

AUG 17 2010

Julia Bonardi
Gallo Glass Company
PO Box 1230
Modesto, CA 95353

**Re: Proposed Authorities to Construct / Certificate of Conformity (Minor Mod)
District Facility # N-1662
Project # N-1100493**

Dear Ms. Bonardi:

Enclosed for your review is the District's analysis of your application for Authorities to Construct for the facility identified above. You have requested that a Certificate of Conformity with the procedural requirements of 40 CFR Part 70 be issued with this project. The modifications consist of increasing the number of hours of permitted ESP bypass time as allowed by 40 CFR Part 60 Subpart CC and District Rule 4354.

After addressing any EPA comments made during the 45-day comment period, the Authorities to Construct will be issued to the facility with a Certificate of Conformity. Prior to operating with modifications authorized by the Authorities 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. Rupi Gill, Permit Services Manager, at (209) 557-6400.

Thank you for your cooperation in this matter.

Sincerely,



David Warner
Director of Permit Services

DW: MS/cm

Enclosures

Seyed Sadredin
Executive Director/Air Pollution Control Officer

Northern Region
4800 Enterprise Way
Modesto, CA 95356-8718
Tel: (209) 557-6400 FAX: (209) 557-6475

Central Region (Main Office)
1990 E. Gettysburg Avenue
Fresno, CA 93726-0244
Tel: (559) 230-6000 FAX: (559) 230-6061

Southern Region
34946 Flyover Court
Bakersfield, CA 93308-9725
Tel: 661-392-5500 FAX: 661-392-5585

AUG 17 2010

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

Re: **Proposed Authorities to Construct / Certificate of Conformity (Minor Mod)**
District Facility # N-1662
Project # N-1100493

Dear Mr. Rios:

Enclosed for your review is the District's engineering evaluation of an application for Authorities to Construct for Gallo Glass Company, located at 605 South Santa Cruz Avenue in Modesto, CA, which has been issued a Title V permit. Gallo Glass Company is requesting that a Certificate of Conformity, with the procedural requirements of 40 CFR Part 70, be issued with this project. The modifications consist of increasing the number of hours of permitted ESP bypass time as allowed by 40 CFR Part 60 Subpart CC and District Rule 4354.

Enclosed is the engineering evaluation of this application, a copy of the current Title V permit, and proposed Authorities to Construct # N-1662-1-12, N-1662-2-13, N-1662-3-13 and N-1662-4-13 with Certificate of Conformity. After demonstrating compliance with the Authorities 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. Rupi Gill, Permit Services Manager, at (209) 557-6400.

Thank you for your cooperation in this matter.

Sincerely,



David Warner
Director of Permit Services

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34946 Flyover Court
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Tel: 661-392-5500 FAX: 661-392-5585

Authority to Construct Application Review

Facility Name: Gallo Glass Company
Mailing Address: PO Box 1230
Modesto, CA 95353

Date: July 21, 2010

Contact Person: Julia Bonardi
Telephone: (209) 341-4298

Engineer: Mark Schonhoff
Application #'s: N-1662-1-12
N-1662-2-13
N-1662-3-13
N-1662-4-13

Project #: N-1100493

Deemed Complete: April 13, 2010

I. Proposal

The facility operates four glass melting furnaces that are served by a single electrostatic precipitator (ESP). The ESP is a mechanical/electrical particulate matter control device that requires periodic maintenance to operate properly. In order to perform maintenance on the ESP, it must be entered by maintenance personnel. To enter the unit safely, it must be bypassed from the furnaces and cooled. Shutting the furnace down would not be practical because the molten glass inside of it would solidify (in fact, for this reason, glass furnaces are never shut down between furnace rebuilds, which occur every 5-10 years). To prevent warping of the electrode plates during ESP maintenance activities, the ESP must be cooled and warmed up over about a two-day period.

As the ESP was originally permitted, no bypass time was allowed and the necessary bypasses were conducted under District variance. The ESP was installed voluntarily after receiving Authorities to Construct and those ATC's carried with them all of the inherent implications associated with the proper operation and maintenance of an ESP, one of which was the requirement to maintain the equipment so that it may continue to operate at maximum emission control efficiency. In 2005, the facility operator applied for Authorities to Construct to formally allow up to 144 hours per year of ESP bypass time for maintenance and repair. The 144 hour proposal was based on 40 CFR Part 60 Subpart CC (Standards of Performance for Glass Manufacturing Plants). Although the proposed amount of bypass time could have been granted, the version of District Rule 4354 in affect at the time did not specifically address ESP bypasses so 96 hours per year was granted instead. The 96 hours was based on a study of the breakdown history for the ESP.

The applicant is now proposing to increase the allowable ESP bypass duration to 144 hours per year for repair and maintenance. This duration is now recognized by Rule 4354 as necessary for proper control device maintenance, and as previously stated it is also recognized by 40 CFR Part 60 Subpart CC as appropriate.

The proposed permit modifications would result in no quarterly emissions increases, so changes in offset requirements will not occur; and additionally, the quarterly PM10 limits placed on the permits during the processing of the applications for project N-1053540 properly enforce the emission reduction credits issued for the PM10 reductions that occurred as a result of the operation of the ESP.

In conclusion, the proposed change will not affect the original or subsequent approvals nor will it add any new BACT or offset implications. Therefore, the facility will remain in compliance with Rule 2201.

II. Applicable Rules

2201 New and Modified Stationary Source Review Rule (9/21/06)
2520 Federally Mandated Operating Permits (6/21/01)
4001 New Source Performance Standards (4/14/99)
4101 Visible Emissions (11/15/01)
4102 Nuisance (12/17/92)
4201 Particulate Matter Concentration (12/17/92)
4202 Particulate Matter – Emission Rate (12/17/92)
4301 Fuel Burning Equipment (12/17/92)
4305 Boilers, Steam Generators and Process Heaters – Phase 2 (8/21/03)
4306 Boilers, Steam Generators and Process Heaters – Phase 3 (3/17/05)
4320 Advanced Emission Reduction Options for Boilers, Steam Generators and Process Heaters Greater than 5.0 MMBtu/hr (10/16/08)
4354 Glass Melting Furnaces (10/16/08)
4801 Sulfur Compounds (12/17/92)
CH&SC 41700
CH&SC 42301.6
California Environmental Quality Act (CEQA)

III. Project Location

605 S. Santa Cruz Avenue
Modesto, CA

The equipment is not located within 1,000 feet of a K-12 school.

IV. Process Description

The furnaces burn natural gas to melt cullet (crushed, recycled glass), sand, soda ash, limestone, and other raw materials. In the process, particulate matter, SO_x and other air contaminants are generated. To control the particulate matter and SO_x emissions, the contaminated air stream is routed through the SO_x scrubber and then the ESP.

V. Equipment Listing

Premodification Equipment Listing:

N-1662-1-11:

FURNACE #1 WITH 10 MAXON GAS/OXYGEN BURNERS AND ASSOCIATED EQUIPMENT (75 MMBTU/HR MAX HEAT CAPACITY). THIS FURNACE IS DUCTED THROUGH A STACK COMMON TO PERMIT UNITS N-1662-1, N-1662-2, N-1662-3 AND N-1662-4. THE FURNACES ARE SERVED BY A SHARED ELECTROSTATIC PRECIPITATOR AND SOX SCRUBBER.

N-1662-2-12:

GLASS FURNACE #2 WITH 10 MAXON GAS/OXYGEN BURNERS AND ASSOCIATED FORMING EQUIPMENT (75 MMBTU/HR MAX HEAT CAPACITY). THIS FURNACE IS DUCTED THROUGH A STACK COMMON TO PERMIT UNITS N-1662-1, N-1662-2, N-1662-3 AND N-1662-4. THE FURNACES ARE SERVED BY A SHARED ELECTROSTATIC PRECIPITATOR AND SOX SCRUBBER.

N-1662-3-12:

GLASS FURNACE #3 WITH 10 MAXON GAS/OXYGEN BURNERS AND ASSOCIATED FORMING EQUIPMENT (75 MMBTU/HR MAX HEAT CAPACITY). THIS FURNACE IS DUCTED THROUGH A STACK COMMON TO PERMIT UNITS N-1662-1, N-1662-2, N-1662-3 AND N-1662-4. THE FURNACES ARE SERVED BY A SHARED ELECTROSTATIC PRECIPITATOR AND SOX SCRUBBER.

N-1662-4-11:

GLASS FURNACE #4 WITH 12 MAXON GAS/OXYGEN BURNERS AND ASSOCIATED FORMING EQUIPMENT (90 MMBTU/HR MAX HEAT CAPACITY). THIS FURNACE IS DUCTED THROUGH A STACK COMMON TO PERMIT UNITS N-1662-1, N-1662-2, N-1662-3 AND N-1662-4. THE FURNACES ARE SERVED BY A SHARED ELECTROSTATIC PRECIPITATOR AND SOX SCRUBBER.

Post modification Equipment Listing:

N-1662-1-12:

FURNACE #1 WITH 10 MAXON GAS/OXYGEN BURNERS AND ASSOCIATED FORMING EQUIPMENT (75 MMBTU/HR MAX HEAT CAPACITY). THIS FURNACE IS DUCTED THROUGH A STACK COMMON TO PERMIT UNITS N-1662-1, N-1662-2, N-1662-3 AND N-1662-4. THE FURNACES ARE SERVED BY A SHARED ELECTROSTATIC PRECIPITATOR AND SOX SCRUBBER.

N-1662-2-13, N-1662-3-13 and N-1662-4-13:

No Change

VI. Emission Control Technology Evaluation

An ESP is utilized to control the particulate matter emissions generated in the glass melting process. The contaminated air stream is passed through positively or negatively charged electrodes that place a charge on the particulate matter. The contaminated air stream, including the charged particles is then passed through oppositely charged electrodes that attract and collect the particulate matter. A control efficiency of about 69% is provided by the ESP.

A scrubber is utilized to control the SO_x emissions. As shown by previous source testing, the unit provides approximately 6.2% SO_x control.

VII. General Calculations

As explained in Section I (Proposal) of this document, the proposed changes will not affect the original approval nor will they will add any new offset or BACT implications. Therefore, most of the calculations normally conducted are not necessary. Potential to Emit calculations are necessary for completion of the Emission Profiles of the Permit Application System

A. Assumptions

None

B. Emission Factors

Premodification Emission Factors:

Premodification emission calculations are not necessary and therefore, neither are premodification emission factor calculations.

Postmodification Emission Factors:

There will be no changes in the emission limits, therefore, the potentials to emit will be taken from the application review document for a previous permitting action. Post modification emission factor calculations are therefore not necessary.

C. Potential to Emit (PE)

1. Daily PE

Post modification:

There will not be a change in the potential to emit of any pollutant from any of the furnaces. The following potentials to emit are from the application review document for project N-1053540, which is the permitting action that established the current emission limits.

N-1662-1:

Daily:

NO_x = 780.1 lb/day
CO = 20.8 lb/day
VOC = 130.0 lb/day
SO_x = 1,222.2 lb/day
PM₁₀ = 369.3 lb/day

Quarterly PM10 Emissions:

Quarter 1 = 22,936 lb/qtr
Quarter 2 = 23,190 lb/qtr
Quarter 3 = 23,445 lb/qtr
Quarter 4 = 23,445 lb/qtr

Annual:

NO_x = 423,192 lb/yr
CO = 7,593 lb/yr
VOC = 47,457 lb/yr
SO_x = 446,099 lb/yr
PM₁₀ = 93,016 lb/yr

N-1662-2:

Daily:

NO_x = 975.3 lb/day
CO = 352.1 lb/day
VOC = 88.0 lb/day
SO_x = 827.4 lb/day
PM₁₀ = 250.0 lb/day

Quarterly PM10 Emissions:

Quarter 1 = 15,527 lb/qtr
Quarter 2 = 15,699 lb/qtr
Quarter 3 = 15,872 lb/qtr
Quarter 4 = 15,872 lb/qtr

Annual:

NO_x = 529,086 lb/yr
CO = 128,509 lb/yr
VOC = 32,127 lb/yr
SO_x = 301,997 lb/yr
PM₁₀ = 62,970 lb/yr

N-1662-3:

Daily:

NO_x = 873.2 lb/day
CO = 3.5 lb/day
VOC = 88.0 lb/day
SO_x = 827.4 lb/day
PM₁₀ = 250.0 lb/day

Quarterly PM10 Emissions:

Quarter 1 = 15,527 lb/qtr
Quarter 2 = 15,699 lb/qtr
Quarter 3 = 15,872 lb/qtr
Quarter 4 = 15,872 lb/qtr

Annual:

NO_x = 473,698 lb/yr
CO = 1,285 lb/yr
VOC = 32,127 lb/yr
SO_x = 301,997 lb/yr
PM₁₀ = 62,970 lb/yr

N-1662-4:

Daily:

NO_x = 1,881.9 lb/day
CO = 637.9 lb/day
VOC = 159.5 lb/day
SO_x = 1,499.1 lb/day
PM₁₀ = 452.9 lb/day

Quarterly PM10 Emissions:

Quarter 1 = 28,132 lb/qtr
Quarter 2 = 28,445 lb/qtr
Quarter 3 = 28,757 lb/qtr
Quarter 4 = 28,758 lb/qtr

Annual:

NO_x = 1,020,902 lb/yr
CO = 232,841 lb/yr
VOC = 58,210 lb/yr
SO_x = 547,176 lb/yr
PM₁₀ = 114,092 lb/yr

D. Increase in Permitted Emissions (IPE)

1. Quarterly IPE

N-1662-1:

The emission profile for this ATC will include the following:

	NOx (lb)	SOx (lb)	PM10 (lb)	CO (lb)	VOC (lb)
Annual PE	423,192	446,099	93,016	7,593	47,457
Daily PE	780.1	1,222.2	369.3	20.8	130.0
Δ PE (Qtr 1)	0	0	0	0	0
Δ PE (Qtr 2)	0	0	0	0	0
Δ PE (Qtr 3)	0	0	0	0	0
Δ PE (Qtr 4)	0	0	0	0	0

N-1662-2:

The emission profile for this ATC will include the following:

	NOx (lb)	SOx (lb)	PM10 (lb)	CO (lb)	VOC (lb)
Annual PE	529,086	301,997	62,970	128,509	32,127
Daily PE	975.3	827.4	250.0	352.1	88.0
Δ PE (Qtr 1)	0	0	0	0	0
Δ PE (Qtr 2)	0	0	0	0	0
Δ PE (Qtr 3)	0	0	0	0	0
Δ PE (Qtr 4)	0	0	0	0	0

N-1662-3:

The emission profile for this ATC will include the following:

	NOx (lb)	SOx (lb)	PM10 (lb)	CO (lb)	VOC (lb)
Annual PE	473,698	301,997	62,970	1,285	32,127
Daily PE	873.2	827.4	250.0	3.5	88.0
Δ PE (Qtr 1)	0	0	0	0	0
Δ PE (Qtr 2)	0	0	0	0	0
Δ PE (Qtr 3)	0	0	0	0	0
Δ PE (Qtr 4)	0	0	0	0	0

N-1662-4:

The emission profile for this ATC will include the following:

	NOx (lb)	SOx (lb)	PM10 (lb)	CO (lb)	VOC (lb)
Annual PE	1,020,902	547,176	114,092	232,841	58,210
Daily PE	1,881.9	1,499.1	452.9	637.9	159.5
Δ PE (Qtr 1)	0	0	0	0	0
Δ PE (Qtr 2)	0	0	0	0	0
Δ PE (Qtr 3)	0	0	0	0	0
Δ PE (Qtr 4)	0	0	0	0	0

VIII. Compliance

Rule 2201 New and Modified Stationary Source Review Rule

As explained in section I (Proposal) of this document, the proposed changes will not affect the original approval nor will they add any new offset or BACT implications. Therefore, the facility will remain in compliance with Rule 2201

Rule 2520 Federally Mandated Operating Permits

The sole purpose of this permitting action is to increase the annual allowable ESP bypass duration from 96 hours to 144 hours. Such a modification is a Minor Modification to the Title V permit. The applicant has proposed to receive an Authority to Construct with a Certificate of Conformity in accordance with the requirements of 40 CFR 70.6(c), 70.7 and 70.8. Therefore, the 45-day EPA comment period will be satisfied prior to the issuance of the ATC. The following two federally enforceable conditions will be placed on the Authorities to Construct:

- 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] Y
- Prior to operating with the modifications authorized by this Authority to Construct, the facility shall submit an application for an administrative amendment to its Title V permit, in accordance with District Rule 2520, Section 11.4.2. [District Rule 2520] Y

In accordance with Rule 2520, the application meets the procedural requirements of section 11.4 by including:

- A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs and
- The source's suggested draft permit (appendix A) and

- Certification by a responsible official (appendix C) that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used.

Per section 5.3.2 of this rule, the applicant must submit an application for a modification prior to implementing the requested changes.

Rule 4001 New Source Performance Standards

40 CFR Part 60 Subpart CC Section 60.290(b) states that the requirements of this subpart apply to any facility that commenced construction or underwent a modification after June 15, 1979. The units were installed prior to June 15, 1979 and have not undergone modifications as defined in section 60.2 since installation.

The units have undergone cold rebricking since installation but per section 60.14, such repairs are not considered modifications.

None of the furnaces currently under consideration are subject to this subpart.

Rule 4101 Visible Emissions

As long as the equipment is properly maintained and operated, the visible emissions are not expected to exceed 20% opacity for a period or periods aggregating more than 3 minutes in any one hour. Compliance with the provisions of this rule is expected.

Rule 4102 Nuisance

A. California Health & Safety Code 41700 (Health Risk Analysis)

No increase in the hourly or annual fuel usage, annual or hourly material throughputs or annual or hourly emissions will occur. Therefore, there will not be a change in health risk and a health risk assessment is not required.

B. Toxics BACT (T-BACT)

For the reasons stated directly above, there will not be a change in the emissions of hazardous pollutants. Therefore, T-BACT is not required.

Rule 4201 Particulate Matter Concentration

This rule limits the particulate matter concentration to 0.1 gr/dscf.

The worst case particulate matter emission concentration will occur during operation with the ESP by-passed. Compliance with the requirements of this rule was shown during the processing of the applications for project N-1052540 utilizing source test data. During the source tests, the units were utilizing the oxy-fuel system, which will result in the worst case particulate matter emission concentration because the exhaust stream will not include the inert portions of air that would increase the flow rate.

Continued compliance is expected.

Rule 4202 Particulate Matter – Emission Rate

The purpose of this rule is to limit the TSP emission rate based on the throughput of the operation. The equation used to calculate the maximum allowable emission rate is:

$$E_{\max} = 17.31P^{0.16}, \text{ where } P > 30 \text{ tons/hr}$$

$$E_{\max} = 3.59P^{0.62}, \text{ where } P \leq 30 \text{ tons/hr}$$

Where: E = Maximum allowable emissions in lb/hr
P = Process weight in tons/hr

N-1662-1-9 (furnace 1):

Operating hours: 24 hr/day
Throughput: 21.67 tons/hr
PE: 369.3 lb/day (15.4 lb/hr)

$$E_{\max} = 3.59(21.67)^{0.62} = 24.2 \text{ lb/hr}$$

PE is less than E_{\max} therefore compliance is expected.

N-1662-2-9 (furnace 2):

Operating hours: 24 hr/day
Throughput: 14.67 tons/hr
PE: 250.0 lb/day (10.4 lb/hr)

$$E_{\max} = 3.59(14.67)^{0.62} = 19.0 \text{ lb/hr}$$

PE is less than E_{\max} therefore compliance is expected.

N-1662-3-9 (furnace 3):

Operating hours: 24 hr/day
Throughput: 14.67 tons/hr
PE: 250.0 lb/day (10.4 lb/hr)

$$E_{\max} = 3.59(14.67)^{0.62} = 19.0 \text{ lb/hr}$$

PE is less than E_{\max} therefore compliance is expected.

N-1662-4-11 (furnace 4):

Operating hours: 24 hr/day
Throughput: 26.58 tons/hr
PE: 452.9 lb/day (18.9 lb/hr)

$$E_{\max} = 3.59(26.58)^{0.62} = 27.4 \text{ lb/hr}$$

PE is less than E_{\max} therefore compliance is expected.

Rule 4301 Fuel Burning Equipment

The purpose of this rule is to limit emissions from fuel burning equipment. Fuel burning equipment is defined in this rule as any furnace, boiler, apparatus, stack and all appurtenances there to, used in the process of burning fuel for the primary purpose of producing heat or power by indirect heat transfer.

The units under consideration are direct fired so this rule does not apply.

Rule 4305 Boilers, Steam Generators and Process Heaters (Phase 2)

Glass melting furnaces are specifically exempt from this rule per section 4.1.2.

Rule 4306 Boilers, Steam Generators and Process Heaters (Phase 3)

Glass melting furnaces are specifically exempt from this rule per section 4.1.2.

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

Glass melting furnaces are specifically exempt from this rule per section 4.1.2.

Rule 4354 Glass Melting Furnaces

The purpose of this rule is to limit the NO_x, CO, VOC, SO_x and PM₁₀ from glass melting furnaces. The facility manufactures container glass.

The sole purpose of these modifications is to increase the amount of ESP by-pass time from 96 hours per year to 144 hours per year as allowed by section 5.10 of this rule. This rule includes other requirements that will be addressed under project N-1094199, therefore, no further discussion is necessary.

California Environmental Quality Act (CEQA)

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. The District’s engineering evaluation (this document) demonstrates that the project would not result in an increase in project specific greenhouse gas emissions and the District therefore concludes that the project would have a less than cumulatively significant impact on global climate change. Per District Policy, project specific greenhouse gas emissions less than or equal to 230 metric tons-CO2e/year are considered to be zero for District permitting purposes and are exempt from further environmental review.

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

Issue Authorities to Construct to increase the annual permitted ESP by-pass duration from 96 hours to 144 hours.

X. Billing Information

Premodification:

Permit #	Description	Fee Schedule
N-1662-1	75 MMBtu/hr	3020-1-H
N-1662-2	75 MMBtu/hr	3020-1-H
N-1662-3	75 MMBtu/hr	3020-1-H
N-1662-4	90 MMBtu/hr	3020-2-H

Post modification:

No Change.

Appendices

Appendix A: Draft ATC

Appendix B: Current PTO's

Appendix C: Title V Modification – Compliance Certification Form

Appendix A
Draft Authorities to Construct

Appendix B
Current PTO's

Appendix C
Title V Modification – Compliance Certification Form

Appendix A

Draft Authorities to Construct

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
DRAFT

PERMIT NO: N-1662-1-12

LEGAL OWNER OR OPERATOR: GALLO GLASS COMPANY
MAILING ADDRESS: PO BOX 1230
MODESTO, CA 95353

LOCATION: 605 S SANTA CRUZ AVE
MODESTO, CA 95354

EQUIPMENT DESCRIPTION:

GLASS FURNACE #1 WITH 10 MAXON GAS/OXYGEN BURNERS AND ASSOCIATED FORMING EQUIPMENT (75 MMBTU/HR MAX HEAT CAPACITY). THIS FURNACE IS DUCTED THROUGH A STACK COMMON TO PERMIT UNITS N-1662-1, N-1662-2, N-1662-3 AND N-1662-4. THE FURNACES ARE SERVED BY A SHARED ELECTROSTATIC PRECIPITATOR AND SOX SCRUBBER. MODIFICATION TO INCREASE THE ESP BYPASS ALLOWANCE TO 144 HR/YR.

CONDITIONS

1. 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 2520] Federally Enforceable Through Title V Permit
2. Prior to operating with the modifications authorized by this Authority to Construct, the facility shall submit an application for an administrative amendment to its Title V permit, in accordance with District Rule 2520, Section 11.4.2. [District Rule 2520] Federally Enforceable Through Title V Permit
3. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
4. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
5. Particulate matter emissions shall not exceed 0.1 grain/dscf in concentration. [District Rule 4201 and Stanislaus County Rule 404] Federally Enforceable Through Title V Permit
6. The furnace shall be fired on natural gas and LPG only. [District NSR Rule] Federally Enforceable Through Title V Permit

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

DRAFT

DAVID WARNER, Director of Permit Services

N-1662-1-12 : Jul 19 2010 9:44AM - SCHOINHOM : Joint Inspection NOT Required

7. The furnace shall have a continuous monitoring system for NO_x. The monitoring system shall have a continuous recording device, and all records shall be kept on site. [District Rules 1080 and 4354, §5.8] Federally Enforceable Through Title V Permit
8. One continuous emissions monitoring (CEM) system may be used for monitoring oxy-fuel fired furnaces #1, #2, #3, and #4 provided all of the exhaust gases of each of these furnaces are ducted to a common stack, and monitored down stream of the common stack. The CEMS shall comply with the requirements of 40 Code of Federal Regulations (CFR) Part 51, 40 CFR Parts 60.7 and 60.13, 40 CFR Part 60 Appendix B (Performance Specifications) and Appendix F (Quality Assurance Procedures) and the applicable sections of Rule 1080 (Stack Monitoring). [District Rule 4354, 5.8 and 6.6.1] Federally Enforceable Through Title V Permit
9. The facility shall install and maintain equipment, facilities, and systems compatible with the District's CEM data polling software system and shall make CEM data available to the District's automated polling system on a daily basis. [District Rule 1080] Federally Enforceable Through Title V Permit
10. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NO_x, CO, and O₂ analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Source Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit
11. During startups, the permittee shall comply with the requirements of section §5.2 of District Rule 4354. [District Rule 4354, §5.2] Federally Enforceable Through Title V Permit
12. The NO_x control system shall be in operation as soon as technologically feasible during the startup period to minimize emissions. [District Rule 4354, §5.2.3] Federally Enforceable Through Title V Permit
13. The NO_x control system shall be in operation whenever technologically feasible during shutdown to minimize emissions. [District Rule 4354, §5.3.2] Federally Enforceable Through Title V Permit
14. The NO_x control system shall be in operation whenever technologically feasible during furnace idling to minimize emissions. [District Rule 4354, §5.4.1] Federally Enforceable Through Title V Permit
15. The duration of shutdown, as measured from the time the furnace operations drop below the idle threshold specified in §3.9 of District Rule 4354 to when all emissions from the furnace cease, shall not exceed 20 days. [District Rule 4354, §5.3.1] Federally Enforceable Through Title V Permit
16. The specific power of the electrostatic precipitator shall be at least 70 milliwatts/acfm except during the bypass episodes allowed by this permit. [District Rule 2520, §9.3.2] Federally Enforceable Through Title V Permit
17. Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation $E=3.59P^{0.62}$ ($P < 30$ tph) or $E=17.31P^{0.16}$ ($P > 30$ tph). [District Rule 4202] Federally Enforceable Through Title V Permit
18. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Stanislaus County Rule 407 and District Rule 4801] Federally Enforceable Through Title V Permit
19. Source testing to demonstrate compliance with permit conditions and all rules and regulations for both natural gas and LPG shall be conducted at least once every calendar year. NO_x and CO testing shall be performed using CARB Method 100. VOC testing shall be performed using EPA method 25A. PM₁₀ testing shall be performed using EPA methods 201 and 202, EPA methods 201A and 202, or CARB methods 501 and 5. SO_x testing shall be performed using EPA Method 8 and CARB Method 1-100. [District Rules 1081; 2520, §9.3.2; and 4354, 6.4 and 6.5.1] Federally Enforceable Through Title V Permit
20. Source testing when firing on LPG fuel need not be performed if the LPG fuel usage for this furnace does not exceed 100 hours during any one calendar year. A source test shall be performed within 90 days after this furnace exceeds 100 hours of operation, on LPG, on an annual basis. [District Rule 1081] Federally Enforceable Through Title V Permit

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21. Source testing shall be conducted by a CARB-certified source testing contractor. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to source testing. The results of each source test shall be submitted to the District within 60 days after the source test date. [District Rule 1081] Federally Enforceable Through Title V Permit
22. Source test conditions shall be representative of operations equal to or greater than 60 percent of the fuel use capacity for each furnace as stated in the Permit to Operate. [District Rule 4354, §6.5.2] Federally Enforceable Through Title V Permit
23. PM and PM10 source testing shall be conducted down stream of the electrostatic precipitator in the common stack. Furnaces #1, #2, #3, and #4 must operate simultaneously during source testing unless prior approval is obtained from the District. [District Rule 1081] Federally Enforceable Through Title V Permit
24. An annual Relative Accuracy Test Audit (RATA) shall be performed on the continuous monitoring system as outlined in 40 CFR Part 60 Appendix B. [District Rule 1080] Federally Enforceable Through Title V Permit
25. The owner/operator shall perform a relative accuracy test audit (RATA) as specified by 40 CFR Part 60, Appendix F (CGAs and RATAs) and if applicable 40 CFR Part 75, Appendix B (linearity and RATAs) at least once every four calendar quarters and annually within ± 30 days of the anniversary date of the initial test. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080] Federally Enforceable Through Title V Permit
26. An exceedance of a NO_x emission limit as indicated by the CEMS shall be reported by the operator to the APCO within 24 hours. The notification shall include 1) name and location of the facility, 2) identification of furnace(s) causing the exceedances, 3) calculation of actual NO_x, CO and VOC emissions, and 4) corrective actions and schedules to complete the work. [District Rule 1080 and Stanislaus County Rule 108] Federally Enforceable Through Title V Permit
27. The operator shall notify the APCO no later than one hour after the detection of a breakdown of the CEMS. The operator shall inform the APCO of the intent to shut down the CEMS at least 24 hours prior to the event. [District Rule 1100] Federally Enforceable Through Title V Permit
28. The permittee shall submit a written report including copies of any Equipment Breakdown reports and/or pertinent variance decisions to the APCO for each calendar quarter, within 30 days of the end of the quarter, including: time intervals, data and magnitude of excess emissions, nature and cause of excess emissions (if known), corrective actions taken and preventive measures adopted; averaging period used for data reporting shall correspond to the averaging period for each respective emission standard; applicable time and date of each period during which the CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; and a negative declaration when no excess emissions occurred. [District Rule 1080] Federally Enforceable Through Title V Permit
29. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
30. Results of continuous emissions monitoring shall be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080] Federally Enforceable Through Title V Permit
31. Cylinder gas audits (GGAs) of continuous emission monitors shall be conducted quarterly, except during quarters in which relative accuracy and total accuracy testing is performed, in accordance with EPA guidelines. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
32. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201, Stanislaus County Rule 404, District Rule 4202 and Stanislaus County Rule 405. A permit shield is granted from these requirements. [District Rule 2520, §13.2] Federally Enforceable Through Title V Permit

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33. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4801 and Stanislaus County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, §13.2] Federally Enforceable Through Title V Permit
34. The requirements of District Rule 4301 and Stanislaus County Rule 408 were determined to not apply to this unit because the unit does not utilize indirect heat transfer. A permit shield is granted from these requirements. [District Rule 2520, §13.2] Federally Enforceable Through Title V Permit
35. The requirements of 40 CFR 60, Subpart CC were determined to not apply to this unit because the unit was constructed prior to the effective date in the regulation and has not been modified (according to the definition of "modified" in the regulation). A permit shield is granted from these requirements. [District Rule 2520, §13.2] Federally Enforceable Through Title V Permit
36. The requirements of 40 CFR 61, Subpart N were determined to not apply to this unit because the unit does not use commercial arsenic. A permit shield is granted from these requirements. [District Rule 2520, §13.2] Federally Enforceable Through Title V Permit
37. NO_x emissions shall not exceed 1.5 pounds per ton of glass pulled. This performance based limit is to enforce the NO_x emission reductions granted by certificate number N-106-2. [District NSR Rule] Federally Enforceable Through Title V Permit
38. Except during furnace idling, shutdown, and startup, the aggregated NO_x emissions shall not exceed 3.6 lb-NO_x per ton of glass pulled (based on a block 24-hour average). Aggregated NO_x emissions are the NO_x emissions as measured at the common stack divided by the sum of the daily glass pulled from permit units N-1662-1, '-2, '-3, and '-4. [District Rule 4354, 9.0, 9.4, and 9.7.1] Federally Enforceable Through Title V Permit
39. CO emissions shall not exceed 0.04 pounds per ton of glass pulled. This performance based limit is to enforce the CO emission reductions granted by certificate number N-106-3. [District NSR Rule] Federally Enforceable Through Title V Permit
40. The VOC emissions shall not exceed 0.25 pounds per ton of glass pulled. [District Rule 2201] Federally Enforceable Through Title V Permit
41. The SO_x emissions shall not exceed 2.35 pounds per ton of glass pulled. [District Rule 2201] Federally Enforceable Through Title V Permit
42. PM₁₀ emissions, except during electrostatic precipitator bypass episodes, shall not exceed 0.49 pound per ton of glass pulled. [District NSR Rule] Federally Enforceable Through Title V Permit
43. The PM₁₀ emissions, during electrostatic precipitator bypass episodes, shall not exceed 0.71 pound per ton of glass pulled. [District Rule 2201] Federally Enforceable Through Title V Permit
44. The electrostatic precipitator may be bypassed only for maintenance and repair. The duration of electrostatic precipitator bypass episodes shall not exceed 144 hours per calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
45. The PM₁₀ emissions shall not exceed 22,936 pounds during the first calendar quarter, 23,190 pounds during the second calendar quarter, 23,445 pounds during the third calendar quarter and 23,445 pounds during the fourth calendar quarter. These limits are to enforce the PM₁₀ emission reductions granted by certificate number N-161-4. [District Rule 2201] Federally Enforceable Through Title V Permit
46. NO_x, CO and VOC emissions during idling shall not exceed the emissions limits as calculated in Section 5.4.2 of District Rule 4354 (2/21/02). [District Rule 4354, 5.4.2] Federally Enforceable Through Title V Permit
47. The facility shall not use commercial arsenic as a raw material in the production process. [40 CFR 61 Subpart N] Federally Enforceable Through Title V Permit
48. Devices used to measure primary and secondary voltage and current shall be maintained in accordance with the manufacturer's specifications. [40 CFR 64] Federally Enforceable Through Title V Permit
49. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR 64] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

50. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR 64] Federally Enforceable Through Title V Permit
51. The permittee shall comply with the record keeping and reporting requirements of 40 CFR part 64.9. [40 CFR 64] Federally Enforceable Through Title V Permit
52. Until the full compliance date for Tier 2 emission limits specified in District Rule 4354, Section 7.1, the permittee shall maintain an operating log that includes: on a monthly basis, the total hours of operation; type and quantity of fuel used in each furnace; and the quantity of glass pulled. The owner shall maintain records of source tests and operating parameters established during the initial source test, maintenance, repair, malfunction, idling, shutdown, and start-up. This information shall be made available on site during normal business hours from Monday through Friday for a period of five years, and submitted to the APCO upon request. [District Rule 2520, §9.4.2 and District Rule 4354, §6.3.1] Federally Enforceable Through Title V Permit
53. The permittee shall maintain daily records of the aggregated NOx emissions and the specific power (in milliwatts/acfm) of the electrostatic precipitator. [District Rules 2520, 9.3.2 and 4354, 9.6.1 and 9.7] Federally Enforceable Through Title V Permit
54. A record of the PM10 emissions from this unit, in pounds per calendar quarter, shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit
55. A record of the cumulative annual electrostatic precipitator bypass duration, in hours, shall be kept. The record shall be updated at least weekly. [District Rule 1070] Federally Enforceable Through Title V Permit
56. 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] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

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ISSUANCE DATE: DRAFT

PERMIT NO: N-1662-2-13

LEGAL OWNER OR OPERATOR: GALLO GLASS COMPANY
MAILING ADDRESS: PO BOX 1230
MODESTO, CA 95353

LOCATION: 605 S SANTA CRUZ AVE
MODESTO, CA 95354

EQUIPMENT DESCRIPTION:

GLASS FURNACE #2 WITH 10 MAXON GAS/OXYGEN BURNERS AND ASSOCIATED FORMING EQUIPMENT (75 MMBTU/HR MAX HEAT CAPACITY). THIS FURNACE IS DUCTED THROUGH A STACK COMMON TO PERMIT UNITS N-1662-1, N-1662-2, N-1662-3 AND N-1662-4. THE FURNACES ARE SERVED BY A SHARED ELECTROSTATIC PRECIPITATOR AND SOX SCRUBBER. MODIFICATION TO INCREASE THE ESP BYPASS ALLOWANCE TO 144 HR/YR.

CONDITIONS

1. 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 2520] Federally Enforceable Through Title V Permit
2. Prior to operating with the modifications authorized by this Authority to Construct, the facility shall submit an application for an administrative amendment to its Title V permit, in accordance with District Rule 2520, Section 11.4.2. [District Rule 2520] Federally Enforceable Through Title V Permit
3. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
4. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
5. Particulate matter emissions shall not exceed 0.1 grain/dscf in concentration. [District Rule 4201 and Stanislaus County Rule 404] Federally Enforceable Through Title V Permit
6. The furnace shall be fired on natural gas and LPG only. [District NSR Rule] Federally Enforceable Through Title V Permit

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

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DAVID WARNER, Director of Permit Services

N-1662-2-13 : Jul 19 2010 9:44AM - SCHOINHOM : Joint Inspection NOT Required

7. The furnace shall have a continuous monitoring system for NOx. The monitoring device shall have a continuous recording device, and all records shall be kept on site. [District Rules 1080 and 4354, §5.8] Federally Enforceable Through Title V Permit
8. One continuous emissions monitoring (CEM) system may be used for monitoring oxy-fuel fired furnaces #1, #2, #3, and #4 provided all of the exhaust gases of each of these furnaces are ducted to a common stack, and monitored down stream of the common stack. The CEMS shall comply with the requirements of 40 Code of Federal Regulations (CFR) Part 51, 40 CFR Parts 60.7 and 60.13, 40 CFR Part 60 Appendix B (Performance Specifications) and Appendix F (Quality Assurance Procedures) and the applicable sections of Rule 1080 (Stack Monitoring). [District Rule 4354, 5.8 and 6.6.1] Federally Enforceable Through Title V Permit
9. The facility shall install and maintain equipment, facilities, and systems compatible with the District's CEM data polling software system and shall make CEM data available to the District's automated polling system on a daily basis. [District Rule 1080] Federally Enforceable Through Title V Permit
10. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NOx, CO, and O2 analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Source Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit
11. During startups, the permittee shall comply with the requirements of section §5.2 of District Rule 4354. [District Rule 4354, §5.2] Federally Enforceable Through Title V Permit
12. The NOx control system shall be in operation as soon as technologically feasible during the startup period to minimize emissions. [District Rule 4354, §5.2.3] Federally Enforceable Through Title V Permit
13. The NOx control system shall be in operation whenever technologically feasible during shutdown to minimize emissions. [District Rule 4354, §5.3.2] Federally Enforceable Through Title V Permit
14. The NOx control system shall be in operation whenever technologically feasible during furnace idling to minimize emissions. [District Rule 4354, §5.4.1] Federally Enforceable Through Title V Permit
15. The duration of shutdown, as measured from the time the furnace operations drop below the idle threshold specified in §3.9 of District Rule 4354 to when all emissions from the furnace cease, shall not exceed 20 days. [District Rule 4354, §5.3.1] Federally Enforceable Through Title V Permit
16. The specific power of the electrostatic precipitator shall be at least 70 milliwatts/acfm except during the bypass episodes allowed by this permit. [District Rule 2520, §9.3.2] Federally Enforceable Through Title V Permit
17. Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation $E=3.59P^{0.62}$ ($P < 30$ tph) or $E=17.31P^{0.16}$ ($P > 30$ tph). [District Rule 4202] Federally Enforceable Through Title V Permit
18. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Stanislaus County Rule 407 and District Rule 4801] Federally Enforceable Through Title V Permit
19. Source testing to demonstrate compliance with permit conditions and all rules and regulations for both natural gas and LPG shall be conducted at least once every calendar year. NOx and CO testing shall be performed using CARB Method 100. VOC testing shall be performed using EPA method 25A. PM10 testing shall be performed using EPA methods 201 and 202, EPA methods 201a and 202, or CARB methods 501 and 5. SOx testing shall be performed using EPA Method 8 and CARB Method 1-100. [District Rules 1081; 2520, §9.3.2; and 4354, 6.4 and 6.5.1] Federally Enforceable Through Title V Permit
20. Source testing when firing on LPG fuel need not be performed if the LPG fuel usage for this furnace does not exceed 100 hours during any one calendar year. A source test shall be performed within 90 days after this furnace exceeds 100 hours of operation, on LPG, on an annual basis. [District Rule 1081] Federally Enforceable Through Title V Permit

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21. Source testing shall be conducted by a CARB-certified source testing contractor. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to source testing. The results of each source test shall be submitted to the District within 60 days after the source test date. [District Rule 1081] Federally Enforceable Through Title V Permit
22. Source test conditions shall be representative of operations equal to or greater than 60 percent of the fuel use capacity for each furnace as stated in the Permit to Operate. [District Rule 4354, §6.5.2] Federally Enforceable Through Title V Permit
23. PM and PM10 source testing shall be conducted down stream of the electrostatic precipitator in the common stack. Furnaces #1, #2, #3, and #4 must operate simultaneously during source testing unless prior approval is obtained from the District. [District Rule 1081] Federally Enforceable Through Title V Permit
24. An annual Relative Accuracy Test Audit (RATA) shall be performed on the continuous monitoring system as outlined in 40 CFR Part 60 Appendix B. [District Rule 1080] Federally Enforceable Through Title V Permit
25. The owner/operator shall perform a relative accuracy test audit (RATA) as specified by 40 CFR Part 60, Appendix F (CGAs and RATAs) and if applicable 40 CFR Part 75, Appendix B (linearity and RATAs) at least once every four calendar quarters and annually within ± 30 days of the anniversary date of the initial test. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080] Federally Enforceable Through Title V Permit
26. An exceedance of a NOx emission limit as indicated by the CEMS shall be reported by the operator to the APCO within 24 hours. The notification shall include 1) name and location of the facility, 2) identification of furnace(s) causing the exceedances, 3) calculation of actual NOx, CO and VOC emissions, and 4) corrective actions and schedules to complete the work. [District Rules 1080 and 4354, §9.6 and Stanislaus County Rule 108] Federally Enforceable Through Title V Permit
27. The operator shall notify the APCO no later than one hour after the detection of a breakdown of the CEMS. The operator shall inform the APCO of the intent to shut down the CEMS at least 24 hours prior to the event. [District Rule 1100] Federally Enforceable Through Title V Permit
28. The permittee shall submit a written report including copies of any Equipment Breakdown reports and/or pertinent variance decisions to the APCO for each calendar quarter, within 30 days of the end of the quarter, including: time intervals, data and magnitude of excess emissions, nature and cause of excess emissions (if known), corrective actions taken and preventive measures adopted; averaging period used for data reporting shall correspond to the averaging period for each respective emission standard; applicable time and date of each period during which the CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; and a negative declaration when no excess emissions occurred. [District Rule 1080] Federally Enforceable Through Title V Permit
29. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
30. Results of continuous emissions monitoring shall be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080] Federally Enforceable Through Title V Permit
31. Cylinder gas audits (GGAs) of continuous emission monitors shall be conducted quarterly, except during quarters in which relative accuracy and total accuracy testing is performed, in accordance with EPA guidelines. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
32. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201, Stanislaus County Rule 404, District Rule 4202 and Stanislaus County Rule 405. A permit shield is granted from these requirements. [District Rule 2520, §13.2] Federally Enforceable Through Title V Permit

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33. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4801 and Stanislaus County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, §13.2] Federally Enforceable Through Title V Permit
34. The requirements of District Rule 4301 and Stanislaus County Rule 408 were determined to not apply to this unit because the unit does not utilize indirect heat transfer. A permit shield is granted from these requirements. [District Rule 2520, §13.2] Federally Enforceable Through Title V Permit
35. The requirements of 40 CFR 60, Subpart CC were determined to not apply to this unit because the unit was constructed prior to the effective date in the regulation and has not been modified (according to the definition of "modified" in the regulation). A permit shield is granted from these requirements. [District Rule 2520, §13.2] Federally Enforceable Through Title V Permit
36. The requirements of 40 CFR 61, Subpart N were determined to not apply to this unit because the unit does not use commercial arsenic. A permit shield is granted from these requirements. [District Rule 2520, §13.2] Federally Enforceable Through Title V Permit
37. NOx emissions shall not exceed 2.77 pounds per ton of glass pulled. This performance based limit is to enforce the NOx emission reductions granted by certificate number N-54-2. [District NSR Rule] Federally Enforceable Through Title V Permit
38. Except during furnace idling, shutdown, and startup, the aggregated NOx emissions shall not exceed 3.6 lb-NOx per ton of glass pulled (based on a block 24-hour average). Aggregated NOx emission are the NOx emissions as measured at the common stack divided by the sum of the daily glass pulled from permit units N-1662-1, '-2, '-3, and '-4. [District Rule 4354, 9.0, 9.4, and 9.7.1] Federally Enforceable Through Title V Permit
39. The CO emissions shall not exceed 1.0 pound per ton of glass pulled. [District NSR Rule and District Rule 4354] Federally Enforceable Through Title V Permit
40. The VOC emissions shall not exceed 0.25 pounds per ton of glass pulled. [District NSR Rule] Federally Enforceable Through Title V Permit
41. The SOx emissions shall not exceed 2.35 pounds per ton of glass pulled. [District NSR Rule] Federally Enforceable Through Title V Permit
42. PM10 emissions, except during electrostatic precipitator bypass episodes, shall not exceed 0.49 pound per ton of glass pulled. [District NSR Rule] Federally Enforceable Through Title V Permit
43. The PM10 emissions, during electrostatic precipitator bypass episodes, shall not exceed 0.71 pound per ton of glass pulled. [District NSR Rule] Federally Enforceable Through Title V Permit
44. The electrostatic precipitator may be bypassed only for maintenance and repair. The duration of electrostatic precipitator bypasses shall not exceed 144 hours per calendar year. [District NSR Rule] Federally Enforceable Through Title V Permit
45. The PM10 emissions shall not exceed 15,527 pounds during the first calendar quarter, 15,699 pounds during the second calendar quarter, 15,872 pounds during the third calendar quarter and 15,872 pounds during the fourth calendar quarter. These limits are to enforce the PM10 emission reductions granted by certificate number N-161-4. [District NSR Rule] Federally Enforceable Through Title V Permit
46. NOx, CO and VOC emissions during idling shall not exceed the emissions limits as calculated in Section 5.4.2 of District Rule 4354 (2/21/02). [District Rule 4354, 5.4.2] Federally Enforceable Through Title V Permit
47. The facility shall not use commercial arsenic as a raw material in the production process. [40 CFR 61 Subpart N] Federally Enforceable Through Title V Permit
48. Devices used to measure primary and secondary voltage and current shall be maintained in accordance with the manufacturer's specifications. [40 CFR 64] Federally Enforceable Through Title V Permit
49. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR 64] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

50. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR 64] Federally Enforceable Through Title V Permit
51. The permittee shall comply with the record keeping and reporting requirements of 40 CFR part 64.9. [40 CFR 64] Federally Enforceable Through Title V Permit
52. The permittee shall maintain daily records of total hours of operation, type and quantity of fuel used, quantity of glass pulled, NOx emission rate (in lb/ton of glass pulled), aggregated NOx emissions, and specific power (in milliwatts/acfm) of the electrostatic precipitator. The permittee shall also maintain records of source tests and all operating parameters established during the initial source test, all instances of maintenance and repair, any malfunction, as well as all periods of idling, startup, and shutdown. All records shall be made available on site during normal business hours from Monday through Friday and shall be provided to the District upon request. [District NSR Rule and District Rules 2520 §9.3.2 and 4354, §6.3.2 & 9.6.1] Federally Enforceable Through Title V Permit
53. A record of the PM10 emissions from this unit, in pounds per calendar quarter, shall be kept. [District NSR Rule] Federally Enforceable Through Title V Permit
54. A record of the cumulative annual electrostatic precipitator bypass duration, in hours, shall be kept. The record shall be updated at least weekly. [District Rule 1070] Federally Enforceable Through Title V Permit
55. 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] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
DRAFT

PERMIT NO: N-1662-3-13

LEGAL OWNER OR OPERATOR: GALLO GLASS COMPANY
MAILING ADDRESS: PO BOX 1230
MODESTO, CA 95353

LOCATION: 605 S SANTA CRUZ AVE
MODESTO, CA 95354

EQUIPMENT DESCRIPTION:

GLASS FURNACE #3 WITH 10 MAXON GAS/OXYGEN BURNERS AND ASSOCIATED FORMING EQUIPMENT (75 MMBTU/HR MAX HEAT CAPACITY). THIS FURNACE IS DUCTED THROUGH A STACK COMMON TO PERMIT UNITS N-1662-1, N-1662-2, N-1662-3 AND N-1662-4. THE FURNACES ARE SERVED BY A SHARED ELECTROSTATIC PRECIPITATOR AND SOX SCRUBBER. MODIFICATION TO INCREASE THE ESP BYPASS ALLOWANCE TO 144 HR/YR.

CONDITIONS

1. 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 2520] Federally Enforceable Through Title V Permit
2. Prior to operating with the modifications authorized by this Authority to Construct, the facility shall submit an application for an administrative amendment to its Title V permit, in accordance with District Rule 2520, Section 11.4.2. [District Rule 2520] Federally Enforceable Through Title V Permit
3. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
4. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
5. Particulate matter emissions shall not exceed 0.1 grain/dscf in concentration. [District Rule 4201 and Stanislaus County Rule 404] Federally Enforceable Through Title V Permit
6. The furnace shall be fired on natural gas and LPG only. [District NSR Rule] Federally Enforceable Through Title V Permit

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

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DAVID WARNER, Director of Permit Services
N-1662-3-13: Jul 19 2010 9:44AM - SCHONHOM : Joint Inspection NOT Required

7. The furnace shall have a continuous monitoring system for NO_x. The monitoring device shall have a continuous recording device, and all records shall be kept on site. [District Rules 1080 and 4354, §5.8] Federally Enforceable Through Title V Permit
8. One continuous emissions monitoring (CEM) system may be used for monitoring oxy-fuel fired furnaces #1, #2, #3, and #4 provided all of the exhaust gases of each of these furnaces are ducted to a common stack, and monitored down stream of the common stack. The CEMS shall comply with the requirements of 40 Code of Federal Regulations (CFR) Part 51, 40 CFR Parts 60.7 and 60.13, 40 CFR Part 60 Appendix B (Performance Specifications) and Appendix F (Quality Assurance Procedures) and the applicable sections of Rule 1080 (Stack Monitoring). [District Rule 4354, 5.8 and 6.6.1] Federally Enforceable Through Title V Permit
9. The facility shall install and maintain equipment, facilities, and systems compatible with the District's CEM data polling software system and shall make CEM data available to the District's automated polling system on a daily basis. [District Rule 1080] Federally Enforceable Through Title V Permit
10. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NO_x, CO, and O₂ analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Source Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit
11. During startups, the permittee shall comply with the requirements of section §5.2 of District Rule 4354. [District Rule 4354, §5.2] Federally Enforceable Through Title V Permit
12. The NO_x control system shall be in operation as soon as technologically feasible during the startup period to minimize emissions. [District Rule 4354, §5.2.3] Federally Enforceable Through Title V Permit
13. The NO_x control system shall be in operation whenever technologically feasible during shutdown to minimize emissions. [District Rule 4354, §5.3.2] Federally Enforceable Through Title V Permit
14. The NO_x control system shall be in operation whenever technologically feasible during furnace idling to minimize emissions. [District Rule 4354, §5.4.1] Federally Enforceable Through Title V Permit
15. The duration of shutdown, as measured from the time the furnace operations drop below the idle threshold specified in §3.9 of District Rule 4354 to when all emissions from the furnace cease, shall not exceed 20 days. [District Rule 4354, §5.3.1] Federally Enforceable Through Title V Permit
16. The specific power of the electrostatic precipitator shall be at least 70 milliwatts/acfm except during the bypass episodes allowed by this permit. [District Rule 2520, §9.3.2] Federally Enforceable Through Title V Permit
17. Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation $E=3.59P^{0.62}$ ($P < 30$ tph) or $E=17.31P^{0.16}$ ($P > 30$ tph). [District Rule 4202] Federally Enforceable Through Title V Permit
18. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Stanislaus County Rule 407 and District Rule 4801] Federally Enforceable Through Title V Permit
19. Source testing to demonstrate compliance with permit conditions and all rules and regulations for both natural gas and LPG shall be conducted at least once every calendar year. NO_x and CO testing shall be performed using CARB Method 100. VOC testing shall be performed using EPA method 25A. PM₁₀ testing shall be performed using EPA methods 201 and 202, EPA methods 201A and 202, or CARB methods 501 and 5. SO_x testing shall be performed using EPA Method 8 and CARB Method 1-100. [District Rules 1081; 2520, §9.3.2; and 4354, 6.4 and 6.5.1] Federally Enforceable Through Title V Permit
20. Source testing when firing on LPG fuel need not be performed if the LPG fuel usage for this furnace does not exceed 100 hours during any one calendar year. A source test shall be performed within 90 days after this furnace exceeds 100 hours of operation, on LPG, on an annual basis. [District Rule 1081] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

21. Source testing shall be conducted by a CARB-certified source testing contractor. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to source testing. The results of each source test shall be submitted to the District within 60 days after the source test date. [District Rule 1081] Federally Enforceable Through Title V Permit
22. Source test conditions shall be representative of operations equal to or greater than 60 percent of the fuel use capacity for each furnace as stated in the Permit to Operate. [District Rule 4354, §6.5.2] Federally Enforceable Through Title V Permit
23. PM and PM10 source testing shall be conducted down stream of the electrostatic precipitator in the common stack. Furnaces #1, #2, #3, and #4 must operate simultaneously during source testing unless prior approval is obtained from the District. [District Rule 1081] Federally Enforceable Through Title V Permit
24. An annual Relative Accuracy Test Audit (RATA) shall be performed on the continuous monitoring system as outlined in 40 CFR Part 60 Appendix B. [District Rule 1080] Federally Enforceable Through Title V Permit
25. The owner/operator shall perform a relative accuracy test audit (RATA) as specified by 40 CFR Part 60, Appendix F (CGAs and RATAs) and if applicable 40 CFR Part 75, Appendix B (linearity and RATAs) at least once every four calendar quarters and annually within ± 30 days of the anniversary date of the initial test. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080] Federally Enforceable Through Title V Permit
26. An exceedance of a NOx emission limit as indicated by the CEMS shall be reported by the operator to the APCO within 24 hours. The notification shall include 1) name and location of the facility, 2) identification of furnace(s) causing the exceedances, 3) calculation of actual NOx, CO and VOC emissions, and 4) corrective actions and schedules to complete the work. [District Rule 4354, 9.6, District Rule 1080 and Stanislaus County Rule 108] Federally Enforceable Through Title V Permit
27. The operator shall notify the APCO no later than one hour after the detection of a breakdown of the CEMS. The operator shall inform the APCO of the intent to shut down the CEMS at least 24 hours prior to the event. [District Rule 1100] Federally Enforceable Through Title V Permit
28. The permittee shall submit a written report including copies of any Equipment Breakdown reports and/or pertinent variance decisions to the APCO for each calendar quarter, within 30 days of the end of the quarter, including: time intervals, data and magnitude of excess emissions, nature and cause of excess emissions (if known), corrective actions taken and preventive measures adopted; averaging period used for data reporting shall correspond to the averaging period for each respective emission standard; applicable time and date of each period during which the CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; and a negative declaration when no excess emissions occurred. [District Rule 1080] Federally Enforceable Through Title V Permit
29. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
30. Results of continuous emissions monitoring shall be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080] Federally Enforceable Through Title V Permit
31. Cylinder gas audits (GGAs) of continuous emission monitors shall be conducted quarterly, except during quarters in which relative accuracy and total accuracy testing is performed, in accordance with EPA guidelines. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
32. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201, Stanislaus County Rule 404, District Rule 4202 and Stanislaus County Rule 405. A permit shield is granted from these requirements. [District Rule 2520, §13.2] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

33. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4801 and Stanislaus County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, §13.2] Federally Enforceable Through Title V Permit
34. The requirements of District Rule 4301 and Stanislaus County Rule 408 were determined to not apply to this unit because the unit does not utilize indirect heat transfer. A permit shield is granted from these requirements. [District Rule 2520, §13.2] Federally Enforceable Through Title V Permit
35. The requirements of 40 CFR 60, Subpart CC were determined to not apply to this unit because the unit was constructed prior to the effective date in the regulation and has not been modified (according to the definition of "modified" in the regulation). A permit shield is granted from these requirements. [District Rule 2520, §13.2] Federally Enforceable Through Title V Permit
36. The requirements of 40 CFR 61, Subpart N were determined to not apply to this unit because the unit does not use commercial arsenic. A permit shield is granted from these requirements. [District Rule 2520, §13.2] Federally Enforceable Through Title V Permit
37. NOx emissions shall not exceed 2.48 pounds per ton of glass pulled. This performance based limit is to enforce the NOx emission reductions granted by certificate number N-56-2. [District NSR Rule] Federally Enforceable Through Title V Permit
38. Except during furnace idling, shutdown, and startup, the aggregated NOx emissions shall not exceed 3.6 lb-NOx per ton of glass pulled (based on a block 24-hour average). Aggregated NOx emission are the NOx emissions as measured at the common stack divided by the sum of the daily glass pulled from permit units N-1662-1, '-2, '-3, and '-4. [District Rule 4354, 9.0, 9.4, and 9.7.1] Federally Enforceable Through Title V Permit
39. CO emissions shall not exceed 0.01 pounds per ton of glass pulled. This performance based limit is to enforce the CO emission reductions granted by certificate number N-56-3. [District NSR Rule] Federally Enforceable Through Title V Permit
40. The VOC emissions shall not exceed 0.25 pounds per ton of glass pulled. [District NSR Rule] Federally Enforceable Through Title V Permit
41. The SOx emissions shall not exceed 2.35 pounds per ton of glass pulled. [District NSR Rule] Federally Enforceable Through Title V Permit
42. PM10 emissions, except during electrostatic precipitator bypass episodes, shall not exceed 0.49 pound per ton of glass pulled. [District NSR Rule] Federally Enforceable Through Title V Permit
43. The PM10 emissions, during electrostatic precipitator bypass episodes, shall not exceed 0.71 pound per ton of glass pulled. [District NSR Rule] Federally Enforceable Through Title V Permit
44. The electrostatic precipitator may be bypassed only for maintenance and repair. The duration of electrostatic precipitator bypasses shall not exceed 144 hours per calendar year. [District NSR Rule] Federally Enforceable Through Title V Permit
45. The PM10 emissions shall not exceed 15,527 pounds during the first calendar quarter, 15,699 pounds during the second calendar quarter, 15,872 pounds during the third calendar quarter and 15,872 pounds during the fourth calendar quarter. These limits are to enforce the PM10 emission reductions granted by certificate number N-161-4. [District NSR Rule] Federally Enforceable Through Title V Permit
46. NOx, CO and VOC emissions during idling shall not exceed the emissions limits as calculated in Section 5.4.2 of District Rule 4354 (2/21/02). [District Rule 4354, 5.4.2] Federally Enforceable Through Title V Permit
47. The facility shall not use commercial arsenic as a raw material in the production process. [40 CFR 61 Subpart N] Federally Enforceable Through Title V Permit
48. Devices used to measure primary and secondary voltage and current shall be maintained in accordance with the manufacturer's specifications. [40 CFR 64] Federally Enforceable Through Title V Permit
49. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR 64] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

50. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR 64] Federally Enforceable Through Title V Permit
51. The permittee shall comply with the record keeping and reporting requirements of 40 CFR part 64.9. [40 CFR 64] Federally Enforceable Through Title V Permit
52. The permittee shall maintain daily records of total hours of operation, type and quantity of fuel used, quantity of glass pulled, NOx emission rate (in lb/ton of glass pulled), aggregated NOx emissions, and specific power (in milliwatts/acfm) of the electrostatic precipitator. The permittee shall also maintain records of source tests and all operating parameters established during the initial source test, all instances of maintenance and repair, any malfunction, as well as all periods of idling, startup, and shutdown. All records shall be made available on site during normal business hours from Monday through Friday and shall be provided to the District upon request. [District NSR Rule and District Rules 2520 §9.3.2 and 4354, §6.3.2 & 9.6.1] Federally Enforceable Through Title V Permit
53. A record of the PM10 emissions from this unit, in pounds per calendar quarter, shall be kept. [District NSR Rule] Federally Enforceable Through Title V Permit
54. A record of the cumulative annual electrostatic precipitator bypass duration, in hours, shall be kept. The record shall be updated at least weekly. [District Rule 1070] Federally Enforceable Through Title V Permit
55. 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] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
DRAFT

PERMIT NO: N-1662-4-13

LEGAL OWNER OR OPERATOR: GALLO GLASS COMPANY
MAILING ADDRESS: PO BOX 1230
MODESTO, CA 95353

LOCATION: 605 S SANTA CRUZ AVE
MODESTO, CA 95354

EQUIPMENT DESCRIPTION:

GLASS FURNACE #4 WITH 12 MAXON GAS/OXYGEN BURNERS AND ASSOCIATED FORMING EQUIPMENT (90 MMBTU/HR MAX HEAT CAPACITY). THIS FURNACE IS DUCTED THROUGH A STACK COMMON TO PERMIT UNITS N-1662-1, N-1662-2, N-1662-3 AND N-1662-4. THE FURNACES ARE SERVED BY A SHARED ELECTROSTATIC PRECIPITATOR AND SOX SCRUBBER. MODIFICATION TO INCREASE THE ESP BYPASS ALLOWANCE TO 144 HR/YR.

CONDITIONS

1. 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 2520] Federally Enforceable Through Title V Permit
2. Prior to operating with the modifications authorized by this Authority to Construct, the facility shall submit an application for an administrative amendment to its Title V permit, in accordance with District Rule 2520, Section 11.4.2. [District Rule 2520] Federally Enforceable Through Title V Permit
3. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
4. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
5. Particulate matter emissions shall not exceed 0.1 grain/dscf in concentration. [District Rule 4201 and Stanislaus County Rule 404] Federally Enforceable Through Title V Permit
6. The furnace shall be fired on natural gas and LPG only. [District NSR Rule] Federally Enforceable Through Title V Permit

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

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DAVID WARNER, Director of Permit Services

N-1662-4-13 : Jul 19 2010 9:44AM -- SCHOENHOM : Joint Inspection NOT Required

7. The furnace shall have a continuous monitoring system for NOx. The monitoring device shall have a continuous recording device, and all records shall be kept on site. [District Rules 1080 and 4354, §5.8] Federally Enforceable Through Title V Permit
8. One continuous emissions monitoring (CEM) system may be used for monitoring oxy-fuel fired furnaces #1, #2, #3, and #4 provided all of the exhaust gases of each of these furnaces are ducted to a common stack, and monitored down stream of the common stack. The CEMS shall comply with the requirements of 40 Code of Federal Regulations (CFR) Part 51, 40 CFR Parts 60.7 and 60.13, 40 CFR Part 60 Appendix B (Performance Specifications) and Appendix F (Quality Assurance Procedures) and the applicable sections of Rule 1080 (Stack Monitoring). [District Rule 4354, 5.8 and 6.6.1] Federally Enforceable Through Title V Permit
9. The facility shall install and maintain equipment, facilities, and systems compatible with the District's CEM data polling software system and shall make CEM data available to the District's automated polling system on a daily basis. [District Rule 1080] Federally Enforceable Through Title V Permit
10. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NOx, CO, and O2 analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Source Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit
11. During the startup period, the permittee shall comply with the requirements of §5.2 of District Rule 4354. [District Rule 4354, §5.2] Federally Enforceable Through Title V Permit
12. The NOx control system shall be in operation as soon as technologically feasible during the startup period to minimize emissions. [District Rule 4354, §5.2.3] Federally Enforceable Through Title V Permit
13. The NOx control system shall be in operation whenever technologically feasible during shutdown to minimize emissions. [District Rule 4354, §5.3.2] Federally Enforceable Through Title V Permit
14. The NOx control system shall be in operation whenever technologically feasible during furnace idling to minimize emissions. [District Rule 4354, §5.4.1] Federally Enforceable Through Title V Permit
15. The duration of shutdown, as measured from the time the furnace operations drop below the idle threshold specified in §3.9 of District Rule 4354 to when all emissions from the furnace cease, shall not exceed 20 days. [District Rule 4354, §5.3.1]
16. The total startup time, as defined in §3.22 of District Rule 4354 (Glass Melting Furnaces), shall not exceed 18 days. [District Rule 4354, §5.2.1] Federally Enforceable Through Title V Permit
17. The specific power of the electrostatic precipitator shall be at least 70 milliwatts/acfm except during the bypass episodes allowed by this permit. [District Rule 2520, §9.3.2] Federally Enforceable Through Title V Permit
18. Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation $E=3.59P^{0.62}$ ($P < 30$ tph) or $E=17.31P^{0.16}$ ($P > 30$ tph). [District Rule 4202] Federally Enforceable Through Title V Permit
19. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Stanislaus County Rule 407 and District Rule 4801] Federally Enforceable Through Title V Permit
20. Source testing to demonstrate compliance with permit conditions and all rules and regulations for both natural gas and LPG shall be conducted at least once every calendar year. NOx and CO testing shall be performed using CARB Method 100. VOC testing shall be performed using EPA method 25A. PM10 testing shall be performed using EPA methods 201 and 202, EPA methods 201a and 202, or CARB methods 501 and 5. SOx testing shall be performed using EPA Method 8 and CARB Method 1-100. [District Rules 1081; 2520, §9.3.2; and 4354, §6.4 and 6.5.1] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

21. Source testing when firing on LPG fuel need not be performed if the LPG fuel usage for this furnace does not exceed 100 hours during any one calendar year. A source test shall be performed within 90 days after this furnace exceeds 100 hours of operation, on LPG, on an annual basis. [District Rule 1081] Federally Enforceable Through Title V Permit
22. Source testing shall be conducted by a CARB-certified source testing contractor. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to source testing. The results of each source test shall be submitted to the District within 60 days after the source test date. [District Rule 1081] Federally Enforceable Through Title V Permit
23. Source test conditions shall be representative of operations equal to or greater than 60 percent of the fuel use capacity for each furnace as stated in the Permit to Operate. [District Rule 4354, §6.5.2] Federally Enforceable Through Title V Permit
24. PM and PM10 source testing shall be conducted down stream of the electrostatic precipitator in the common stack. Furnaces #1, #2, #3, and #4 must operate simultaneously during source testing unless prior approval is obtained from the District. [District Rule 1081] Federally Enforceable Through Title V Permit
25. An annual Relative Accuracy Test Audit (RATA) shall be performed on the continuous monitoring system as outlined in 40 CFR Part 60 Appendix B. [District Rule 1080] Federally Enforceable Through Title V Permit
26. The owner/operator shall perform a relative accuracy test audit (RATA) as specified by 40 CFR Part 60, Appendix F (CGAs and RATAs) and if applicable 40 CFR Part 75, Appendix B (linearity and RATAs) at least once every four calendar quarters and annually within ± 30 days of the anniversary date of the initial test. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080] Federally Enforceable Through Title V Permit
27. The exceedance of a NO_x emission limit as indicated by the CEMS shall be reported by the operator to the APCO within 24 hours. The notification shall include 1) name and location of the facility, 2) identification of furnace(s) causing the exceedances, 3) calculation of actual NO_x, CO and VOC emissions, and 4) corrective actions and schedules to complete the work. [District Rule 4354, 9.6.1; District Rule 1080; and Stanislaus County Rule 108] Federally Enforceable Through Title V Permit
28. The operator shall notify the APCO no later than one hour after the detection of a breakdown of the CEMS. The operator shall inform the APCO of the intent to shut down the CEMS at least 24 hours prior to the event. [District Rule 1100] Federally Enforceable Through Title V Permit
29. The permittee shall submit a written report including copies of any Equipment Breakdown reports and/or pertinent variance decisions to the APCO for each calendar quarter, within 30 days of the end of the quarter, including: time intervals, data and magnitude of excess emissions, nature and cause of excess emissions (if known), corrective actions taken and preventive measures adopted; averaging period used for data reporting shall correspond to the averaging period for each respective emission standard; applicable time and date of each period during which the CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; and a negative declaration when no excess emissions occurred. [District Rule 1080] Federally Enforceable Through Title V Permit
30. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
31. Results of continuous emissions monitoring shall be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080] Federally Enforceable Through Title V Permit
32. Cylinder gas audits (GGAs) of continuous emission monitors shall be conducted quarterly, except during quarters in which relative accuracy and total accuracy testing is performed, in accordance with EPA guidelines. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

33. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201, Stanislaus County Rule 404, District Rule 4202 and Stanislaus County Rule 405. A permit shield is granted from these requirements. [District Rule 2520, §13.2] Federally Enforceable Through Title V Permit
34. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4801 and Stanislaus County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, §13.2] Federally Enforceable Through Title V Permit
35. The requirements of District Rule 4301 and Stanislaus County Rule 408 were determined to not apply to this unit because the unit does not utilize indirect heat transfer. A permit shield is granted from these requirements. [District Rule 2520, §13.2] Federally Enforceable Through Title V Permit
36. The requirements of 40 CFR 60, Subpart CC were determined to not apply to this unit because the unit was constructed prior to the effective date in the regulation and has not been modified (according to the definition of "modified" in the regulation). A permit shield is granted from these requirements. [District Rule 2520, §13.2] Federally Enforceable Through Title V Permit
37. The requirements of 40 CFR 61, Subpart N were determined to not apply to this unit because the unit does not use commercial arsenic. A permit shield is granted from these requirements. [District Rule 2520, §13.2] Federally Enforceable Through Title V Permit
38. NOx emissions shall not exceed 2.95 pounds per ton of glass pulled. This performance based limit is to enforce the NOx emission reductions granted by certificate number N-107-2. [District NSR Rule] Federally Enforceable Through Title V Permit
39. Except during furnace idling, shutdown, and startup, the aggregated NOx emissions shall not exceed 3.6 lb-NOx per ton of glass pulled (based on a block 24-hour average). Aggregated NOx emission are the NOx emissions as measured at the common stack divided by the sum of the daily glass pulled from permit units N-1662-1, '-2, '-3, and '-4. [District Rule 4354, 9.0, 9.4, and 9.7.1] Federally Enforceable Through Title V Permit
40. CO emissions shall not exceed 1.0 pound per ton of glass pulled. [District Rule 4354, §5.1] Federally Enforceable Through Title V Permit
41. VOC emissions shall not exceed 0.25 pounds per ton of glass pulled. [District Rule 4354, §5.1] Federally Enforceable Through Title V Permit
42. The SOx emissions shall not exceed 2.35 pounds per ton of glass pulled. [District NSR Rule] Federally Enforceable Through Title V Permit
43. PM10 emissions, except during electrostatic precipitator bypass episodes, shall not exceed 0.49 pound per ton of glass pulled. [District NSR Rule] Federally Enforceable Through Title V Permit
44. The PM10 emissions, during electrostatic precipitator bypass episodes, shall not exceed 0.71 pound per ton of glass pulled. [District NSR Rule] Federally Enforceable Through Title V Permit
45. The electrostatic precipitator may be bypassed only for maintenance and repair. The duration of electrostatic precipitator bypasses shall not exceed 144 hours per calendar year. [District NSR Rule] Federally Enforceable Through Title V Permit
46. The PM10 emissions shall not exceed 28,132 pounds during the first calendar quarter, 28,445 pounds during the second calendar quarter, 28,757 pounds during the third calendar quarter and 28,758 pounds during the fourth calendar quarter. These limits are to enforce the PM10 emission reductions granted by certificate number N-161-4. [District NSR Rule] Federally Enforceable Through Title V Permit
47. During furnace idling, NOx emissions shall not exceed 1,888 pounds in any one day. [District Rule 4354, §5.4.2] Federally Enforceable Through Title V Permit
48. During furnace idling, CO emissions shall not exceed 640 pounds in any one day. [District Rule 4354, §5.4.2] Federally Enforceable Through Title V Permit
49. During furnace idling, VOC emissions shall not exceed 160 pounds in any one day. [District Rule 4354, §5.4.2] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

50. The facility shall not use commercial arsenic as a raw material in the production process. [40 CFR 61 Subpart N] Federally Enforceable Through Title V Permit
51. Devices used to measure primary and secondary voltage and current shall be maintained in accordance with the manufacturer's specifications. [40 CFR 64] Federally Enforceable Through Title V Permit
52. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR 64] Federally Enforceable Through Title V Permit
53. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR 64] Federally Enforceable Through Title V Permit
54. The permittee shall comply with the record keeping and reporting requirements of 40 CFR part 64.9. [40 CFR 64] Federally Enforceable Through Title V Permit
55. The permittee shall maintain daily records of total hours of operation, type and quantity of fuel used, quantity of glass pulled, NOx emission rate (in lb/ton of glass pulled), aggregated NOx emissions, and specific power (in milliwatts/acfm) of the electrostatic precipitator. The permittee shall also maintain records of source tests and all operating parameters established during the initial source test, all instances of maintenance and repair, any malfunction, as well as all periods of idling, startup, and shutdown. All records shall be made available on site during normal business hours from Monday through Friday and shall be provided to the District upon request. [District NSR Rule and District Rules 2520 §9.3.2 and 4354, §6.3.2 & 9.6.1] Federally Enforceable Through Title V Permit
56. A record of the PM10 emissions from this unit, in pounds per calendar quarter, shall be kept. [District NSR Rule] Federally Enforceable Through Title V Permit
57. A record of the cumulative annual electrostatic precipitator bypass duration, in hours, shall be kept. The record shall be updated at least weekly. [District Rule 1070] Federally Enforceable Through Title V Permit
58. 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] Federally Enforceable Through Title V Permit

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Appendix B
Current PTO's

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-1662-1-11

EXPIRATION DATE: 06/30/2007

EQUIPMENT DESCRIPTION:

FURNACE #1 WITH 10 MAXON GAS/OXYGEN BURNERS AND ASSOCIATED EQUIPMENT (75 MMBTU/HR MAX HEAT CAPACITY). THIS FURNACE IS DUCTED THROUGH A STACK COMMON TO PERMIT UNITS N-1662-1, N-1662-2, N-1662-3 AND N-1662-4. THE FURNACES ARE SERVED BY A SHARED ELECTROSTATIC PRECIPITATOR AND SOX SCRUBBER.

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
2. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. Particulate matter emissions shall not exceed 0.1 grain/dscf in concentration. [District Rule 4201 and Stanislaus County Rule 404] Federally Enforceable Through Title V Permit
4. The furnace shall be fired on natural gas and LPG only. [District NSR Rule] Federally Enforceable Through Title V Permit
5. The furnace shall have a continuous monitoring system for NOx. The monitoring system shall have a continuous recording device, and all records shall be kept on site. [District Rules 1080 and 4354, §5.8] Federally Enforceable Through Title V Permit
6. One continuous emissions monitoring (CEM) system may be used for monitoring oxy-fuel fired furnaces #1, #2, #3, and #4 provided all of the exhaust gases of each of these furnaces are ducted to a common stack, and monitored down stream of the common stack. The CEMS shall comply with the requirements of 40 Code of Federal Regulations (CFR) Part 51, 40 CFR Parts 60.7 and 60.13, 40 CFR Part 60 Appendix B (Performance Specifications) and Appendix F (Quality Assurance Procedures), and applicable sections of Rule 1080 (Stack Monitoring). [District Rule 4354, 5.8 and 6.6.1] Federally Enforceable Through Title V Permit
7. The facility shall install and maintain equipment, facilities, and systems compatible with the District's CEM data polling software system and shall make CEM data available to the District's automated polling system on a daily basis. [District Rule 1080] Federally Enforceable Through Title V Permit
8. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NOx, CO, and O2 analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Source Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit
9. During startups, the permittee shall comply with the requirements of section §5.2 of District Rule 4354. [District Rule 4354, §5.2] Federally Enforceable Through Title V Permit
10. The NOx control system shall be in operation as soon as technologically feasible during the startup period to minimize emissions. [District Rule 4354, §5.2.3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

11. The NOx control system shall be in operation whenever technologically feasible during shutdown to minimize emissions. [District Rule 4354, §5.3.2] Federally Enforceable Through Title V Permit
12. The NOx control system shall be in operation whenever technologically feasible during furnace idling to minimize emissions. [District Rule 4354, §5.4.1] Federally Enforceable Through Title V Permit
13. The duration of shutdown, as measured from the time the furnace operations drop below the idle threshold specified in §3.9 of District Rule 4354 to when all emissions from the furnace cease, shall not exceed 20 days. [District Rule 4354, §5.3.1] Federally Enforceable Through Title V Permit
14. The specific power of the electrostatic precipitator shall be at least 70 milliwatts/acfm except during the bypass episodes allowed by this permit. [District Rule 2520, §9.3.2] Federally Enforceable Through Title V Permit
15. Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation $E=3.59P^{0.62}$ ($P < 30$ tph) or $E=17.31P^{0.16}$ ($P > 30$ tph). [District Rule 4202] Federally Enforceable Through Title V Permit
16. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Stanislaus County Rule 407 and District Rule 4801] Federally Enforceable Through Title V Permit
17. Source testing to demonstrate compliance with permit conditions and all rules and regulations for both natural gas and LPG shall be conducted at least once every calendar year. NOx and CO testing shall be performed using CARB Method 100. VOC testing shall be performed using EPA method 25A. PM10 testing shall be performed using EPA methods 201 and 202, EPA methods 201A and 202, or CARB methods 501 and 5. SOx testing shall be performed using EPA Method 8 and CARB Method 1-100. [District Rules 1081; 2520, §9.3.2; and 4354, 6.4 and 6.5.1] Federally Enforceable Through Title V Permit
18. Source testing when firing on LPG fuel need not be performed if the LPG fuel usage for this furnace does not exceed 100 hours during any one calendar year. A source test shall be performed within 90 days after this furnace exceeds 100 hours of operation, on LPG, on an annual basis. [District Rule 1081] Federally Enforceable Through Title V Permit
19. Source testing shall be conducted by a CARB-certified source testing contractor. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to source testing. The results of each source test shall be submitted to the District within 60 days after the source test date. [District Rule 1081] Federally Enforceable Through Title V Permit
20. Source test conditions shall be representative of operations equal to or greater than 60 percent of the fuel use capacity for each furnace as stated in the Permit to Operate. [District Rule 4354, §6.5.2] Federally Enforceable Through Title V Permit
21. PM and PM10 source testing shall be conducted down stream of the electrostatic precipitator in the common stack. Furnaces #1, #2, #3, and #4 must operate simultaneously during source testing unless prior approval is obtained from the District. [District Rule 1081] Federally Enforceable Through Title V Permit
22. An annual Relative Accuracy Test Audit (RATA) shall be performed on the continuous monitoring system as outlined in 40 CFR Part 60 Appendix B. [District Rule 1080] Federally Enforceable Through Title V Permit
23. The owner/operator shall perform a relative accuracy test audit (RATA) as specified by 40 CFR Part 60, Appendix F (CGAs and RATAs) and if applicable 40 CFR Part 75, Appendix B (linearity and RATAs) at least once every four calendar quarters and annually within ± 30 days of the anniversary date of the initial test. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

24. An exceedance of a NOx emission limit as indicated by the CEMS shall be reported by the operator to the APCO within 24 hours. The notification shall include 1) name and location of the facility, 2) identification of furnace(s) causing the exceedances, 3) calculation of actual NOx, CO and VOC emissions, and 4) corrective actions and schedules to complete the work. [District Rule 1080 and Stanislaus County Rule 108] Federally Enforceable Through Title V Permit
25. The operator shall notify the APCO no later than one hour after the detection of a breakdown of the CEMS. The operator shall inform the APCO of the intent to shut down the CEMS at least 24 hours prior to the event. [District Rule 1100] Federally Enforceable Through Title V Permit
26. The permittee shall submit a written report including copies of any Equipment Breakdown reports and/or pertinent variance decisions to the APCO for each calendar quarter, within 30 days of the end of the quarter, including: time intervals, data and magnitude of excess emissions, nature and cause of excess emissions (if known), corrective actions taken and preventive measures adopted; averaging period used for data reporting shall correspond to the averaging period for each respective emission standard; applicable time and date of each period during which the CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; and a negative declaration when no excess emissions occurred. [District Rule 1080] Federally Enforceable Through Title V Permit
27. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
28. Results of continuous emissions monitoring shall be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080] Federally Enforceable Through Title V Permit
29. Cylinder gas audits (GGAs) of continuous emission monitors shall be conducted quarterly, except during quarters in which relative accuracy and total accuracy testing is performed, in accordance with EPA guidelines. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
30. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201, Stanislaus County Rule 404, District Rule 4202 and Stanislaus County Rule 405. A permit shield is granted from these requirements. [District Rule 2520, §13.2] Federally Enforceable Through Title V Permit
31. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4801 and Stanislaus County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, §13.2] Federally Enforceable Through Title V Permit
32. The requirements of District Rule 4301 and Stanislaus County Rule 408 were determined to not apply to this unit because the unit does not utilize indirect heat transfer. A permit shield is granted from these requirements. [District Rule 2520, §13.2] Federally Enforceable Through Title V Permit
33. The requirements of 40 CFR 60, Subpart CC were determined to not apply to this unit because the unit was constructed prior to the effective date in the regulation and has not been modified (according to the definition of "modified" in the regulation). A permit shield is granted from these requirements. [District Rule 2520, §13.2] Federally Enforceable Through Title V Permit
34. The requirements of 40 CFR 61, Subpart N were determined to not apply to this unit because the unit does not use commercial arsenic. A permit shield is granted from these requirements. [District Rule 2520, §13.2] Federally Enforceable Through Title V Permit
35. NOx emissions shall not exceed 1.5 pounds per ton of glass pulled. This performance based limit is to enforce the NOx emission reductions granted by certificate number N-106-2. [District NSR Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

36. Except during furnace idling, shutdown, and startup, the aggregated NOx emissions shall not exceed 3.6 lb-NOx per ton of glass pulled (based on a block 24-hour average). Aggregated NOx emission are the NOx emissions as measured at the common stack divided by the sum of the daily glass pulled from permit units N-1662-1, '-2, '-3, and '-4. [District Rule 4354, 9.0, 9.4, and 9.7.1] Federally Enforceable Through Title V Permit
37. CO emissions shall not exceed 0.04 pounds per ton of glass pulled. This performance based limit is to enforce the CO emission reductions granted by certificate number N-106-3. [District NSR Rule] Federally Enforceable Through Title V Permit
38. The VOC emissions shall not exceed 0.25 pounds per ton of glass pulled. [District Rule 2201] Federally Enforceable Through Title V Permit
39. The SOx emissions shall not exceed 2.35 pounds per ton of glass pulled. [District Rule 2201] Federally Enforceable Through Title V Permit
40. PM10 emissions, except during electrostatic precipitator bypass episodes. shall not exceed 0.49 pound per ton of glass pulled. [District NSR Rule] Federally Enforceable Through Title V Permit
41. The PM10 emissions, during electrostatic precipitator bypass episodes, shall not exceed 0.71 pound per ton of glass pulled. [District Rule 2201] Federally Enforceable Through Title V Permit
42. The electrostatic precipitator may be bypassed only for maintenance and repair. The duration of electrostatic precipitator bypass episodes shall not exceed 96 hours per calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
43. The PM10 emission shall not exceed 22,936 pounds during the first calendar quarter, 23,190 pounds during the second calendar quarter, 23,445 pounds during the third calendar quarter and 23,445 pounds during the fourth calendar quarter. These limits are to enforce the PM10 emission reductions granted by certificate number N-161-4. [District Rule 2201] Federally Enforceable Through Title V Permit
44. NOx, CO and VOC emissions during idling shall not exceed the emissions limits as calculated in Section 5.4.2 of District Rule 4354 (2/21/02). [District Rule 4354, 5.4.2] Federally Enforceable Through Title V Permit
45. The facility shall not use commercial arsenic as a raw material in the production process. [40 CFR 61 Subpart N] Federally Enforceable Through Title V Permit
46. Devices used to measure primary and secondary voltage and current shall be maintained in accordance with the manufacturer's specifications. [40 CFR 64] Federally Enforceable Through Title V Permit
47. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR 64] Federally Enforceable Through Title V Permit
48. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR 64] Federally Enforceable Through Title V Permit
49. The permittee shall comply with the record keeping and reporting requirements of 40 CFR part 64.9. [40 CFR 64] Federally Enforceable Through Title V Permit
50. Until the full compliance date for Tier 2 emission limits specified in District Rule 4354, Section 7.1, the permittee shall maintain an operating log that includes: on a monthly basis, the total hours of operation; type and quantity of fuel used in each furnace; and the quantity of glass pulled. The owner shall maintain records of source tests and operating parameters established during the initial source test, maintenance, repair, malfunction, idling, shutdown, and start-up. This information shall be made available on site during normal business hours from Monday through Friday for a period of five years, and submitted to the APCO upon request. [District Rule 2520, §9.4.2 and District Rule 4354, §6.3.1] Federally Enforceable Through Title V Permit
51. The permittee shall maintain daily records of the aggregated NOx emissions and the specific power (in milliwatts/acfm) of the electrostatic precipitator. [District Rules 2520, 9.3.2 and 4354, 9.6.1 and 9.7] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

52. A record of the PM10 emissions from this unit, in pounds per calendar quarter, shall be kept. [District Rule 2201] Federally Enforceable Through Title V Permit
53. A record of the cumulative annual electrostatic precipitator bypass duration, in hours, shall be kept. The record shall be updated at least weekly. [District Rule 1070] Federally Enforceable Through Title V Permit
54. 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] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-1662-2-12

EXPIRATION DATE: 06/30/2007

EQUIPMENT DESCRIPTION:

GLASS FURNACE #2 WITH 10 MAXON GAS/OXYGEN BURNERS AND ASSOCIATED FORMING EQUIPMENT (75 MMBTU/HR MAX HEAT CAPACITY). THIS FURNACE IS DUCTED THROUGH A STACK COMMON TO PERMIT UNITS N-1662-1, N-1662-2, N-1662-3 AND N-1662-4. THE FURNACES ARE SERVED BY A SHARED ELECTROSTATIC PRECIPITATOR AND SOX SCRUBBER.

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grain/dscf in concentration. [District Rule 4201 and Stanislaus County Rule 404] Federally Enforceable Through Title V Permit
2. The furnace shall be fired on natural gas and LPG only. [District NSR Rule] Federally Enforceable Through Title V Permit
3. The furnace shall have a continuous monitoring system for NOx. The monitoring device shall have a continuous recording device, and all records shall be kept on site. [District Rules 1080 and 4354, §5.8] Federally Enforceable Through Title V Permit
4. One continuous emissions monitoring (CEM) system may be used for monitoring oxy-fuel fired furnaces #1, #2, #3, and #4 provided all of the exhaust gases of each of these furnaces are ducted to a common stack, and monitored down stream of the common stack. The CEMS shall comply with the requirements of 40 Code of Federal Regulations (CFR) Part 51, 40 CFR Parts 60.7 and 60.13, 40 CFR Part 60 Appendix B (Performance Specifications) and Appendix F (Quality Assurance Procedures), and applicable sections of Rule 1080 (Stack Monitoring). [District Rule 4354, 5.8 and 6.6.1] Federally Enforceable Through Title V Permit
5. The facility shall install and maintain equipment, facilities, and systems compatible with the District's CEM data polling software system and shall make CEM data available to the District's automated polling system on a daily basis. [District Rule 1080] Federally Enforceable Through Title V Permit
6. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NOx, CO, and O2 analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Source Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit
7. During startups, the permittee shall comply with the requirements of section §5.2 of District Rule 4354. [District Rule 4354, §5.2] Federally Enforceable Through Title V Permit
8. The NOx control system shall be in operation as soon as technologically feasible during the startup period to minimize emissions. [District Rule 4354, §5.2.3] Federally Enforceable Through Title V Permit
9. The NOx control system shall be in operation whenever technologically feasible during shutdown to minimize emissions. [District Rule 4354, §5.3.2] Federally Enforceable Through Title V Permit
10. The NOx control system shall be in operation whenever technologically feasible during furnace idling to minimize emissions. [District Rule 4354, §5.4.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

11. The duration of shutdown, as measured from the time the furnace operations drop below the idle threshold specified in §3.9 of District Rule 4354 to when all emissions from the furnace cease, shall not exceed 20 days. [District Rule 4354, §5.3.1] Federally Enforceable Through Title V Permit
12. The specific power of the electrostatic precipitator shall be at least 70 milliwatts/acfm except during the bypass episodes allowed by this permit. [District Rule 2520, §9.3.2] Federally Enforceable Through Title V Permit
13. Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation $E=3.59P^{0.62}$ ($P < 30$ tph) or $E=17.31P^{0.16}$ ($P > 30$ tph). [District Rule 4202] Federally Enforceable Through Title V Permit
14. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Stanislaus County Rule 407 and District Rule 4801] Federally Enforceable Through Title V Permit
15. Source testing to demonstrate compliance with permit conditions and all rules and regulations for both natural gas and LPG shall be conducted at least once every calendar year. NOx and CO testing shall be performed using CARB Method 100. VOC testing shall be performed using EPA method 25A. PM10 testing shall be performed using EPA methods 201 and 202, EPA methods 201a and 202, or CARB methods 501 and 5. SOx testing shall be performed using EPA Method 8 and CARB Method 1-100. [District Rules 1081; 2520, §9.3.2; and 4354, 6.4 and 6.5.1] Federally Enforceable Through Title V Permit
16. Source testing when firing on LPG fuel need not be performed if the LPG fuel usage for this furnace does not exceed 100 hours during any one calendar year. A source test shall be performed within 90 days after this furnace exceeds 100 hours of operation, on LPG, on an annual basis. [District Rule 1081] Federally Enforceable Through Title V Permit
17. Source testing shall be conducted by a CARB-certified source testing contractor. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to source testing. The results of each source test shall be submitted to the District within 60 days after the source test date. [District Rule 1081] Federally Enforceable Through Title V Permit
18. Source test conditions shall be representative of operations equal to or greater than 60 percent of the fuel use capacity for each furnace as stated in the Permit to Operate. [District Rule 4354, §6.5.2] Federally Enforceable Through Title V Permit
19. PM and PM10 source testing shall be conducted down stream of the electrostatic precipitator in the common stack. Furnaces #1, #2, #3, and #4 must operate simultaneously during source testing unless prior approval is obtained from the District. [District Rule 1081] Federally Enforceable Through Title V Permit
20. An annual Relative Accuracy Test Audit (RATA) shall be performed on the continuous monitoring system as outlined in 40 CFR Part 60 Appendix B. [District Rule 1080] Federally Enforceable Through Title V Permit
21. The owner/operator shall perform a relative accuracy test audit (RATA) as specified by 40 CFR Part 60, Appendix F (CGAs and RATAs) and if applicable 40 CFR Part 75, Appendix B (linearity and RATAs) at least once every four calendar quarters and annually within ± 30 days of the anniversary date of the initial test. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080] Federally Enforceable Through Title V Permit
22. An exceedance of a NOx emission limit as indicated by the CEMS shall be reported by the operator to the APCO within 24 hours. The notification shall include 1) name and location of the facility, 2) identification of furnace(s) causing the exceedances, 3) calculation of actual NOx, CO and VOC emissions, and 4) corrective actions and schedules to complete the work. [District Rules 1080 and 4354, §9.6 and Stanislaus County Rule 108] Federally Enforceable Through Title V Permit
23. The operator shall notify the APCO no later than one hour after the detection of a breakdown of the CEMS. The operator shall inform the APCO of the intent to shut down the CEMS at least 24 hours prior to the event. [District Rule 1100] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

24. The permittee shall submit a written report including copies of any Equipment Breakdown reports and/or pertinent variance decisions to the APCO for each calendar quarter, within 30 days of the end of the quarter, including: time intervals, data and magnitude of excess emissions, nature and cause of excess emissions (if known), corrective actions taken and preventive measures adopted; averaging period used for data reporting shall correspond to the averaging period for each respective emission standard; applicable time and date of each period during which the CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; and a negative declaration when no excess emissions occurred. [District Rule 1080] Federally Enforceable Through Title V Permit
25. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
26. Results of continuous emissions monitoring shall be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080] Federally Enforceable Through Title V Permit
27. Cylinder gas audits (GGAs) of continuous emission monitors shall be conducted quarterly, except during quarters in which relative accuracy and total accuracy testing is performed, in accordance with EPA guidelines. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
28. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201, Stanislaus County Rule 404, District Rule 4202 and Stanislaus County Rule 405. A permit shield is granted from these requirements. [District Rule 2520, §13.2] Federally Enforceable Through Title V Permit
29. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4801 and Stanislaus County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, §13.2] Federally Enforceable Through Title V Permit
30. The requirements of District Rule 4301 and Stanislaus County Rule 408 were determined to not apply to this unit because the unit does not utilize indirect heat transfer. A permit shield is granted from these requirements. [District Rule 2520, §13.2] Federally Enforceable Through Title V Permit
31. The requirements of 40 CFR 60, Subpart CC were determined to not apply to this unit because the unit was constructed prior to the effective date in the regulation and has not been modified (according to the definition of "modified" in the regulation). A permit shield is granted from these requirements. [District Rule 2520, §13.2] Federally Enforceable Through Title V Permit
32. The requirements of 40 CFR 61, Subpart N were determined to not apply to this unit because the unit does not use commercial arsenic. A permit shield is granted from these requirements. [District Rule 2520, §13.2] Federally Enforceable Through Title V Permit
33. NOx emissions shall not exceed 2.77 pounds per ton of glass pulled. This performance based limit is to enforce the NOx emission reductions granted by certificate number N-54-2. [District NSR Rule] Federally Enforceable Through Title V Permit
34. Except during furnace idling, shutdown, and startup, the aggregated NOx emissions shall not exceed 3.6 lb-NOx per ton of glass pulled (based on a block 24-hour average). Aggregated NOx emission are the NOx emissions as measured at the common stack divided by the sum of the daily glass pulled from permit units N-1662-1, '-2, '-3, and '-4. [District Rule 4354, 9.0, 9.4, and 9.7.1] Federally Enforceable Through Title V Permit
35. The CO emissions shall not exceed 1.0 pound per ton of glass pulled. [District NSR Rule and District Rule 4354] Federally Enforceable Through Title V Permit
36. The VOC emissions shall not exceed 0.25 pounds per ton of glass pulled. [District NSR Rule] Federally Enforceable Through Title V Permit
37. The SOx emissions shall not exceed 2.35 pounds per ton of glass pulled. [District NSR Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

38. PM10 emissions, except during electrostatic precipitator bypass episodes, shall not exceed 0.49 pound per ton of glass pulled. [District NSR Rule] Federally Enforceable Through Title V Permit
39. The PM10 emissions, during electrostatic precipitator bypass episodes, shall not exceed 0.71 pound per ton of glass pulled. [District NSR Rule] Federally Enforceable Through Title V Permit
40. The electrostatic precipitator may be bypassed only for maintenance and repair. The duration of electrostatic precipitator bypasses shall not exceed 96 hours per calendar year. [District NSR Rule] Federally Enforceable Through Title V Permit
41. The PM10 emission shall not exceed 15,527 pounds during the first calendar quarter, 15,699 pounds during the second calendar quarter, 15,872 pounds during the third calendar quarter and 15,872 pounds during the fourth calendar quarter. These limits are to enforce the PM10 emission reductions granted by certificate number N-161-4. [District NSR Rule] Federally Enforceable Through Title V Permit
42. NO_x, CO and VOC emissions during idling shall not exceed the emissions limits as calculated in Section 5.4.2 of District Rule 4354 (2/21/02). [District Rule 4354, 5.4.2] Federally Enforceable Through Title V Permit
43. The facility shall not use commercial arsenic as a raw material in the production process. [40 CFR 61 Subpart N] Federally Enforceable Through Title V Permit
44. Devices used to measure primary and secondary voltage and current shall be maintained in accordance with the manufacturer's specifications. [40 CFR 64] Federally Enforceable Through Title V Permit
45. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR 64] Federally Enforceable Through Title V Permit
46. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR 64] Federally Enforceable Through Title V Permit
47. The permittee shall comply with the record keeping and reporting requirements of 40 CFR part 64.9. [40 CFR 64] Federally Enforceable Through Title V Permit
48. The permittee shall maintain daily records of total hours of operation, type and quantity of fuel used, quantity of glass pulled, NO_x emission rate (in lb/ton of glass pulled), aggregated NO_x emissions, and specific power (in milliwatts/acfm) of the electrostatic precipitator. The permittee shall also maintain records of source tests and all operating parameters established during the initial source test, all instances of maintenance and repair, any malfunction, as well as all periods of idling, startup, and shutdown. All records shall be made available on site during normal business hours from Monday through Friday and shall be provided to the District upon request. [District NSR Rule and District Rules 2520 §9.3.2 and 4354, §6.3.2 & 9.6.1] Federally Enforceable Through Title V Permit
49. A record of the PM10 emissions from this unit, in pounds per calendar quarter, shall be kept. [District NSR Rule] Federally Enforceable Through Title V Permit
50. A record of the cumulative annual electrostatic precipitator bypass duration, in hours, shall be kept. The record shall be updated at least weekly. [District Rule 1070] Federally Enforceable Through Title V Permit
51. 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] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-1662-3-12

EXPIRATION DATE: 06/30/2007

EQUIPMENT DESCRIPTION:

GLASS FURNACE #3 WITH 10 MAXON GAS/OXYGEN BURNERS AND ASSOCIATED FORMING EQUIPMENT (75 MMBTU/HR MAX HEAT CAPACITY). THIS FURNACE IS DUCTED THROUGH A STACK COMMON TO PERMIT UNITS N-1662-1, N-1662-2, N-1662-3 AND N-1662-4. THE FURNACES ARE SERVED BY A SHARED ELECTROSTATIC PRECIPITATOR AND SOX SCRUBBER.

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grain/dscf in concentration. [District Rule 4201 and Stanislaus County Rule 404] Federally Enforceable Through Title V Permit
2. The furnace shall be fired on natural gas and LPG only. [District NSR Rule] Federally Enforceable Through Title V Permit
3. The furnace shall have a continuous monitoring system for NOx. The monitoring device shall have a continuous recording device, and all records shall be kept on site. [District Rules 1080 and 4354, §5.8] Federally Enforceable Through Title V Permit
4. One continuous emissions monitoring (CEM) system may be used for monitoring oxy-fuel fired furnaces #1, #2, #3, and #4 provided all of the exhaust gases of each of these furnaces are ducted to a common stack, and monitored down stream of the common stack. The CEMS shall comply with the requirements of 40 Code of Federal Regulations (CFR) Part 51, 40 CFR Parts 60.7 and 60.13, 40 CFR Part 60 Appendix B (Performance Specifications) and Appendix F (Quality Assurance Procedures), and applicable sections of Rule 1080 (Stack Monitoring). [District Rule 4354, 5.8 and 6.6.1] Federally Enforceable Through Title V Permit
5. The facility shall install and maintain equipment, facilities, and systems compatible with the District's CEM data polling software system and shall make CEM data available to the District's automated polling system on a daily basis. [District Rule 1080] Federally Enforceable Through Title V Permit
6. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NOx, CO, and O2 analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Source Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit
7. During startups, the permittee shall comply with the requirements of section §5.2 of District Rule 4354. [District Rule 4354, §5.2] Federally Enforceable Through Title V Permit
8. The NOx control system shall be in operation as soon as technologically feasible during the startup period to minimize emissions. [District Rule 4354, §5.2.3] Federally Enforceable Through Title V Permit
9. The NOx control system shall be in operation whenever technologically feasible during shutdown to minimize emissions. [District Rule 4354, §5.3.2] Federally Enforceable Through Title V Permit
10. The NOx control system shall be in operation whenever technologically feasible during furnace idling to minimize emissions. [District Rule 4354, §5.4.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

11. The duration of shutdown, as measured from the time the furnace operations drop below the idle threshold specified in §3.9 of District Rule 4354 to when all emissions from the furnace cease, shall not exceed 20 days. [District Rule 4354, §5.3.1] Federally Enforceable Through Title V Permit
12. The specific power of the electrostatic precipitator shall be at least 70 milliwatts/acfm except during the bypass episodes allowed by this permit. [District Rule 2520, §9.3.2] Federally Enforceable Through Title V Permit
13. Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation $E=3.59P^{0.62}$ ($P < 30$ tph) or $E=17.31P^{0.16}$ ($P > 30$ tph). [District Rule 4202] Federally Enforceable Through Title V Permit
14. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Stanislaus County Rule 407 and District Rule 4801] Federally Enforceable Through Title V Permit
15. Source testing to demonstrate compliance with permit conditions and all rules and regulations for both natural gas and LPG shall be conducted at least once every calendar year. NOx and CO testing shall be performed using CARB Method 100. VOC testing shall be performed using EPA method 25A. PM10 testing shall be performed using EPA methods 201 and 202, EPA methods 201A and 202, or CARB methods 501 and 5. SOx testing shall be performed using EPA Method 8 and CARB Method 1-100. [District Rules 1081; 2520, §9.3.2; and 4354, 6.4 and 6.5.1] Federally Enforceable Through Title V Permit
16. Source testing when firing on LPG fuel need not be performed if the LPG fuel usage for this furnace does not exceed 100 hours during any one calendar year. A source test shall be performed within 90 days after this furnace exceeds 100 hours of operation, on LPG, on an annual basis. [District Rule 1081] Federally Enforceable Through Title V Permit
17. Source testing shall be conducted by a CARB-certified source testing contractor. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to source testing. The results of each source test shall be submitted to the District within 60 days after the source test date. [District Rule 1081] Federally Enforceable Through Title V Permit
18. Source test conditions shall be representative of operations equal to or greater than 60 percent of the fuel use capacity for each furnace as stated in the Permit to Operate. [District Rule 4354, §6.5.2] Federally Enforceable Through Title V Permit
19. PM and PM10 source testing shall be conducted down stream of the electrostatic precipitator in the common stack. Furnaces #1, #2, #3, and #4 must operate simultaneously during source testing unless prior approval is obtained from the District. [District Rule 1081] Federally Enforceable Through Title V Permit
20. An annual Relative Accuracy Test Audit (RATA) shall be performed on the continuous monitoring system as outlined in 40 CFR Part 60 Appendix B. [District Rule 1080] Federally Enforceable Through Title V Permit
21. The owner/operator shall perform a relative accuracy test audit (RATA) as specified by 40 CFR Part 60, Appendix F (CGAs and RATAs) and if applicable 40 CFR Part 75, Appendix B (linearity and RATAs) at least once every four calendar quarters and annually within ± 30 days of the anniversary date of the initial test. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080] Federally Enforceable Through Title V Permit
22. An exceedance of a NOx emission limit as indicated by the CEMS shall be reported by the operator to the APCO within 24 hours. The notification shall include 1) name and location of the facility, 2) identification of furnace(s) causing the exceedances, 3) calculation of actual NOx, CO and VOC emissions, and 4) corrective actions and schedules to complete the work. [District Rule 4354, 9.6, District Rule 1080 and Stanislaus County Rule 108] Federally Enforceable Through Title V Permit
23. The operator shall notify the APCO no later than one hour after the detection of a breakdown of the CEMS. The operator shall inform the APCO of the intent to shut down the CEMS at least 24 hours prior to the event. [District Rule 1100] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

24. The permittee shall submit a written report including copies of any Equipment Breakdown reports and/or pertinent variance decisions to the APCO for each calendar quarter, within 30 days of the end of the quarter, including: time intervals, data and magnitude of excess emissions, nature and cause of excess emissions (if known), corrective actions taken and preventive measures adopted; averaging period used for data reporting shall correspond to the averaging period for each respective emission standard; applicable time and date of each period during which the CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; and a negative declaration when no excess emissions occurred. [District Rule 1080] Federally Enforceable Through Title V Permit
25. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
26. Results of continuous emissions monitoring shall be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080] Federally Enforceable Through Title V Permit
27. Cylinder gas audits (GGAs) of continuous emission monitors shall be conducted quarterly, except during quarters in which relative accuracy and total accuracy testing is performed, in accordance with EPA guidelines. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
28. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201, Stanislaus County Rule 404, District Rule 4202 and Stanislaus County Rule 405. A permit shield is granted from these requirements. [District Rule 2520, §13.2] Federally Enforceable Through Title V Permit
29. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4801 and Stanislaus County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, §13.2] Federally Enforceable Through Title V Permit
30. The requirements of District Rule 4301 and Stanislaus County Rule 408 were determined to not apply to this unit because the unit does not utilize indirect heat transfer. A permit shield is granted from these requirements. [District Rule 2520, §13.2] Federally Enforceable Through Title V Permit
31. The requirements of 40 CFR 60, Subpart CC were determined to not apply to this unit because the unit was constructed prior to the effective date in the regulation and has not been modified (according to the definition of "modified" in the regulation). A permit shield is granted from these requirements. [District Rule 2520, §13.2] Federally Enforceable Through Title V Permit
32. The requirements of 40 CFR 61, Subpart N were determined to not apply to this unit because the unit does not use commercial arsenic. A permit shield is granted from these requirements. [District Rule 2520, §13.2] Federally Enforceable Through Title V Permit
33. NOx emissions shall not exceed 2.48 pounds per ton of glass pulled. This performance based limit is to enforce the NOx emission reductions granted by certificate number N-56-2. [District NSR Rule] Federally Enforceable Through Title V Permit
34. Except during furnace idling, shutdown, and startup, the aggregated NOx emissions shall not exceed 3.6 lb-NOx per ton of glass pulled (based on a block 24-hour average). Aggregated NOx emission are the NOx emissions as measured at the common stack divided by the sum of the daily glass pulled from permit units N-1662-1, '-2, '-3, and '-4. [District Rule 4354, 9.0, 9.4, and 9.7.1] Federally Enforceable Through Title V Permit
35. CO emissions shall not exceed 0.01 pounds per ton of glass pulled. This performance based limit is to enforce the CO emission reductions granted by certificate number N-56-3. [District NSR Rule] Federally Enforceable Through Title V Permit
36. The VOC emissions shall not exceed 0.25 pounds per ton of glass pulled. [District NSR Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

37. The SOx emissions shall not exceed 2.35 pounds per ton of glass pulled. [District NSR Rule] Federally Enforceable Through Title V Permit
38. PM10 emissions, except during electrostatic precipitator bypass episodes, shall not exceed 0.49 pound per ton of glass pulled. [District NSR Rule] Federally Enforceable Through Title V Permit
39. The PM10 emissions, during electrostatic precipitator bypass episodes, shall not exceed 0.71 pound per ton of glass pulled. [District NSR Rule] Federally Enforceable Through Title V Permit
40. The electrostatic precipitator may be bypassed only for maintenance and repair. The duration of electrostatic precipitator bypasses shall not exceed 96 hours per calendar year. [District NSR Rule] Federally Enforceable Through Title V Permit
41. The PM10 emission shall not exceed 15,527 pounds during the first calendar quarter, 15,699 pounds during the second calendar quarter, 15,872 pounds during the third calendar quarter and 15,872 pounds during the fourth calendar quarter. These limits are to enforce the PM10 emission reductions granted by certificate number N-161-4. [District NSR Rule] Federally Enforceable Through Title V Permit
42. NOx, CO and VOC emissions during idling shall not exceed the emissions limits as calculated in Section 5.4.2 of District Rule 4354 (2/21/02). [District Rule 4354, 5.4.2] Federally Enforceable Through Title V Permit
43. The facility shall not use commercial arsenic as a raw material in the production process. [40 CFR 61 Subpart N] Federally Enforceable Through Title V Permit
44. Devices used to measure primary and secondary voltage and current shall be maintained in accordance with the manufacturer's specifications. [40 CFR 64] Federally Enforceable Through Title V Permit
45. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR 64] Federally Enforceable Through Title V Permit
46. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR 64] Federally Enforceable Through Title V Permit
47. The permittee shall comply with the record keeping and reporting requirements of 40 CFR part 64.9. [40 CFR 64] Federally Enforceable Through Title V Permit
48. The permittee shall maintain daily records of total hours of operation, type and quantity of fuel used, quantity of glass pulled, NOx emission rate (in lb/ton of glass pulled), aggregated NOx emissions, and specific power (in milliwatts/acfm) of the electrostatic precipitator. The permittee shall also maintain records of source tests and all operating parameters established during the initial source test, all instances of maintenance and repair, any malfunction, as well as all periods of idling, startup, and shutdown. All records shall be made available on site during normal business hours from Monday through Friday and shall be provided to the District upon request. [District NSR Rule and District Rules 2520 §9.3.2 and 4354, §6.3.2 & 9.6.1] Federally Enforceable Through Title V Permit
49. A record of the PM10 emissions from this unit, in pounds per calendar quarter, shall be kept. [District NSR Rule] Federally Enforceable Through Title V Permit
50. A record of the cumulative annual electrostatic precipitator bypass duration, in hours, shall be kept. The record shall be updated at least weekly. [District Rule 1070] Federally Enforceable Through Title V Permit
51. 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] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-1662-4-11

EXPIRATION DATE: 06/30/2007

EQUIPMENT DESCRIPTION:

GLASS FURNACE #4 WITH 12 MAXON GAS/OXYGEN BURNERS AND ASSOCIATED FORMING EQUIPMENT (90 MMBTU/HR MAX HEAT CAPACITY). THIS FURNACE IS DUCTED THROUGH A STACK COMMON TO PERMIT UNITS N-1662-1, N-1662-2, N-1662-3 AND N-1662-4. THE FURNACES ARE SERVED BY A SHARED ELECTROSTATIC PRECIPITATOR AND SOX SCRUBBER

PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
2. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. Particulate matter emissions shall not exceed 0.1 grain/dscf in concentration. [District Rule 4201 and Stanislaus County Rule 404] Federally Enforceable Through Title V Permit
4. The furnace shall be fired on natural gas and LPG only. [District NSR Rule] Federally Enforceable Through Title V Permit
5. The furnace shall have a continuous monitoring system for NOx. The monitoring device shall have a continuous recording device, and all records shall be kept on site. [District Rules 1080 and 4354, §5.8] Federally Enforceable Through Title V Permit
6. One continuous emissions monitoring (CEM) system may be used for monitoring oxy-fuel fired furnaces #1, #2, #3, and #4 provided all of the exhaust gases of each of these furnaces are ducted to a common stack, and monitored down stream of the common stack. The CEMS shall comply with the requirements of 40 Code of Federal Regulations (CFR) Part 51, 40 CFR Parts 60.7 and 60.13, 40 CFR Part 60 Appendix B (Performance Specifications) and Appendix F (Quality Assurance Procedures), and applicable sections of Rule 1080 (Stack Monitoring). [District Rule 4354, 5.8 and 6.6.1] Federally Enforceable Through Title V Permit
7. The facility shall install and maintain equipment, facilities, and systems compatible with the District's CEM data polling software system and shall make CEM data available to the District's automated polling system on a daily basis. [District Rule 1080] Federally Enforceable Through Title V Permit
8. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NOx, CO, and O2 analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Source Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit
9. During the startup period, the permittee shall comply with the requirements of §5.2 of District Rule 4354. [District Rule 4354, §5.2] Federally Enforceable Through Title V Permit
10. The NOx control system shall be in operation as soon as technologically feasible during the startup period to minimize emissions. [District Rule 4354, §5.2.3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

11. The NOx control system shall be in operation whenever technologically feasible during shutdown to minimize emissions. [District Rule 4354, §5.3.2] Federally Enforceable Through Title V Permit
12. The NOx control system shall be in operation whenever technologically feasible during furnace idling to minimize emissions. [District Rule 4354, §5.4.1] Federally Enforceable Through Title V Permit
13. The duration of shutdown, as measured from the time the furnace operations drop below the idle threshold specified in §3.9 of District Rule 4354 to when all emissions from the furnace cease, shall not exceed 20 days. [District Rule 4354, §5.3.1]
14. The total startup time, as defined in §3.22 of District Rule 4354 (Glass Melting Furnaces), shall not exceed 18 days. [District Rule 4354, §5.2.1] Federally Enforceable Through Title V Permit
15. The specific power of the electrostatic precipitator shall be at least 70 milliwatts/acfm except during the bypass episodes allowed by this permit. [District Rule 2520, §9.3.2] Federally Enforceable Through Title V Permit
16. Particulate matter emissions shall not exceed the hourly rate as calculated in District Rule 4202 using the equation $E=3.59P^{0.62}$ ($P < 30$ tph) or $E=17.31P^{0.16}$ ($P > 30$ tph). [District Rule 4202] Federally Enforceable Through Title V Permit
17. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Stanislaus County Rule 407 and District Rule 4801] Federally Enforceable Through Title V Permit
18. Source testing to demonstrate compliance with permit conditions and all rules and regulations for both natural gas and LPG shall be conducted at least once every calendar year. NOx and CO testing shall be performed using CARB Method 100. VOC testing shall be performed using EPA method 25A. PM10 testing shall be performed using EPA methods 201 and 202, EPA methods 201a and 202, or CARB methods 501 and 5. SOx testing shall be performed using EPA Method 8 and CARB Method 1-100. [District Rules 1081; 2520, §9.3.2; and 4354, §6.4 and 6.5.1] Federally Enforceable Through Title V Permit
19. Source testing when firing on LPG fuel need not be performed if the LPG fuel usage for this furnace does not exceed 100 hours during any one calendar year. A source test shall be performed within 90 days after this furnace exceeds 100 hours of operation, on LPG, on an annual basis. [District Rule 1081] Federally Enforceable Through Title V Permit
20. Source testing shall be conducted by a CARB-certified source testing contractor. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to source testing. The results of each source test shall be submitted to the District within 60 days after the source test date. [District Rule 1081] Federally Enforceable Through Title V Permit
21. Source test conditions shall be representative of operations equal to or greater than 60 percent of the fuel use capacity for each furnace as stated in the Permit to Operate. [District Rule 4354, §6.5.2] Federally Enforceable Through Title V Permit
22. PM and PM10 source testing shall be conducted down stream of the electrostatic precipitator in the common stack. Furnaces #1, #2, #3, and #4 must operate simultaneously during source testing unless prior approval is obtained from the District. [District Rule 1081] Federally Enforceable Through Title V Permit
23. An annual Relative Accuracy Test Audit (RATA) shall be performed on the continuous monitoring system as outlined in 40 CFR Part 60 Appendix B. [District Rule 1080] Federally Enforceable Through Title V Permit
24. The owner/operator shall perform a relative accuracy test audit (RATA) as specified by 40 CFR Part 60, Appendix F (CGAs and RATAs) and if applicable 40 CFR Part 75, Appendix B (linearity and RATAs) at least once every four calendar quarters and annually within ± 30 days of the anniversary date of the initial test. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

25. The exceedance of a NO_x emission limit as indicated by the CEMS shall be reported by the operator to the APCO within 24 hours. The notification shall include 1) name and location of the facility, 2) identification of furnace(s) causing the exceedances, 3) calculation of actual NO_x, CO and VOC emissions, and 4) corrective actions and schedules to complete the work. [District Rule 4354, 9.6.1; District Rule 1080; and Stanislaus County Rule 108] Federally Enforceable Through Title V Permit
26. The operator shall notify the APCO no later than one hour after the detection of a breakdown of the CEMS. The operator shall inform the APCO of the intent to shut down the CEMS at least 24 hours prior to the event. [District Rule 1100] Federally Enforceable Through Title V Permit
27. The permittee shall submit a written report including copies of any Equipment Breakdown reports and/or pertinent variance decisions to the APCO for each calendar quarter, within 30 days of the end of the quarter, including: time intervals, data and magnitude of excess emissions, nature and cause of excess emissions (if known), corrective actions taken and preventive measures adopted; averaging period used for data reporting shall correspond to the averaging period for each respective emission standard; applicable time and date of each period during which the CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; and a negative declaration when no excess emissions occurred. [District Rule 1080] Federally Enforceable Through Title V Permit
28. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
29. Results of continuous emissions monitoring shall be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080] Federally Enforceable Through Title V Permit
30. Cylinder gas audits (GGAs) of continuous emission monitors shall be conducted quarterly, except during quarters in which relative accuracy and total accuracy testing is performed, in accordance with EPA guidelines. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
31. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201, Stanislaus County Rule 404, District Rule 4202 and Stanislaus County Rule 405. A permit shield is granted from these requirements. [District Rule 2520, §13.2] Federally Enforceable Through Title V Permit
32. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4801 and Stanislaus County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, §13.2] Federally Enforceable Through Title V Permit
33. The requirements of District Rule 4301 and Stanislaus County Rule 408 were determined to not apply to this unit because the unit does not utilize indirect heat transfer. A permit shield is granted from these requirements. [District Rule 2520, §13.2] Federally Enforceable Through Title V Permit
34. The requirements of 40 CFR 60, Subpart CC were determined to not apply to this unit because the unit was constructed prior to the effective date in the regulation and has not been modified (according to the definition of "modified" in the regulation). A permit shield is granted from these requirements. [District Rule 2520, §13.2] Federally Enforceable Through Title V Permit
35. The requirements of 40 CFR 61, Subpart N were determined to not apply to this unit because the unit does not use commercial arsenic. A permit shield is granted from these requirements. [District Rule 2520, §13.2] Federally Enforceable Through Title V Permit
36. NO_x emissions shall not exceed 2.95 pounds per ton of glass pulled. This performance based limit is to enforce the NO_x emission reductions granted by certificate number N-107-2. [District NSR Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

37. Except during furnace idling, shutdown, and startup, the aggregated NOx emissions shall not exceed 3.6 lb-NOx per ton of glass pulled (based on a block 24-hour average). Aggregated NOx emission are the NOx emissions as measured at the common stack divided by the sum of the daily glass pulled from permit units N-1662-1, '-2, '-3, and '-4. [District Rule 4354, 9.0, 9.4, and 9.7.1] Federally Enforceable Through Title V Permit
38. CO emissions shall not exceed 1.0 pound per ton of glass pulled. [District Rule 4354, §5.1] Federally Enforceable Through Title V Permit
39. VOC emissions shall not exceed 0.25 pounds per ton of glass pulled. [District Rule 4354, §5.1] Federally Enforceable Through Title V Permit
40. The SOx emissions shall not exceed 2.35 pounds per ton of glass pulled. [District NSR Rule] Federally Enforceable Through Title V Permit
41. PM10 emissions, except during electrostatic precipitator bypass episodes, shall not exceed 0.49 pound per ton of glass pulled. [District NSR Rule] Federally Enforceable Through Title V Permit
42. The PM10 emissions, during electrostatic precipitator bypass episodes, shall not exceed 0.71 pound per ton of glass pulled. [District NSR Rule] Federally Enforceable Through Title V Permit
43. The electrostatic precipitator may be bypassed only for maintenance and repair. The duration of electrostatic precipitator bypasses shall not exceed 96 hours per calendar year. [District NSR Rule] Federally Enforceable Through Title V Permit
44. The PM10 emission shall not exceed 28,132 pounds during the first calendar quarter, 28,445 pounds during the second calendar quarter, 28,757 pounds during the third calendar quarter and 28,758 pounds during the fourth calendar quarter. These limits are to enforce the PM10 emission reductions granted by certificate number N-161-4. [District NSR Rule] Federally Enforceable Through Title V Permit
45. During furnace idling, NOx emissions shall not exceed 1,888 pounds in any one day. [District Rule 4354, §5.4.2] Federally Enforceable Through Title V Permit
46. During furnace idling, CO emissions shall not exceed 640 pounds in any one day. [District Rule 4354, §5.4.2] Federally Enforceable Through Title V Permit
47. During furnace idling, VOC emissions shall not exceed 160 pounds in any one day. [District Rule 4354, §5.4.2] Federally Enforceable Through Title V Permit
48. The facility shall not use commercial arsenic as a raw material in the production process. [40 CFR 61 Subpart N] Federally Enforceable Through Title V Permit
49. Devices used to measure primary and secondary voltage and current shall be maintained in accordance with the manufacturer's specifications. [40 CFR 64] Federally Enforceable Through Title V Permit
50. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR 64] Federally Enforceable Through Title V Permit
51. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR 64] Federally Enforceable Through Title V Permit
52. The permittee shall comply with the record keeping and reporting requirements of 40 CFR part 64.9. [40 CFR 64] Federally Enforceable Through Title V Permit
53. The permittee shall maintain daily records of total hours of operation, type and quantity of fuel used, quantity of glass pulled, NOx emission rate (in lb/ton of glass pulled), aggregated NOx emissions, and specific power (in milliwatts/acfm) of the electrostatic precipitator. The permittee shall also maintain records of source tests and all operating parameters established during the initial source test, all instances of maintenance and repair, any malfunction, as well as all periods of idling, startup, and shutdown. All records shall be made available on site during normal business hours from Monday through Friday and shall be provided to the District upon request. [District NSR Rule and District Rules 2520 §9.3.2 and 4354, §6.3.2 & 9.6.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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54. A record of the PM10 emissions from this unit, in pounds per calendar quarter, shall be kept. [District NSR Rule] Federally Enforceable Through Title V Permit
55. A record of the cumulative annual electrostatic precipitator bypass duration, in hours, shall be kept. The record shall be updated at least weekly. [District Rule 1070] Federally Enforceable Through Title V Permit
56. 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] Federally Enforceable Through Title V Permit

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Appendix C
Title V Modification – Compliance Certification Form

RECEIVED

DATE

SJVAPCD
NORTHERN REGION

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
 MINOR PERMIT MODIFICATION

ADMINISTRATIVE
AMENDMENT

COMPANY NAME: GALLO GLASS COMPANY	FACILITY ID: N-1662
1. Type of Organization: <input checked="" type="checkbox"/> Corporation <input type="checkbox"/> Sole Ownership <input type="checkbox"/> Government <input type="checkbox"/> Partnership <input type="checkbox"/> Utility	
2. Owner's Name: E & J GALLO WINERY	
3. Agent to the Owner: LANCE LETINGS	

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 forgoing is correct and true:

Lance Letings
Signature of Responsible Official

5 APRIL 2010
Date

LANCE LETINGS
Name of Responsible Official (please print)

DIR - MAINT & ENGINEERING
Title of Responsible Official (please print)