



**DEC 21 2012**

Mr. Jeff Curtin  
CertainTeed Corporation  
17775 Avenue 23 1/2  
Chowchilla, CA 93610

**Re: Final - Authority to Construct / Certificate of Conformity (Minor Mod)  
Project # C-1123768**

Dear Mr. Curtin:

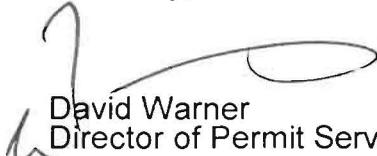
The Air Pollution Control Officer has issued Authorities to Construct (ATC's C-261-2-24, -3-13, and -4-11) with Certificates of Conformity to CertainTeed Corporation. The modifications consisted of the following: lowering the NOx and SOx emission factors for compliance with District Rule 4354; adding SOx and PM10 parametric monitoring requirements for compliance with District Rule 4354; and modifying the daily final stack emissions limit.

Enclosed are the Authorities to Construct and invoice. The application and proposal were sent to US EPA Region IX on November 8, 2012. No comments were received following the District's preliminary decision on this project.

Prior to operating with modifications authorized by the Authority to Construct, you must submit an application to modify the Title V permit as an administrative amendment in accordance with District Rule 2520, Section 11.5.

Thank you for your cooperation in this matter. If you have any questions, please contact Mr. Jim Swaney, Permit Services Manager, at (559) 230-5900.

Sincerely,



David Warner  
Director of Permit Services

Enclosures  
df

**Seyed Sadredin**  
Executive Director/Air Pollution Control Officer

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**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



**DEC 21 2012**

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

**Re: Final - Authority to Construct / Certificate of Conformity (Minor Mod)  
Project # C-1123768**

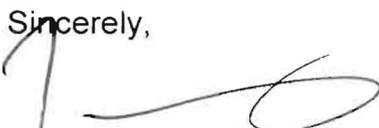
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# AUTHORITY TO CONSTRUCT

**PERMIT NO:** C-261-2-24

**ISSUANCE DATE:** 12/11/2012

**LEGAL OWNER OR OPERATOR:** CERTAINTeed CORPORATION

**MAILING ADDRESS:** 17775 AVENUE 23 1/2  
CHOWCHILLA, CA 93610

**LOCATION:** 17775 AVENUE 23 1/2  
CHOWCHILLA, CA 93610

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 96 MMBTU/HR, 325 METRIC TONS/DAY GLASS MELTING OXY-FUEL FURNACE WITH 12 (8 MMBTU/HR EACH) COMBUSTION TEC. FLAT FLAME BURNERS: REDUCE NOX AND SOX EMISSIONS LIMITS, AND ADD SOX AND PM10 PARAMETRIC MONITORING REQUIREMENTS FOR COMPLIANCE WITH RULE 4354, AND LOWER THE NOX AND SOX DAILY EMISSIONS LIMITS SHARED WITH UNITS -3 AND -4

## 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 2201] Federally Enforceable Through Title V Permit
2. Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. Authority to Construct (ATC) C-261-2-23 shall be implemented concurrently, or prior to the modification and startup of the equipment authorized by this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201; PSD ATC SJ 80-02] Federally Enforceable Through Title V Permit
5. The glass melting furnace shall produce no more than either of the following limits: 325 metric tons/day or 118,625 metric tons/year. A permanent record of daily production and of daily nitrate addition to the furnace shall be maintained and shall be available for inspection by the District, EPA or CARB. [District NSR Rule; District Rule 4354; PSD ATC SJ 80-02] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

YOU **MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (559) 230-5950 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  
C-261-2-24 Dec 11 2012 3:45PM - FUKUDAD - down Inspection NOT Required

6. All fiberglass shall contain a minimum of 30% by weight post-consumer cullet on an annual average basis. The facility shall maintain records of the annual amount (in tons) of post-consumer cullet used. [District Rule 2201] Federally Enforceable Through Title V Permit
7. With approval from EPA, CertainTeed Corporation may choose to conduct performance tests at production and firing rates less than maximum design capacity and may choose to test only the fuel expected to be used in the next 12-month time period, provided that actual plant production does not exceed the tested rate and provided that only the fuel for which tests have been performed is used. The emission rate for NOx established by the first test at the specific production rate (less than maximum plant capacity) shall become the applicable emission limit for NOx at the production rate tested, as in condition IX.B of PSD permit SJ 80-02. A fuel switch or an increase in production levels beyond the maximum tested rate for any product line requires approval by EPA prior to such production increases or fuel switch and may require additional performance testing. [PSD ATC SJ 80-02] Federally Enforceable Through Title V Permit
8. EPA shall be notified by letter 30 days prior to the fuel switch or production increase in order to make a determination of whether additional performance testing is required. In the case of an emergency fuel switch, EPA shall be notified by letter postmarked within 15 days of the fuel switch. [PSD ATC SJ 80-02] Federally Enforceable Through Title V Permit
9. The sulfur content of fuel oil shall not exceed 0.0015% by weight. [District Rules 2201 and 4354, Madera County Rule 404] Federally Enforceable Through Title V Permit
10. The rate of fuel oil consumption shall not exceed 570 gal/hr nor 5,000,000 gal/year. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Sulfur content of the fuel oil shall be determined by ASTM Method D-129, D-1552, D-6428, D-5453, or the most current method promulgated by ASTM. Other methods may be used if approved by EPA, Region 9 (Attention: A-3-3). [District Rule 4354, PSD ATC SJ 80-02; Madera County Rule 404] Federally Enforceable Through Title V Permit
12. Certification of the sulfur content of each fuel oil delivery by the supplier will be acceptable; the analytical method used to determine sulfur content must be one of those cited. [PSD ATC SJ 80-02; Madera County Rule 404] Federally Enforceable Through Title V Permit
13. All natural gas used by the facility shall be PUC regulated. [District Rule 2201; PSD ATC SJ 80-02; Madera County Rule 404] Federally Enforceable Through Title V Permit
14. A permanent record of daily production shall be maintained and shall be available for inspection by the District, EPA or CARB. [District Rule 2201; PSD ATC SJ 80-02] Federally Enforceable Through Title V Permit
15. Source tests shall be performed while operating at design capacity. To determine worst case emissions, the tests shall be performed while firing on natural gas, and separately while firing 0.0015% sulfur backup fuel oil. With prior EPA and District approval, source testing may be performed as otherwise provided. [District Rule 2201; PSD ATC SJ 80-02] Federally Enforceable Through Title V Permit
16. Source tests shall be performed at least on an annual basis, but not more than once every 18 months or sooner than every 6 months and at such other times as may be specified by the District or EPA. Tests shall comply with the procedures in 40 CFR (Part 60.8) for PM, NOx, SOx, and VOC. [District Rules 2520 and 4354, and PSD ATC SJ 80-02] Federally Enforceable Through Title V Permit
17. Source testing for NOx from the final stack shall be performed under normal operating conditions at the time of the test. Testing shall be performed in the presence of nitrate additive if daily records indicate that nitrate is routinely used in the furnace during the period immediately prior to the test. If nitrate use is discontinued by the facility during normal operations, NOx source testing shall be performed without nitrate additive in the furnace. [District Rule 2201] Federally Enforceable Through Title V Permit
18. PM shall be sampled according to the modified version of EPA's Method 5 which includes the impinger catch. [District Rule 2201; District Rule 4202; District Rule 2520; PSD ATC SJ 80-02; and 40 CFR 60 Subpart CC] Federally Enforceable Through Title V Permit
19. Source tests for PM shall be performed at the outlet of the dry ESP, the outlet of the three wet ESP's and the final stack. The source tests for NOx, SOx, and VOC shall be performed at the final stack. [District Rules 2201, 2520, and 4202; PSD ATC SJ 80-02] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

20. The District and EPA (Attention: Air-5) shall be notified in writing 30 days in advance of the scheduled tests dates to allow time for the development of an approvable source test plan and to arrange for an observer to be present at the test. [District Rule 1081; PSD ATC SJ 80-02] Federally Enforceable Through Title V Permit
21. The results of each source test shall be submitted to the District and EPA, Region 9 (Attention: Air-5) within 60 days after the test. [District Rule 1081; PSD ATC SJ 80-02] Federally Enforceable Through Title V Permit
22. The outlets of the dry ESP and the final stack shall be so fitted as to permit performance of tests for pollutants (per 40 CFR 60, Appendix A) using portable equipment in a manner as approved by the EPA, CARB and the District. [District Rule 1081] Federally Enforceable Through Title V Permit
23. The applicant shall maintain and operate CEM to measure stack gas NO<sub>x</sub> concentration (per 40 CFR 60.13 and 40 CFR, Appendix B, Performance Spec. 2; and 40 CFR 60 Appendix F) and stack gas volumetric flow rate (per 40 CFR Part 52, Appendix E). [District Rule 2201; PSD ATC SJ 80-02] Federally Enforceable Through Title V Permit
24. The applicant shall maintain and operate an opacity CEMS in the final stack to continuously measure the opacity of stack emissions. The opacity CEMS shall meet EPA specs. (40 CFR 60.13; and 40 CFR 60, Appendix B, Performance Specification 1) [PSD ATC SJ 80-02] Federally Enforceable Through Title V Permit
25. The facility shall 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
26. 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
27. 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
28. The owner or operator shall, upon written notice from the APCO, provide a summary of the data obtained from the CEM systems. This summary of data shall be in the form and the manner prescribed by the APCO. [District Rule 1080] Federally Enforceable Through Title V Permit
29. CertainTeed Corporation shall submit to EPA (Attention: Air-5) a written report of all excess emissions for each calendar quarter. The report shall include the conditions specified in EPA Permit Special Conditions IX.J.4. [PSD ATC SJ 80-02] Federally Enforceable Through Title V Permit
30. CertainTeed shall continuously operate and maintain the caustic soda injection system for the pretreatment of the glass furnace gas stream upstream of the dry ESP. [District Rule 2201; PSD ATC SJ 80-02] Federally Enforceable Through Title V Permit
31. Both the caustic soda injection system (scrubber) and the dry electrostatic precipitator shall be functioning as air pollution abatement devices whenever the glass melting furnace is in operation. [District Rule 2201; PSD ATC SJ 80-02] Federally Enforceable Through Title V Permit
32. Dry Electrostatic Precipitator (ESP) outlet emissions shall not exceed 8.4 lbs PM/hr. [District Rules 2201 and 4202; PSD ATC SJ 80-02] Federally Enforceable Through Title V Permit
33. When the furnace is heated with LPG/propane, final stack emissions shall not exceed 547.2 lb PM/day, 547.2 lb PM<sub>10</sub>/day, 432.0 lb HC/day, 432.0 lb VOC/day, 1,074.7 lb NO<sub>x</sub>/day, 322.4 lb SO<sub>x</sub>/day, or 1,072.8 lb CO/day. [District Rule 2201] Federally Enforceable Through Title V Permit
34. When the furnace is heated with natural gas, final stack emissions shall not exceed 22.8 lb PM/hr, 22.8 lb PM<sub>10</sub>/hr, 18.0 lb HC/hr, 18.0 lb VOC/hr, 55.9 lb NO<sub>x</sub>/hr, 24.3 lb SO<sub>x</sub>/hr, nor 44.7 lb CO/hr. [District Rules 2201, 4354, and 4202; PSD ATC SJ 80-02] Federally Enforceable Through Title V Permit
35. When the furnace is heated with fuel oil, final stack emissions shall not exceed 22.8 lb PM/hr, 22.8 lb PM<sub>10</sub>/hr, 18.0 lb HC/hr, 18.0 lb VOC/hr, 40.0 lb NO<sub>x</sub>/hr, 54.0 lb SO<sub>x</sub>/hr, nor 44.7 lb CO/hr. [District Rules 2201, 4354, and 4202; PSD ATC SJ 80-02] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

36. During any day when nitrate is used in the furnace, final stack emissions shall not exceed 3.0 lb-NO<sub>x</sub>/ton of glass pulled on a block 24-hour average. During any day when nitrate is not used in the furnace, final stack emissions shall not exceed 1.45 lb-NO<sub>x</sub>/ton of glass pulled on a block 24-hour average. These emission limits shall not apply during periods of startup, shutdown, or idling, provided the facility complies with the requirements of Rule 4354, Sections 5.5, 5.6, 5.7, and 6.7. [District Rule 2201 and 4354] Federally Enforceable Through Title V Permit
37. Emissions from the glass melting furnace shall not exceed any of the emission limits of District Rule 4354, as follows: 0.90 lb SO<sub>x</sub>/short ton or glass pulled on a rolling 24-hour average, 0.50 lb-PM<sub>10</sub>/short ton pulled on a block 24-hour average, 1.0 lb CO/short ton of glass pulled as averaged over a three hour period, or 0.25 lb VOC/short ton of glass pulled as averaged over a three hour period. These emission limits shall not apply during periods of startup, shutdown, or idling, provided the facility complies with the requirements of Rule 4354, Sections 5.5, 5.6, 5.7, and 6.7. [District Rule 4354] Federally Enforceable Through Title V Permit
38. Source testing to measure NO<sub>x</sub>, SO<sub>x</sub>, PM, CO, and VOC emissions from this unit shall be conducted while firing on fuel oil when this unit is fired on fuel oil during the previous 12 months from the date of the proposed source test. After demonstrating compliance on two consecutive annual source tests when the unit is fired on fuel oil, the unit shall be tested not less than once every 36 months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emissions limits, the source testing frequency shall revert to at least once every 12 months. [District Rule 2201] Federally Enforceable Through Title V Permit
39. Natural gas and propane consumption shall not exceed 3.55 million cubic feet per day and 1.295 trillion Btu in any 12 month period. [District Rule 2201; PSD ATC SJ 80-02] Federally Enforceable Through Title V Permit
40. The owner or operator shall install, certify, maintain, operate and quality-assure a Continuous Parametric Monitoring System which continuously measures and records the furnace oxygen/fuel ratio. [District Rules 1080 and 4354] Federally Enforceable Through Title V Permit
41. The furnace oxygen/fuel ratio shall be greater than 1.7 to 1. [District Rule 2201] Federally Enforceable Through Title V Permit
42. Normal range for the furnace oxygen/fuel ratio shall be re-established during each source test required by this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
43. Results of the Continuous Parametric Monitoring System system shall be logged in one hour intervals for furnace oxygen/fuel ratio. [District Rule 1080] Federally Enforceable Through Title V Permit
44. The owner or operator shall install, certify, maintain, operate and quality-assure a Continuous Parametric Monitoring System which continuously measures and records the caustic soda injection system's liquid flow rate and liquid specific gravity. [District Rules 1080 and 4354] Federally Enforceable Through Title V Permit
45. The caustic soda injection system's liquid flow rate shall not be lower than 0.5 gallons/minute. [District Rule 4354] Federally Enforceable Through Title V Permit
46. The caustic soda injection system's liquid specific gravity shall not be lower than 1.01. [District Rule 4354] Federally Enforceable Through Title V Permit
47. Results of the Continuous Parametric Monitoring System monitoring the liquid flow rate and liquid specific gravity of the caustic soda injection system shall be recorded every hour. [District Rule 1080] Federally Enforceable Through Title V Permit
48. The owner or operator shall install, certify, maintain, operate and quality-assure a Continuous Parametric Monitoring System which continuously measures and records the voltage of the dry electrostatic precipitator. [District Rules 1080 and 4354] Federally Enforceable Through Title V Permit
49. The dry electrostatic precipitator voltage shall not drop below 1,800 kV for more than 6 continuous minutes. [District Rule 4354] Federally Enforceable Through Title V Permit
50. Results of the Continuous Parametric Monitoring System monitoring the dry electrostatic precipitator voltage shall be recorded at least four times per hour. [District Rule 1080] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

51. The continuous parametric monitors specified in these permit conditions shall be installed, calibrated and operational prior to the next furnace source test. After the next furnace source test, the detection range of the Continuous Parametric Monitoring System shall be adjusted as necessary to accurately measure the resulting range of furnace oxygen/fuel ratio. [District Rule 2201] Federally Enforceable Through Title V Permit
52. The owner or operator shall submit a written report of furnace oxygen/fuel ratio Continuous Parametric Monitoring System operations for each calendar quarter to the APCO. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess oxygen/fuel ratio, nature and the cause of excess (if known), corrective actions taken and preventative measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the furnace oxygen/fuel ratio test period and used to determine compliance with the furnace oxygen/fuel ratio standard; Applicable time and date of each period during which the Continuous Parametric Monitoring System was inoperative (monitor downtime), except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080] Federally Enforceable Through Title V Permit
53. The owner or operator shall submit a written report of the caustic soda injection system Continuous Parametric Monitoring System operations for each calendar quarter to the APCO. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess of the caustic soda injection rate or specific gravity, nature and the cause of excess (if known), corrective actions taken and preventative measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the caustic soda injection system flow rate and specific gravity test period and used to determine compliance with the caustic soda injection system flow rate and specific gravity standard; Applicable time and date of each period during which the Continuous Parametric Monitoring System was inoperative (monitor downtime), except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080] Federally Enforceable Through Title V Permit
54. The owner or operator shall submit a written report of the dry electrostatic precipitator Continuous Parametric Monitoring System operations for each calendar quarter to the APCO. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess of the dry electrostatic precipitator, nature and the cause of excess (if known), corrective actions taken and preventative measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the dry electrostatic precipitator test period and used to determine compliance with the dry electrostatic precipitator standard; Applicable time and date of each period during which the Continuous Parametric Monitoring System was inoperative (monitor downtime), except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080] Federally Enforceable Through Title V Permit
55. CertainTeed Corporation shall maintain and operate the following continuous emissions monitoring systems (CEMS) in the final stack: (1) a CEMS to measure stack gas NO<sub>x</sub> concentrations; (2) a CEMS to measure stack gas volumetric flow rates [District Rule 2201 and 4354; PSD ATC SJ 80-02] Federally Enforceable Through Title V Permit
56. The NO<sub>x</sub> CEMS shall meet EPA monitoring performance specifications (40 CFR 60.13, 40 CFR 60, Appendix B, Performance Specification 2; and 40 CFR 60, Appendix F). [PSD ATC SJ 80-02] Federally Enforceable Through Title V Permit
57. The volumetric flow rate CEMS shall meet EPA monitoring performance specifications (40 CFR 52, Appendix E). [PSD ATC SJ 80-02] Federally Enforceable Through Title V Permit
58. In the quarterly excess emission reports, CertainTeed Corporation shall report all dates and times when process gases are vented to the bypass stack, CertainTeed Corporation shall also report the reason for each instance of venting to the bypass stack. [PSD ATC SJ 80-02] Federally Enforceable Through Title V Permit
59. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: District Rules 4201 (12/17/92) and 4202 (12/17/92); and Madera County Rule 404. A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
60. A record of each fuel consumption shall be maintained, kept onsite for at least five years and made available for inspection by EPA, CARB and the District upon request. [District 2520] Federally Enforceable Through Title V Permit
61. Source shall be in compliance with all requirements of District Rule 4354 by the end of startup as prescribed in Section 7.1 of District Rule 4354. [District Rule 4354] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

62. Furnace shutdown shall not exceed 20 days, measured from the time furnace operations drop below the idle thresholds specified in Section 3.17 of District Rule 4354 to when all emissions from the furnace cease. [District Rule 4354] Federally Enforceable Through Title V Permit
63. NO<sub>x</sub>, CO and VOC emissions during idling shall not exceed the emissions limits as calculated in Section 5.7.2 of District Rule 4354. [District Rule 4354] Federally Enforceable Through Title V Permit
64. Any source testing result, CEMS, or alternate emission monitoring method averaged value exceeding the applicable emission limits in Section 5.1, Section 5.2, Section 5.3, or Section 5.4 shall constitute a violation of the rule. [District Rule 4354] Federally Enforceable Through Title V Permit
65. The following test methods shall be used, NO<sub>x</sub>: EPA Method 7E, 19, or ARB Method 100, CO: EPA Method 10 or ARB Method 100, VOC: EPA Method 25A expressed in terms of carbon or ARB Method 100. EPA Method 18 or ARB Method 422 shall be used to determine emissions of exempt compounds, SO<sub>x</sub>: EPA Method 6C, EPA Method 8, or ARB Method 100. Alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. [District Rule 4354] Federally Enforceable Through Title V Permit
66. Stack gas oxygen, carbon dioxide, excess air, and dry molecular weight for source testing purposes shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rule 4354] Federally Enforceable Through Title V Permit
67. Stack gas velocity and volumetric flow rate for source testing purposes shall be determined using EPA Method 2. [District Rule 4354] Federally Enforceable Through Title V Permit
68. Permittee shall comply with Section 5.5 during startup. Startup exemption time shall not exceed 40 days, starting from the time of primary combustion system activation. [District Rule 4354] Federally Enforceable Through Title V Permit
69. The emission control systems (ECS) shall be in operation whenever technologically feasible during startup, idling and shutdown conditions. [District Rule 4354] Federally Enforceable Through Title V Permit
70. During startup, the stoichiometric ratio of the primary furnace combustion system shall not exceed 5% oxygen as calculated from the actual fuel and oxidant flow measurements for combustion in the furnace. [District Rule 4354] Federally Enforceable Through Title V Permit
71. Operator shall maintain daily records of the total hours of operation, type and quantity of fuel used in the furnace, the quantity of glass pulled from the furnace, NO<sub>x</sub> emission rate in lb/ton of glass pulled. Operator shall maintain records of source tests and operating parameters established during initial source test, maintenance and repair, malfunction, and idling, start-up and shutdown. [District Rule 4354] Federally Enforceable Through Title V Permit
72. The operator shall retain the records specified in this permit for a period of five years, make them available on site during normal business hours to the APCO, ARB, or EPA, and submit them to the APCO, ARB, or EPA upon request. [District Rule 4354] Federally Enforceable Through Title V Permit
73. Excess emissions indicated by the CEM system shall be considered violations of the applicable emissions limits for the purposes of this permit. [PSD ATC SJ 80-02] Federally Enforceable Through Title V Permit
74. The owner or operator shall not discharge or cause to be discharged into the atmosphere in excess of 0.25 kilogram (kg) of filterable particulate matter (PM) per megagram (Mg) (0.5 pound [lb] of PM per ton) of glass pulled for each new or existing glass-melting furnace. [40 CFR 63, Subpart NNN and 40 CFR 60, Subpart CC] Federally Enforceable Through Title V Permit
75. The owner or operator must initiate corrective action within 1 hour when any 3-hour block average of the monitored dry electrostatic precipitator (DESP) parameter is outside the limit(s) established during the performance test as specified in Section 63.1384 and complete corrective actions in a timely manner according to the procedures in the operations, maintenance, and monitoring plan. [40 CFR 63, Subpart NNN] Federally Enforceable Through Title V Permit
76. The owner or operator must implement a QIP consistent with the compliance assurance monitoring provisions of 40 CFR part 64 subpart D when the monitored DESP parameter is outside the limit(s) established during the performance test as specified in Section 63.1384 for more than 5 percent of the total operating time in a 6-month block reporting period. [40 CFR 63, Subpart NNN] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

77. The owner or operator must operate the DESP such that the monitored DESP parameter is not outside the limit(s) established during the performance test as specified in Section 63.1384 for more than 10 percent of the total operating time in a 6-month block reporting period. [40 CFR 63, Subpart NNN] Federally Enforceable Through Title V Permit
78. The owner or operator must initiate corrective action within 1 hour when the average glass pull rate of any 4-hour block period for glass melting furnaces equipped with continuous glass pull rate monitors, or daily glass pull rate for glass melting furnaces not so equipped, exceeds the average glass pull rate established during the performance test as specified in Section 63.1384, by greater than 20 percent and complete corrective actions in a timely manner according to the procedures in the operations, maintenance, and monitoring plan. [40 CFR 63, Subpart NNN] Federally Enforceable Through Title V Permit
79. The owner or operator must implement a QIP consistent with the compliance assurance monitoring provisions of 40 CFR part 64, subpart D when the glass pull rate exceeds, by more than 20 percent, the average glass pull rate established during the performance test as specified in Section 63.1384 for more than 5 percent of the total operating time in a 6-month block reporting period. [40 CFR 63, Subpart NNN] Federally Enforceable Through Title V Permit
80. The owner or operator must operate each glass-melting furnace such that the glass pull rate does not exceed, by more than 20 percent, the average glass pull rate established during the performance test as specified in Section 63.1384 for more than 10 percent of the total operating time in a 6-month block reporting period. [40 CFR 63, Subpart NNN] Federally Enforceable Through Title V Permit
81. The owner or operator of each wool fiberglass manufacturing facility must prepare for each glass-melting furnace, rotary spin manufacturing line a written operations, maintenance, and monitoring plan. The plan must be submitted to the Administrator for review and approval as part of the application for a part 70 permit. The plan must include the following information: Procedures for the proper operation and maintenance of process modifications and add-on control devices used to meet the emission limits in Section 63.1382; Procedures for the proper operation and maintenance of monitoring devices used to determine compliance, including quarterly calibration and certification of accuracy of each monitoring device according to the manufacturers's instructions; and Corrective actions to be taken when process parameters or add-on control device parameters deviate from the limit(s) established during initial performance tests. [40 CFR 63, Subpart NNN] Federally Enforceable Through Title V Permit
82. The owner or operator must monitor the DESP according to the procedures in the operations, maintenance, and monitoring plan. The operations, maintenance, and monitoring plan for the ESP must contain the following information: The ESP operating parameter(s), such as secondary voltage of each electrical field, to be monitored and the minimum and/or maximum value(s) that will be used to identify any operational problems; A schedule for monitoring the ESP operating parameter(s); Recordkeeping procedures, consistent with the recordkeeping requirements of Section 63.1386, to show that the ESP operating parameter(s) is within the limit(s) established during the performance test; and Procedures for the proper operation and maintenance of the ESP. [40 CFR 63, Subpart NNN] Federally Enforceable Through Title V Permit
83. The owner or operator of an existing glass-melting furnace equipped with continuous glass pull rate monitors must monitor and record the glass pull rate on an hourly basis. For glass-melting furnaces that are not equipped with continuous glass pull rate monitors, the glass pull rate must be monitored and recorded once per day. [40 CFR 63, Subpart NNN] Federally Enforceable Through Title V Permit
84. The owner or operator must monitor the established parameter(s) according to the procedures in the operations, maintenance, and monitoring plan. [40 CFR 63, Subpart NNN] Federally Enforceable Through Title V Permit
85. The owner or operator must include as part of their operations, maintenance, and monitoring plan the following information: Procedures for the proper operation and maintenance of the process; Process parameter(s) to be monitored to demonstrate compliance with the applicable emission limits in Section 63.1382; Correlation(s) between process parameter(s) to be monitored and formaldehyde emissions; A schedule for monitoring the process parameter(s); and Recordkeeping procedures, consistent with the recordkeeping requirements of Section 63.1386, to show that the process parameter value(s) established during the performance test is not exceeded. [40 CFR 63, Subpart NNN] Federally Enforceable Through Title V Permit

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86. For all control device and process operating parameters measured during the initial performance tests, the owners or operators of glass-melting furnaces subject to this subpart may change the limits established during the initial performance tests if additional performance testing is conducted to verify that, at the new control device or process parameter levels, they comply with the applicable emission limits in Section 63.1382. The owner or operator shall conduct all additional performance tests according to the procedures in this part 63, subpart A and in Section 63.1384. [40 CFR 63, Subpart NNN] Federally Enforceable Through Title V Permit
87. The owner or operator shall conduct a performance test for each existing and new glass-melting furnace. All monitoring systems and equipment must be installed, operational, and calibrated prior to the performance test. Unless a different frequency is specified in this section, the owner or operator must monitor and record process and/or add-on control device parameters at least every 15 minutes during the performance tests. The arithmetic average for each parameter must be calculated using all of the recorded measurements for the parameter. [40 CFR 63, Subpart NNN] Federally Enforceable Through Title V Permit
88. During each performance test, the owner or operator must monitor and record the glass pull rate for each glass-melting furnace and, if different, the glass pull rate for each rotary spin manufacturing line and flame attenuation manufacturing line. Record the glass pull rate every 15 minutes during any performance test required by this subpart and determine the arithmetic average of the recorded measurements for each test run and calculate the average of the three test runs. [40 CFR 63, Subpart NNN] Federally Enforceable Through Title V Permit
89. During the performance test, the owner or operator of a glass-melting furnace controlled by an DESP shall monitor and record the DESP parameter level(s), as specified in the operations, maintenance, and monitoring plan, and establish the minimum and/or maximum value(s) that will be used to demonstrate compliance after the initial performance test. [40 CFR 63, Subpart NNN] Federally Enforceable Through Title V Permit
90. To determine compliance with the PM emission limit for glass-melting furnaces, use the following equation:  $E = (C \times Q \times K1)/P$ , where: E = Emission rate of PM, kg/Mg (lb/ton) of glass pulled; C = Concentration of PM, g/dscm (gr/dscf); Q = Volumetric flow rate of exhaust gases, dscm/h (dscf/h); K1 = Conversion factor, 1 kg/1,000 g (1 lb/7,000 gr); and P = Average glass pull rate, Mg/h (tons/h). [40 CFR 63, Subpart NNN and 40 CFR 60, Subpart CC] Federally Enforceable Through Title V Permit
91. The owner or operator shall submit the following written initial notifications to the Administrator:(1) Notification of intention to construct a new major source or reconstruct a major source; of the date construction or reconstruction commenced; of the anticipated date of startup; of the actual date of startup, where the initial startup of a new or reconstructed source occurs after June 14, 2002, and for which an application for approval or construction or reconstruction is required (See Section 63.9(b)(4) and (5) of this part);(2) Notification of special compliance obligations;(3) Notification of performance test; and (4) Notification of compliance status. [40 CFR 63, Subpart NNN] Federally Enforceable Through Title V Permit
92. The owner or operator shall report the results of the initial performance test as part of the notification of compliance status. [40 CFR 63, Subpart NNN] Federally Enforceable Through Title V Permit
93. The owner or operator shall develop and implement a written plan as described in Section 63.6(e)(3) of this part that contains specific procedures to be followed for operating the source and maintaining the source during periods of startup, shutdown, and malfunction and a program of corrective action for malfunctioning process modifications and control systems used to comply with the standard. In addition to the information required in Section 63.6(e)(3), the plan shall include:(i) Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended;(ii) Corrective actions to be taken in the event of a malfunction of a control device or process modification, including procedures for recording the actions taken to correct the malfunction or minimize emissions; and(iii) A maintenance schedule for each control device and process modification that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance. The owner or operator shall also keep records of each event as required by Section 63.10(b) of this part and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in Section 63.10(e)(3)(iv) of this part. [40 CFR 63, Subpart NNN] Federally Enforceable Through Title V Permit
94. The owner or operator must retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site. [40 CFR 63, Subpart NNN] Federally Enforceable Through Title V Permit

95. The owner or operator shall maintain records of the following information: DESP parameter value(s) used to monitor DESP performance, including any period when the value(s) deviated from the established limit(s), the date and time of the deviation, when corrective actions were initiated, the cause of the deviation, an explanation of the corrective actions taken, and when the cause of the deviation was corrected; and Glass pull rate, including any period when the pull rate exceeded the average pull rate established during the performance test by more than 20 percent, the date and time of the exceedance, when corrective actions were initiated, the cause of the exceedance, an explanation of the corrective actions taken, and when the cause of the exceedance was corrected. [40 CFR 63, Subpart NNN] Federally Enforceable Through Title V Permit
96. The owner or operator shall report semiannually if measured emissions are in excess of the applicable standard or a monitored parameter deviates from the levels established during the performance test. The report shall contain the information specified in Section 63.10(c) of this part as well as the additional records required by the recordkeeping requirements of paragraph (d) of this section. When no deviations have occurred, the owner or operator shall submit a report stating that no excess emissions occurred during the reporting period. [40 CFR 63, Subpart NNN] Federally Enforceable Through Title V Permit



## AUTHORITY TO CONSTRUCT

**PERMIT NO:** C-261-3-13

**ISSUANCE DATE:** 12/11/2012

**LEGAL OWNER OR OPERATOR:** CERTAINTED CORPORATION

**MAILING ADDRESS:** 17775 AVENUE 23 1/2  
CHOWCHILLA, CA 93610

**LOCATION:** 17775 AVENUE 23 1/2  
CHOWCHILLA, CA 93610

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 51.44 MMBTU/HR C-11 PRODUCTION LINE CONSISTING OF FOREHEARTH #1, GLASS FIBERIZER & MAT FORMING, CURING OVEN, MAT COOLING, SLITTING & TRIMMING, FACING, INFRARED DRYER, AND ROLL UP PACKAGING AND CONTROL DEVICES: LOWER THE NOX AND SOX DAILY EMISSIONS LIMITS SHARED WITH UNITS -2 AND -4

### 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 2201] Federally Enforceable Through Title V Permit
2. Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. Authority to Construct (ATC) C-261-3-1 shall be implemented concurrently, or prior to the modification and startup of the equipment authorized by this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Fiberglass production on the C-11 Line shall not exceed 260 metric tons per day and 94,900 metric tons per year. A permanent record of daily production shall be maintained and shall be available for inspection by the District, EPA and CARB. [PSD ATC SJ 80-02] Federally Enforceable Through Title V Permit

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YOU **MUST** NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (559) 230-5950 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO

DAVID WARNER, Director of Permit Services  
C-261-3-13 : Dec 11 2012 3:45PM - FUKUDAD : Joint Inspection NOT Required  
Central Regional Office • 1990 E. Gettysburg Ave. • Fresno, CA 93726 • (559) 230-5900 • Fax (559) 230-6061

5. With approval from EPA, CertainTeed Corporation may choose to conduct performance tests at production and firing rates less than maximum design capacity and may choose to test only the fuel expected to be used in the next 12-month time period, provided that actual plant production does not exceed the tested rate and provided that only the fuel for which tests have been performed is used. The emission rate for NO<sub>x</sub> established by the first test at the specific production rate (less than maximum plant capacity) shall become the applicable emission limit for NO<sub>x</sub> at the production rate tested, as in condition IX.B of PSD permit SJ 80-02. A fuel switch or an increase in production levels beyond the maximum tested rate for any product line requires approval by EPA prior to such production increases or fuel switch and may require additional performance testing. [PSD ATC SJ 80-02] Federally Enforceable Through Title V Permit
6. EPA shall be notified by letter 30 days prior to a production increase in order to make a determination of whether additional performance testing is required. [PSD ATC SJ 80-02] Federally Enforceable Through Title V Permit
7. Only PUC regulated natural gas shall be used. [PSD ATC SJ 80-02; Madera County Rule 404] Federally Enforceable Through Title V Permit
8. A permanent record of daily production shall be maintained and shall be available for inspection by EPA, CARB and the District. [District Rule 2520; PSD ATC SJ 80-02] Federally Enforceable Through Title V Permit
9. Source tests shall be performed at least on an annual basis and at such other times as may be specified by the District or EPA. Tests shall comply with the procedures in 40 CFR (Part 60.8) for PM, NO<sub>x</sub>, SO<sub>x</sub>, and VOC. [District Rule 2520; PSD ATC SJ 80-02] Federally Enforceable Through Title V Permit
10. PM shall be sampled according to the modified version of EPA's Method 5 which includes the impinger catch. [PSD ATC SJ 80-02] Federally Enforceable Through Title V Permit
11. The source tests for PM shall be performed at the outlet of the two wet ESP's and the final stack. The source tests for NO<sub>x</sub>, SO<sub>x</sub>, and VOC shall be performed at the final stack. [PSD ATC SJ 80-02] Federally Enforceable Through Title V Permit
12. The District and EPA (Attention: Air-5) shall be notified in writing 30 days in advance of the scheduled tests dates to allow time for the development of an approvable source test plan and to arrange for an observer to be present at the test. [District Rule 1081; PSD ATC SJ 80-02] Federally Enforceable Through Title V Permit
13. The result of each source test shall be submitted to the District and EPA, Region 9 (Attention: Air-5) within 60 days after the test. [District Rule 1081; PSD ATC SJ 80-02] Federally Enforceable Through Title V Permit
14. CertainTeed shall continuously operate and maintain the wet cyclonic scrubbers for the pretreatment of the gas stream upstream of the south wet ESP. [PSD ATC SJ 80-02] Federally Enforceable Through Title V Permit
15. Both the cyclonic scrubbers and the South wet ESP shall be functioning as air pollution abatement devices whenever there is glass production on the C-11 Line. [PSD ATC SJ 80-02] Federally Enforceable Through Title V Permit
16. The North wet ESP shall be functioning as air pollutant abatement device whenever there is glass production on the C-11 Line. [PSD ATC SJ 80-02] Federally Enforceable Through Title V Permit
17. The combined North wet ESP and South wet ESP outlet emissions on C-11 Line shall not exceed 11.8 lbs/hr of PM. [District Rule 4202; PSD ATC SJ 80-02] Federally Enforceable Through Title V Permit
18. Natural gas and propane consumption shall not exceed 3.55 million cubic feet per day and 1.295 trillion Btu in any 12 month period. [PSD ATC SJ 80-02] Federally Enforceable Through Title V Permit
19. When fired on propane, the total stack emissions, which result from combining the C-11 dry ESP (PTO C-261-2), C-11 wet ESP and C-12 wet ESP (PTO C-261-4) emissions, shall not exceed 547.2 lb PM/day, 547.2 lb PM<sub>10</sub>/day, 432.0 lb HC/day, 432.0 lb VOC/day, 1,074.7 lb NO<sub>x</sub>/day, 322.4 lb SO<sub>x</sub>/day, or 1,072.8 lb CO/day. [District Rule 2201] Federally Enforceable Through Title V Permit
20. The total stack emissions, which result from combining the C-1 dry ESP (PTO C-261-2), C-11 wet ESP (PTO C-261-3) and C-12 wet ESP emissions, shall not exceed 22.8 lb PM/hr or 22.8 lb PM<sub>10</sub>/hr. [District Rule 2201; PSD ATC SJ 80-02] Federally Enforceable Through Title V Permit

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21. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: District Rules 4201 (12/17/92) and 4202 (12/17/92); and Madera County Rule 404. A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
22. The owner or operator shall not discharge or cause to be discharged into the atmosphere in excess of 0.6 kg of formaldehyde per megagram (1.2 lb of formaldehyde per ton) of glass pulled for each existing rotary spin manufacturing line. [40 CFR 63, Subpart NNN] Federally Enforceable Through Title V Permit
23. The owner or operator must initiate corrective action within 1 hour when the average glass pull rate of any 4-hour block period for glass melting furnaces equipped with continuous glass pull rate monitors, or daily glass pull rate for glass melting furnaces not so equipped, exceeds the average glass pull rate established during the performance test as specified in Section 63.1384, by greater than 20 percent and complete corrective actions in a timely manner according to the procedures in the operations, maintenance, and monitoring plan. [40 CFR 63, Subpart NNN] Federally Enforceable Through Title V Permit
24. The owner or operator must implement a QIP consistent with the compliance assurance monitoring provisions of 40 CFR part 64, subpart D when the glass pull rate exceeds, by more than 20 percent, the average glass pull rate established during the performance test as specified in Section 63.1384 for more than 5 percent of the total operating time in a 6-month block reporting period. [40 CFR 63, Subpart NNN] Federally Enforceable Through Title V Permit
25. The owner or operator must operate each glass-melting furnace such that the glass pull rate does not exceed, by more than 20 percent, the average glass pull rate established during the performance test as specified in Section 63.1384 for more than 10 percent of the total operating time in a 6-month block reporting period. [40 CFR 63, Subpart NNN] Federally Enforceable Through Title V Permit
26. The owner or operator must initiate corrective action within 1 hour when the monitored process parameter level(s) is outside the limit(s) established during the performance test as specified in Section 63.1384 for the process modification(s) used to control formaldehyde emissions and complete corrective actions in a timely manner according to the procedures in the operations, maintenance, and monitoring plan. [40 CFR 63, Subpart NNN] Federally Enforceable Through Title V Permit
27. The owner or operator must implement a QIP consistent with the compliance assurance monitoring provisions of 40 CFR part 64, subpart D when the process parameter(s) is outside the limit(s) established during the performance test as specified in Section 63.1384 for more than 5 percent of the total operating time in a 6-month block reporting period. [40 CFR 63, Subpart NNN] Federally Enforceable Through Title V Permit
28. The owner or operator must operate the process modifications such that the monitored process parameter(s) is not outside the limit(s) established during the performance test as specified in Section 63.1384 for more than 10 percent of the total operating time in a 6-month block reporting period. [40 CFR 63, Subpart NNN] Federally Enforceable Through Title V Permit
29. The owner or operator must use a resin in the formulation of binder such that the free-formaldehyde content of the resin used does not exceed the free-formaldehyde range contained in the specification for the resin used during the performance test as specified in Section 63.1384. [40 CFR 63, Subpart NNN] Federally Enforceable Through Title V Permit
30. The owner or operator must use a binder formulation that does not vary from the specification and operating range established and used during the performance test as specified in Section 63.1384. For the purposes of this standard, adding or increasing the quantity of urea and/or lignin in the binder formulation does not constitute a change in the binder formulation. [40 CFR 63, Subpart NNN] Federally Enforceable Through Title V Permit

31. The owner or operator of each wool fiberglass manufacturing facility must prepare for each glass-melting furnace and rotary spin manufacturing line subject to the provisions of this subpart, a written operations, maintenance, and monitoring plan. The plan must be submitted to the Administrator for review and approval as part of the application for a part 70 permit. The plan must include the following information: Procedures for the proper operation and maintenance of process modifications and add-on control devices used to meet the emission limits in Section 63.1382; Procedures for the proper operation and maintenance of monitoring devices used to determine compliance, including quarterly calibration and certification of accuracy of each monitoring device according to the manufacturers' instructions; and Corrective actions to be taken when process parameters or add-on control device parameters deviate from the limit(s) established during initial performance tests. [40 CFR 63, Subpart NNN] Federally Enforceable Through Title V Permit
32. The owner or operator of an existing glass-melting furnace equipped with continuous glass pull rate monitors must monitor and record the glass pull rate on an hourly basis. For glass-melting furnaces that are not equipped with continuous glass pull rate monitors, the glass pull rate must be monitored and recorded once per day. [40 CFR 63, Subpart NNN] Federally Enforceable Through Title V Permit
33. The owner or operator who uses process modifications to control formaldehyde emissions must establish a correlation between formaldehyde emissions and a process parameter(s) to be monitored. [40 CFR 63, Subpart NNN] Federally Enforceable Through Title V Permit
34. The owner or operator must monitor the established parameter(s) according to the procedures in the operations, maintenance, and monitoring plan. [40 CFR 63, Subpart NNN] Federally Enforceable Through Title V Permit
35. The owner or operator must include as part of their operations, maintenance, and monitoring plan the following information: Procedures for the proper operation and maintenance of the process; Process parameter(s) to be monitored to demonstrate compliance with the applicable emission limits in Section 63.1382; Correlation(s) between process parameter(s) to be monitored and formaldehyde emissions; A schedule for monitoring the process parameter(s); and Recordkeeping procedures, consistent with the recordkeeping requirements of Section 63.1386, to show that the process parameter value(s) established during the performance test is not exceeded. [40 CFR 63, Subpart NNN] Federally Enforceable Through Title V Permit
36. The owner or operator must monitor and record the free-formaldehyde content of each resin shipment received and used in the formulation of binder. [40 CFR 63, Subpart NNN] Federally Enforceable Through Title V Permit
37. The owner or operator must monitor and record the formulation of each batch of binder used. [40 CFR 63, Subpart NNN] Federally Enforceable Through Title V Permit
38. The owner or operator must monitor and record at least once every 8 hours, the product LOI and product density of each bonded wool fiberglass product manufactured. [40 CFR 63, Subpart NNN] Federally Enforceable Through Title V Permit
39. For all control device and process operating parameters measured during the initial performance tests, the owners or operators of glass-melting furnaces and rotary spin manufacturing lines subject to this subpart may change the limits established during the initial performance tests if additional performance testing is conducted to verify that, at the new control device or process parameter levels, they comply with the applicable emission limits in Section 63.1382. The owner or operator shall conduct all additional performance tests according to the procedures in this part 63, subpart A and in Section 63.1384. [40 CFR 63, Subpart NNN] Federally Enforceable Through Title V Permit
40. During each performance test, the owner or operator must monitor and record the glass pull rate for each glass-melting furnace and, if different, the glass pull rate for the C-11 rotary spin manufacturing line. Record the glass pull rate every 15 minutes during any performance test required by this subpart and determine the arithmetic average of the recorded measurements for each test run and calculate the average of the three test runs. [40 CFR 63, Subpart NNN] Federally Enforceable Through Title V Permit
41. The owner or operator must conduct a performance test for the C-11 rotary spin manufacturing line, subject to this subpart, while producing the building insulation with the highest LOI expected to be produced on that line. [40 CFR 63, Subpart NNN] Federally Enforceable Through Title V Permit

42. The owner or operator of each rotary spin manufacturing line regulated by this subpart must conduct performance tests using the resin with the highest free-formaldehyde content. During the performance test of each rotary spin manufacturing line regulated by this subpart, the owner or operator shall monitor and record the free-formaldehyde content of the resin, the binder formulation used, and the product LOI and density. [40 CFR 63, Subpart NNN] Federally Enforceable Through Title V Permit
43. During the performance test, the owner or operator of a rotary spin manufacturing line who plans to use process modifications to comply with the emission limits in Section 63.1382 must monitor and record the process parameter level(s), as specified in the operations, maintenance, and monitoring plan, which will be used to demonstrate compliance after the initial performance test. [40 CFR 63, Subpart NNN] Federally Enforceable Through Title V Permit
44. Unless disapproved by the Administrator, an owner or operator of a rotary spin or flame attenuation manufacturing line regulated by this subpart may conduct short-term experimental production runs using binder formulations or other process modifications where the process parameter values would be outside those established during performance tests without first conducting performance tests. Such runs must not exceed 1 week in duration unless the Administrator approves a longer period. The owner or operator must notify the Administrator and postmark or deliver the notification at least 15 days prior to commencement of the short-term experimental production runs. The Administrator must inform the owner or operator of a decision to disapprove or must request additional information prior to the date of the short-term experimental production runs. Notification of intent to perform an experimental short-term production run shall include the following information:(i) The purpose of the experimental production run;(ii) The affected line;(iii) How the established process parameters will deviate from previously approved levels;(iv) The duration of the experimental production run;(v) The date and time of the experimental production run; and(vi) A description of any emission testing to be performed during the experimental production run. [40 CFR 63, Subpart NNN] Federally Enforceable Through Title V Permit
45. To determine compliance with the emission limit for formaldehyde for rotary spin manufacturing lines, use the following equation:  $E = (C \times MW \times Q \times K1 \times K2) / (K3 \times P \times 10^6)$ , where: E = Emission rate of formaldehyde, kg/Mg (lb/ton) of glass pulled; C = Measured volume fraction of formaldehyde, ppm; MW = Molecular weight of formaldehyde, 30.03 g/g-mol; Q = Volumetric flow rate of exhaust gases, dscm/h (dscf/h); K1 = Conversion factor, 1 kg/1,000 g (1 lb/453.6 g); K2 = Conversion factor, 1,000 L/m<sup>3</sup> (28.3 L/ft<sup>3</sup>); K3 = Conversion factor, 24.45 L/g-mol; and P = Average glass pull rate, Mg/h (tons/h). [40 CFR 63, Subpart NNN] Federally Enforceable Through Title V Permit
46. The owner or operator shall submit the following written initial notifications to the Administrator:(1) Notification of intention to construct a new major source or reconstruct a major source; of the date construction or reconstruction commenced; of the anticipated date of startup; of the actual date of startup, where the initial startup of a new or reconstructed source occurs after June 14, 2002, and for which an application for approval or construction or reconstruction is required (See Section 63.9(b)(4) and (5) of this part);(2) Notification of special compliance obligations;(3) Notification of performance test; and (4) Notification of compliance status. [40 CFR 63, Subpart NNN] Federally Enforceable Through Title V Permit
47. The owner or operator shall report the results of the initial performance test as part of the notification of compliance status. [40 CFR 63, Subpart NNN] Federally Enforceable Through Title V Permit
48. The owner or operator shall develop and implement a written plan as described in Section 63.6(e)(3) of this part that contains specific procedures to be followed for operating the source and maintaining the source during periods of startup, shutdown, and malfunction and a program of corrective action for malfunctioning process modifications and control systems used to comply with the standard. In addition to the information required in Section 63.6(e)(3), the plan shall include:(i) Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended;(ii) Corrective actions to be taken in the event of a malfunction of a control device or process modification, including procedures for recording the actions taken to correct the malfunction or minimize emissions; and (iii) A maintenance schedule for each control device and process modification that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance. The owner or operator shall also keep records of each event as required by Section 63.10(b) of this part and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in Section 63.10(e)(3)(iv) of this part. [40 CFR 63, Subpart NNN] Federally Enforceable Through Title V Permit

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49. The owner or operator must retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site. [40 CFR 63, Subpart NNN] Federally Enforceable Through Title V Permit
50. The owner or operator shall maintain records of the following information: the formulation of each binder batch and the LOI and density for each product manufactured on a rotary spin manufacturing line or flame attenuation manufacturing line subject to the provisions of this subpart, and the free formaldehyde content of each resin shipment received and used in the binder formulation; Process parameter level(s) for RS and FA manufacturing lines that use process modifications to comply with the emission limits, including any period when the parameter level(s) deviated from the established limit(s), the date and time of the deviation, when corrective actions were initiated, the cause of the deviation, an explanation of the corrective actions taken, and when the cause of the deviation was corrected; and Glass pull rate, including any period when the pull rate exceeded the average pull rate established during the performance test by more than 20 percent, the date and time of the exceedance, when corrective actions were initiated, the cause of the exceedance, an explanation of the corrective actions taken, and when the cause of the exceedance was corrected. [40 CFR 63, Subpart NNN] Federally Enforceable Through Title V Permit
51. The owner or operator shall report semiannually if measured emissions are in excess of the applicable standard or a monitored parameter deviates from the levels established during the performance test. The report shall contain the information specified in Section 63.10(c) of this part as well as the additional records required by the recordkeeping requirements of paragraph (d) of this section. When no deviations have occurred, the owner or operator shall submit a report stating that no excess emissions occurred during the reporting period. [40 CFR 63, Subpart NNN] Federally Enforceable Through Title V Permit



## AUTHORITY TO CONSTRUCT

**PERMIT NO:** C-261-4-11

**ISSUANCE DATE:** 12/11/2012

**LEGAL OWNER OR OPERATOR:** CERTAINTEED CORPORATION

**MAILING ADDRESS:** 17775 AVENUE 23 1/2  
CHOWCHILLA, CA 93610

**LOCATION:** 17775 AVENUE 23 1/2  
CHOWCHILLA, CA 93610

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 27.44 MMBTU/HR C-12 LINE INCLUDING FOREHEARTH #2; FIBERIZER CONTROLLED BY 3 FISHER-KLOSTERMANN (F-K) CYCLONIC SCRUBBERS; COLLECTION & SHREDDING CONTROLLED BY 2 CERTAINTEED CYCLONES/F-K SCRUBBERS/C-12 WET EP; BAGGING CONTROLLED BY BAGHOUSE #2. LOWER THE NOX AND SOX DAILY EMISSIONS LIMITS SHARED WITH UNITS -2 AND -3

### 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 2201] Federally Enforceable Through Title V Permit
2. Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. Authority to Construct (ATC) C-261-4-9 shall be implemented concurrently, or prior to the modification and startup of the equipment authorized by this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Fiberglass production on the C-12 Line shall not exceed 260 metric tons per day and 94,900 metric tons per year. A permanent record of daily production shall be maintained and shall be available for inspection by the District, EPA and CARB. [District Rule 2201; PSD ATC SJ 80-02] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

**YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (559) 230-5950 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT.** This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO

  
DAVID WARNER, Director of Permit Services  
C-261-4-11: Dec 11 2012 3:45PM - FUKUDAD : Joint Inspection NOT Required

5. With approval from EPA, CertainTeed Corporation may choose to conduct performance tests at production and firing rates less than maximum design capacity and may choose to test only the fuel expected to be used in the next 12-month time period, provided that actual plant production does not exceed the tested rate and provided that only the fuel for which tests have been performed is used. The emission rate for NO<sub>x</sub> established by the first test at the specific production rate (less than maximum plant capacity) shall become the applicable emission limit for NO<sub>x</sub> at the production rate tested, as in condition IX.B of PSD permit SJ 80-02. A fuel switch or an increase in production levels beyond the maximum tested rate for any product line requires approval by EPA prior to such production increases or fuel switch and may require additional performance testing. [PSD ATC SJ 80-02] Federally Enforceable Through Title V Permit
6. EPA shall be notified by letter 30 days prior to a production increase in order to make a determination of whether additional performance testing is required. [PSD ATC SJ 80-02] Federally Enforceable Through Title V Permit
7. Only PUC regulated natural gas shall be used. [PSD ATC SJ 80-02; Madera County Rule 404] Federally Enforceable Through Title V Permit
8. A permanent record of daily production shall be maintained and shall be available for inspection by EPA, CARB and the District. [District Rule 2520; PSD ATC SJ 80-02] Federally Enforceable Through Title V Permit
9. Source tests shall be performed at least on an annual basis and at such other times as may be specified by the District or EPA. Tests shall comply with the procedures in 40 CFR (Part 60.8) for PM, NO<sub>x</sub>, SO<sub>x</sub>, and VOC. [District Rules 2201, 4354, and 2520, PSD ATC SJ 80-02] Federally Enforceable Through Title V Permit
10. PM shall be sampled according to the modified version of EPA's Method 5 which includes the impinger catch. [District Rule 2201; PSD ATC SJ 80-02] Federally Enforceable Through Title V Permit
11. The source tests for PM shall be performed at the outlet of the wet ESP and the final stack. The source tests for NO<sub>x</sub>, SO<sub>x</sub>, and VOC shall be performed at the final stack. [District Rule 2201; PSD ATC SJ 80-02] Federally Enforceable Through Title V Permit
12. The District and EPA (Attention: Air-5) shall be notified in writing 30 days in advance of the scheduled tests dates to allow time for the development of an approvable source test plan and to arrange for an observer to be present at the test. [District Rule 1081; PSD ATC SJ 80-02] Federally Enforceable Through Title V Permit
13. The result of each source test shall be submitted to the District and EPA, Region 9 (Attention: Air-5) within 60 days after the test. [District Rule 1081; PSD ATC SJ 80-02] Federally Enforceable Through Title V Permit
14. The outlet of the wet ESP and the final stack shall be so fitted as to permit performance of tests for pollutants (per 40 CFR 60, Appendix A) using portable equipment in a manner as approved by the EPA, CARB and the District. [District Rule 1081; PSD ATC SJ 80-02] Federally Enforceable Through Title V Permit
15. CertainTeed shall continuously operate and maintain the wet cyclonic scrubbers for the pretreatment of the gas stream upstream of the C-12 wet ESP. [District Rule 2201; PSD ATC SJ 80-02] Federally Enforceable Through Title V Permit
16. Both the cyclonic scrubbers and the C-12 wet ESP shall be functioning as air pollution abatement devices whenever there is glass production on the C-12 Line. [District Rule 2201; PSD ATC SJ 80-02] Federally Enforceable Through Title V Permit
17. Baghouse shall be functioning as air pollutant abatement device whenever there is glass production on the C-12 Line. [District Rule 2201; PSD ATC SJ 80-02] Federally Enforceable Through Title V Permit
18. The C-12 wet ESP outlet emissions shall not exceed 4.5 lbs PM/hr nor 108 lb PM/day. [District Rules 2201 and 4202; PSD ATC SJ 80-02] Federally Enforceable Through Title V Permit
19. Natural gas and propane consumption shall not exceed 3.55 million cubic feet per day and 1.295 trillion Btu in any 12 month period. [District Rule 2201; PSD ATC SJ 80-02] Federally Enforceable Through Title V Permit
20. When fired on propane, the total stack emissions, which result from combining the C-11 dry ESP (PTO C-261-2), C-11 wet ESP (PTO C-261-3) and C-12 wet ESP emissions, shall not exceed 547.2 lb PM/day, 547.2 lb PM<sub>10</sub>/day, 432.0 lb HC/day, 432.0 lb VOC/day, 1,074.7 lb NO<sub>x</sub>/day, 322.4 lb SO<sub>x</sub>/day, or 1,072.8 lb CO/day. [District Rule 2201] Federally Enforceable Through Title V Permit

21. The total stack emissions, which result from combining the C-1 dry ESP (PTO C-261-2), C-11 wet ESP (PTO C-261-3) and C-12 wet ESP emissions, shall not exceed 22.8 lb PM/hr or 22.8 lb PM10/hr. [District Rule 2201; PSD ATC SJ 80-02] Federally Enforceable Through Title V Permit
22. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: District Rules 4201 (12/17/92) and 4202 (12/17/92); and Madera County Rule 404. A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
23. Particulate matter emissions shall not exceed 2.6 lb/hour, until EPA approves modification to PSD ATC SJ 80-02 to increase the maximum emission rate. Upon EPA approval, particulate matter emissions shall not exceed 4.5 lb/hour. [PSD ATC 80-02] Federally Enforceable Through Title V Permit
24. The owner or operator must initiate corrective action within 1 hour when the average glass pull rate of any 4-hour block period for glass melting furnaces equipped with continuous glass pull rate monitors, or daily glass pull rate for glass melting furnaces not so equipped, exceeds the average glass pull rate established during the performance test as specified in Section 63.1384, by greater than 20 percent and complete corrective actions in a timely manner according to the procedures in the operations, maintenance, and monitoring plan. [40 CFR 63, Subpart NNN] Federally Enforceable Through Title V Permit
25. The owner or operator must implement a QIP consistent with the compliance assurance monitoring provisions of 40 CFR part 64, subpart D when the glass pull rate exceeds, by more than 20 percent, the average glass pull rate established during the performance test as specified in Section 63.1384 for more than 5 percent of the total operating time in a 6-month block reporting period. [40 CFR 63, Subpart NNN] Federally Enforceable Through Title V Permit
26. The owner or operator must operate each glass-melting furnace such that the glass pull rate does not exceed, by more than 20 percent, the average glass pull rate established during the performance test as specified in Section 63.1384 for more than 10 percent of the total operating time in a 6-month block reporting period. [40 CFR 63, Subpart NNN] Federally Enforceable Through Title V Permit



**San Joaquin Valley**  
AIR POLLUTION CONTROL DISTRICT

Due Date
2/20/2013

Amount Due
\$ 4,654.00

Amount Enclosed

ATCFEE C1120768  
261 C198317 12/11/2012

**RETURN THIS TOP PORTION ONLY, WITH REMITTANCE TO:**

CERTAINT EED CORPORATION  
17775 AVENUE 23 1/2  
CHOWCHILLA, CA 93610

SJVAPCD  
1990 E. Gettysburg Avenue  
Fresno, CA 93726-0244

*Thank You!*



**San Joaquin Valley**  
AIR POLLUTION CONTROL DISTRICT

SJVAPCD Tax ID: 77-0262563

CERTAINT EED CORPORATION  
17775 AVENUE 23 1/2  
CHOWCHILLA, CA 93610

Facility ID	Invoice Date	Invoice Number
C261	12/11/2012	C198317

Invoice Type
Project: C1120768

**PROJECT NUMBER: 1120768**

APPLICATION FILING FEES	\$ 213.00
ENGINEERING TIME FEES	\$ 4,512.00
TOTAL FEES	\$ 4,725.00
LESS PREVIOUSLY PAID PROJECT FEES APPLIED TO THIS INVOICE	(\$ 71.00)
<b>PROJECT FEES DUE (Enclosed is a detailed statement outlining the fees for each item.)</b>	<b>\$ 4,654.00</b>

Late Payment (see Rule 3010, Section 11.0 Late Fees)	
Postmarked	Total Due
After 2/20/2013 through 3/2/2013	\$ 5,119.40
After 3/2/2013	\$ 6,981.00
After 3/22/2013	Permits To Operate MAY BE SUSPENDED

San Joaquin Valley Air Pollution Control District  
1990 E. Gettysburg Avenue, Fresno, CA 93726-0244, (559) 230-6020, Fax (559) 230-6063

**Invoice Detail**

Facility ID: C261

CERTAINTEED CORPORATION  
 17775 AVENUE 23 1/2  
 CHOWCHILLA, CA 93610

Invoice Nbr: C198317  
 Invoice Date: 12/11/2012  
 Page: 1

**Application Filing Fees**

Project Nbr	Permit Number	Description	Application Fee
C1120768	C-261-2-24	MODIFICATION OF 96 MMBTU/HR, 325 METRIC TONS/DAY GLASS MELTING OXY-FUEL FURNACE WITH 12 (8 MMBTU/HR EACH) COMBUSTION TEC. FLAT FLAME BURNERS: REDUCE NOX AND SOX EMISSIONS LIMITS, AND ADD SOX AND PM10 PARAMETRIC MONITORING REQUIREMENTS FOR COMPLIANCE WITH RULE 4354, AND LOWER THE NOX AND SOX DAILY EMISSIONS LIMITS SHARED WITH UNITS -3 AND -4	\$ 71.00
C1120768	C-261-3-13	MODIFICATION OF 51.44 MMBTU/HR C-11 PRODUCTION LINE CONSISTING OF FOREHEARTH #1, GLASS FIBERIZER & MAT FORMING, CURING OVEN, MAT COOLING, SLITTING & TRIMMING, FACING, INFRARED DRYER, AND ROLL UP PACKAGING AND CONTROL DEVICES: LOWER THE NOX AND SOX DAILY EMISSIONS LIMITS SHARED WITH UNITS -2 AND -4	\$ 71.00
C1120768	C-261-4-11	MODIFICATION OF 27.44 MMBTU/HR C-12 LINE INCLUDING FOREHEARTH #2; FIBERIZER CONTROLLED BY 3 FISHER-KLOSTERMANN (F-K) CYCLONIC SCRUBBERS; COLLECTION & SHREDDING CONTROLLED BY 2 CERTAINTEED CYCLONES/F-K SCRUBBERS/C-12 WET EP; BAGGING CONTROLLED BY BAGHOUSE #2: LOWER THE NOX AND SOX DAILY EMISSIONS LIMITS SHARED WITH UNITS -2 AND -3	\$ 71.00
<b>Total Application Filing Fees:</b>			<b>\$ 213.00</b>

**Engineering Time Fees**

Project Nbr	Quantity	Rate	Description	Fee
C1120768	45 hours	\$ 105.00 /h	Standard Engineering Time	\$ 4,725.00
			Less Credit For Application Filing Fees	(\$ 213.00)
			Standard Engineering Time SubTotal	\$ 4,512.00
<b>Total Engineering Time Fees:</b>				<b>\$ 4,512.00</b>