage which would otherwise be required.

   A. Except for steam generators subject to the requirements of item B below, the economizer system shall be designed at maximum steam generator firing rate to either 1) reduce the temperature of the economizer flue gas outlet to a value no greater than 90°F above the temperature of the boiler feed water or 2) heat the boiler feed water to a temperature which is no less than the saturation temperature of the steam at the pressure of the steam separator, or 3) reduce the final temperature of the boiler's flue gas to a temperature no greater than 300°F.

   Note: For purposes of this BPS, feedwater temperature is defined as the temperature of the water stream delivered to the steam generator from the deaerator or feedwater tank.

   B. For steam generators with rated capacity in excess of 20 MMBtu/hr which have an average water supply temperature which is equal to or less than 150°F, the steam generator shall equipped with an economizer designed to reduce the temperature of the flue gas outlet to a value no greater than 90°F above the water supply temperature when the boiler is operating at maximum firing rate.

   Note: For purposes of this BPS, water supply temperature is defined as the weighted average temperature of the combined makeup water and the recovered condensate delivered to the steam generator upstream of any deaerator or other feedwater preheater.

AND

2. Electric motors driving combustion air fans or induced draft fans shall have an efficiency meeting the standards of the National Electrical Manufacturer's Association (NEMA) for "premium efficiency" motors and shall each be operated with a variable speed control or equivalent for control of flow through the fan.
<table>
<thead>
<tr>
<th>Percentage Achieved GHG Emission Reduction Relative to Baseline Emissions</th>
<th>4.2%</th>
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<tbody>
<tr>
<td><strong>District Project Number</strong></td>
<td>C-1100388</td>
</tr>
<tr>
<td><strong>Evaluating Engineer</strong></td>
<td>Dennis Roberts, P.E.</td>
</tr>
<tr>
<td><strong>Lead Engineer</strong></td>
<td>Martin Keast</td>
</tr>
<tr>
<td><strong>Public Notice of Intent Date</strong></td>
<td>April 1, 2012</td>
</tr>
<tr>
<td><strong>Public Notice: Start Date</strong></td>
<td>August 20, 2012</td>
</tr>
<tr>
<td><strong>Public Notice: End Date</strong></td>
<td>September 20, 2012</td>
</tr>
<tr>
<td><strong>Determination Effective Date</strong></td>
<td>October 01, 2012</td>
</tr>
</tbody>
</table>
San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: N-1665-514-0
LEGAL OWNER OR OPERATOR: BRONCO WINE COMPANY
MAILING ADDRESS: ATTN: MAINTENANCE MANAGER
                    P O BOX 789
                    CERES, CA 95307
LOCATION:
                    6342 BYSTRUM RD
                    CERES, CA 95307
EQUIPMENT DESCRIPTION:
15.75 MMBTU/HR NATURAL GAS FIRED CLAYTON SSEG-404-FMB-1 BOILER

CONDITIONS

1. (1830) This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit

2. (1831) Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit

3. The economizer system shall be designed at maximum steam generator firing rate to either 1) reduce the temperature of the economizer flue gas outlet to a value no greater than 90 degrees F above the temperature of the boiler feed water or 2) heat the boiler feed water to a temperature which is no less than the saturation temperature of the steam at the pressure of the steam separator, or 3) reduce the final temperature of the boiler's flue gas to a temperature no greater than 300 degrees F. Feedwater temperature is defined as the temperature of the water stream delivered to the steam generator from the deaerator or feedwater tank. [CCR Title 14, Division 6, Chapter 3, § 15000-15387 (CEQA)]

4. Electric motors driving combustion air fans or induced draft fans shall have an efficiency meeting the standards of the National Electric Manufacturer's Association (NEMA) for "premium efficiency" motors and shall each be operated with a variable speed control or equivalent for control of flow through the fan. [CCR Title 14, Division 6, Chapter 3, § 15000-15387 (CEQA)]

5. The unit shall always operate at least 487 feet away from the nearest property boundary. [District Rule 4102]

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.

Seyed Sadredin, Executive Director
APCO

DAVID WARNER, Director of Permit Services
Northern Regional Office • 4800 Enterprise Way • Modesto, CA 95356-6718 • (209) 557-6400 • Fax (209) 557-6475
6. 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] Federally Enforceable Through Title V Permit

7. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit

8. The unit shall only be fired on PUC-regulated natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit

9. Emissions rates from the natural gas-fired unit shall not exceed any of the following limits: 7ppmv NOx @ 3% O2 or 0.008 lb-NOx/MMBtu, 0.0285 lb-SOx/MMBtu, 0.0076 lb-PM10/MMBtu, 50 ppmv CO @ 3% O2 or 0.037 lb-CO/MMBtu, 0.0055 lb-VOC/MMBtu. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

10. 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] Federally Enforceable Through Title V Permit

11. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. 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 monitoring has been performed within the last month. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

12. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 24 hours 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 has occurred, subject to enforcement action. 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 the performing the notification and testing required by this condition. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

13. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission 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 (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

14. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

15. 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] Federally Enforceable Through Title V Permit

16. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

17. Source testing to measure NOx and CO emissions from this unit while fired on natural gas shall be conducted within 60 days of initial start-up. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
18. Source testing to measure NOx and CO emissions from this unit while fired on natural gas 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] Federally Enforceable Through Title V Permit

19. NOx 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] Federally Enforceable Through Title V Permit

20. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

21. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

22. Fuel sulfur content shall be determined using EPA Method 11 or Method 15. [District Rule 4320] Federally Enforceable Through Title V Permit

23. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

24. 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] Federally Enforceable Through Title V Permit

25. 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] Federally Enforceable Through Title V Permit

26. (3246) 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 Rule 1070]

27. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantity of emissions: 1st quarter - 285 lb, 2nd quarter - 285 lb, 3rd quarter - 285 lb, and fourth quarter - 285 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 4/21/11) for the ERC specified below. [District Rule 2201] Federally Enforceable Through Title V Permit

28. ERC Certificate Number S-3442-1 (or a certificate split from this certificate) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public notification requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit