

**AIR QUALITY
MANAGEMENT DISTRICT****DRAFT AUTHORITY TO CONSTRUCT**

A/C NO.: 25399**ISSUED BY:** _____**DATE ISSUED:** TO BE DETERMINED

DAVID R. GROSE

DATE EXPIRES: TO BE DETERMINED**ISSUED TO:** MITSUBISHI CHEMICAL CARBON FIBER AND COMPOSITES, INC.**LOCATION:** 5900 88TH STREET, SACRAMENTO, CA 95828**DESCRIPTION:** BOILER, MAKE: CLEAVER BROOKS, MODEL: CBI 200-150-150, SERIAL NO.: OL103578, 6.124 MMBTU/HR CAPACITY, NATURAL GAS FIRED, SERVING INDUSTRIAL PROCESSES.**AUTHORITY TO CONSTRUCT CONDITIONS****START-UP REQUIREMENTS**

S1. Upon installation of the equipment authorized in this Authority to Construct, the owner/operator may contact the Sacramento Metropolitan Air Quality Management District (SMAQMD) at (916) 874-4800 to arrange for a start-up inspection.

[Basis: SMAQMD Rule 201, Section 405]

S2. The permit holder will indemnify and defend SMAQMD, its officers, agents, and employees if this permit, or the environmental review of the permit under CEQA (including exemption determinations), is challenged through a legal action. This indemnification includes attorney fees awarded against SMAQMD, as well as attorney fees, court costs, legal fees, and other expenses incurred in defending the challenge. The District will provide written notice to the permit holder within 5 days if it receives a petition, complaint or other legal notice by a third party challenging this Authority to Construct or the environmental review of the Authority to Construct under the California Environmental Quality Act (including exemption determinations). The permit holder may, within 10 days of notification, request cancellation of the Authority to Construct. If the permit holder requests cancellation, within 5 days SMAQMD will cancel the permit, notify the plaintiffs of the cancellation, and request dismissal of the litigation.

[Basis: SMAQMD Rule 201, Section 405]

S3. This Authority to Construct may serve as a temporary Permit to Operate provided that:

A. The SMAQMD has been notified to conduct a start-up inspection.

B. The equipment installed matches the equipment authorized in this Authority to Construct.

C. The equipment is operated in compliance with all conditions listed within this Authority to Construct.

[Basis: SMAQMD Rule 201, Section 405]

S4. A permit application for an Administrative Title V permit amendment must be submitted after the issuance of this Authority to Construct.

[Basis: SMAQMD Rule 202, Section 101]

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GENERAL

1. The equipment must be properly maintained and operated in accordance with the manufacturer's recommendations at all times.
[Basis: SMAQMD Rule 201, Section 405 and Rule 202, Section 408.1]
2. The Air Pollution Control Officer and/or authorized representatives, upon the presentation of credentials must be permitted:
 - A. To enter upon the premises where the source is located or in which any records are required to be kept under the terms and conditions of this Authority to Construct, and
 - B. At reasonable times to have access to and copy any records required to be kept under terms and conditions of this Authority to Construct, and
 - C. To inspect any equipment, operation, or method required in this Authority to Construct, and
 - D. To sample emissions from the source or require samples to be taken.**[Basis: SMAQMD Rule 201, Section 405]**
3. This Authority to Construct does not authorize the emission of air contaminants in excess of those allowed by Division 26, Part 4, Chapter 3, of the California Health and Safety Code or the Rules and Regulations of the SMAQMD.
[Basis: SMAQMD Rule 201, Section 405]
4. The equipment may not discharge such quantities of air contaminants or other materials which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.
[Basis: SMAQMD Rule 402, Section 301]
5. A legible copy of this Authority to Construct must be maintained on the premises with the equipment.
[Basis: SMAQMD Rule 201, Section 401]

EMISSION LIMITATIONS

6. The boiler must not discharge into the atmosphere any visible air contaminant other than uncombined water vapor for a period or periods aggregating more than three minutes in any one hour which is as dark or darker than Ringelmann No. 1 or equivalent to or greater than 20% opacity.
[Basis: SMAQMD Rule 401, Section 301]
7. The boiler, when burning natural gas, must meet the following emission standards:
[Basis: SMAQMD Rule 201, Section 405 and Rule 202, Section 408]

Pollutant	Emission Standard
NOx	9 ppmvd corrected to 3% oxygen (A)
CO	100 ppmvd corrected to 3% oxygen (B)

(A) Based on SMAQMD BACT standard for this equipment category.

(B) Applicant proposed emission standard.

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8. Emissions from the boiler must not exceed the following limits:

[Basis: SMAQMD Rule 201, Section 405 and Rule 202, Section 408]

Pollutant	Emission Factors (lb/mmcf) (A)	Emissions Limit (B)		
		(lb/day)	(lb/quarter)	(lb/year)
VOC	5.5	0.8	40	160
NOx	10.9	1.6	79	317
SOx	0.6	0.1	4	9
PM10	7.6	1.1	55	221
PM2.5	7.6	1.1	55	221
CO	74	10.9	538	2,152

(A) Emission factors for VOC, SOx, PM10 and PM2.5 are from AP-42, Table 1.4-2 (07/98). Emission factors for NOx and CO are based on 9 ppmvd at 3% oxygen and 100 ppmvd at 3% oxygen, respectively. Emission factor for PM2.5 is the PM10 factor assuming all PM10 to be PM2.5.

(B) Emissions are based on the boiler operating at maximum capacity at 0.006124 mmcf/hour, 24 hours/day, 7.27 mmcf/quarter, 29.08 mmcf/year and the emission factors in this table.

EQUIPMENT OPERATION

9. The boiler must be fired only on pipeline quality natural gas.

[Basis: SMAQMD Rule 201, Section 405]

10. The boiler must be equipped with a non-resetting totalizing fuel meter to ensure compliance with Condition Nos. 8 and 11. The totalizing function of the meter must have the ability to read up to at least 100 million cubic feet before the indicator rolls over.

[Basis: SMAQMD Rule 201, Section 405]

11. Natural gas fuel usage for the boiler must not exceed the following limit.

[Basis: SMAQMD Rule 201, Section 405]

Fuel Type	Fuel Meter Type	Fuel Usage Limit (A) (cubic feet/quarter)
Natural Gas	Pressure and Temperature Compensated	7,270,000

(A) This limit is based on a pressure and temperature compensated fuel meter. However, if the actual fuel meter is different from that described above, the source must submit to the SMAQMD the natural gas fuel delivery line pressure (in inches H₂O or psig) from PG&E in order to determine the appropriate meter adjustment factor.

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EMISSIONS TESTING

12. Emissions of nitrogen oxides, carbon monoxide, and oxygen must be tested in 2018 and biennially thereafter to verify compliance with Condition No. 7.
- A. Submit a source test plan to the Air Pollution Control Officer for approval at least 30 days before the test is to be performed.
 - B. Notify the Air Pollution Control Officer at least 7 days prior to the source test date of the exact date and time of test if the date has changed from that approved in the source test plan.
 - C. During source testing, the burner must be operated at a firing rate that is as close as physically possible to the rated capacity.
 - D. Submit the source test report to the Air Pollution Control Officer within 60 days from the completion of the test(s.)

[Basis: SMAQMD Rule 201, Section 303.2]

13. Emission testing methods must be the following:
- A. Oxides of Nitrogen – ARB method 100 or EPA Method 7E.
 - B. Carbon Monoxide – ARB method 100 or EPA Method 10.
 - C. Stack Gas Oxygen – ARB method 100 or EPA Method 3A.
 - D. Carbon Dioxide – ARB method 100 or EPA Method 3A.

[Basis: SMAQMD Rule 201, Section 405]

EMISSION OFFSETS

14. Prior to commencing operation, Mitsubishi Chemical Carbon Fiber and Composites, Inc. must provide sufficient emission reduction credits (ERCs) to the Air Pollution Control Officer to fully offset the following amount of emissions:

[Basis: SMAQMD Rule 202, Section 302]

Pollutant	Emissions to be Offset (A) (lb/quarter)			
	Quarter 1	Quarter 2	Quarter 3	Quarter 4
VOC	40	40	40	40
NOx	33	33	33	33
PM10	55	55	55	55
PM2.5	55	55	55	55

(A) Emission offset ratios required by Rule 202, Section 303 have not been applied to the VOC emissions.

15. The following emission reduction credits (ERCs) have been provided by Mitsubishi Chemical Carbon Fiber and Composites, Inc. to **partially** offset the amounts specified in Condition No. 14.

[Basis: SMAQMD Rule 202, Section 408 and Rule 202, Section 409]

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Emission Reduction Credits	Pollutant	Emission Offsets Provided (lb/quarter)			
		1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
ERC Certificate No. 12-01159	VOC	4	7	6	5
ERC Certificate No. 12-01159	NOx	33	33	33	33
ERC Certificate No. 12-01159	PM10	4	9	8	6
ERC Certificate No. 12-01159	PM2.5	4	9	8	6

16. The following additional emission reduction credits (ERCs) must be surrendered by Mitsubishi Chemical Carbon Fiber and Composites, Inc. to offset the amounts specified in Condition No. 14 prior to commencing operation.

[Basis: SMAQMD Rule 202, Sections 408 and 409, and Rule 205, Section 316]

Emission Reduction Credits	Pollutant	Emission Offsets Provided (lb/quarter)			
		1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
FRAQMD ERC Certificate No. 2001-30-S1-S1-S2 (A, B)	VOC	72	66	20	70
ERC Loan from the Community Bank (C)	VOC	0	0	24	0
FRAQMD ERC Certificate No. 2001-30-S1-S1-S2 (B)	PM10	102	92	94	98
FRAQMD ERC Certificate No. 2001-30-S1-S1-S2(B)	PM2.5	102	92	94	98

(A) Emission offset provided at an offset ratio of 2.0 to 1.0.

(B) ERCs on this certificate are used to offset emissions on A/Cs 25397, 25398 and 25399. The facility must split this certificate to reflect the amount in this table.

(C) These credits are returned to the Community Bank if the permit is surrendered, revoked, not renewed or ownership is transferred.

17. The borrowed emission reduction credits from the Community Bank specified in Condition No. 16 are valid only if the facility operates in a manner consistent with the requirements of Rule 205 – COMMUNITY BANK AND PRIORITY RESERVE BANK and the facts, including the information provided in the application, that were presented to the Board of Directors.

[Basis: SMAQMD Rule 205, Section 307.7]

18. In order for ownership of this process to be transferred, the new owner must provide replacement credits for those Community Bank credits that were returned pursuant to Condition No. 16.

[Basis: SAMQD Rule 205, Section 315]

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19. The permit will expire on October 1, 2022, unless replacement credits have been provided. To replace the Community Bank credits specified in Condition No. 16, the facility must submit an application to modify the current permit six months prior to October 1, 2022. Failure to provide replacement credits after October 1, 2022, will require the facility to reapply for a permit and the emission unit will be subject to Rule 202 – NEW SOURCE REVIEW at the time of re-permitting.

[Basis: SMAQMD Rule 205, Section 307 and Section 312]

RECORD KEEPING AND REPORTING

20. The following records must be continuously maintained on-site for the most recent five year period and must be made available to the Air Pollution Control Officer upon request. Records, as specified below, must be made available for inspection within 30 days from the end of the quarter.

Frequency	Information to be Recorded
Quarterly	Total amount of fuel usage for the boiler (cubic feet/quarter)

21. Emission test reports must be maintained on-site and must be made available to the Air Pollution Control Officer upon request.

[Basis: SMAQMD Rule 201, Section 405]

22. The permit holder must, upon determination of applicability and written notification by the District, comply with all applicable requirements of the Air Toxics "Hot Spots" Information and Assessment Act (California Health and Safety Code Section 44300 et seq.)

[Basis: SMAQMD Rule 201, Section 303.1]

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Your application for this Air Quality Authority to Construct was evaluated for compliance with Sacramento Metropolitan Air Quality Management District (AQMD), state and federal air quality rules. The following listed rules are those that are most applicable to the operation of your equipment. Other rules may also be applicable.

<u>AQMD RULE NO.</u>	<u>RULE TITLE</u>
201	GENERAL PERMIT REQUIREMENTS (8-24-06)
202	NEW SOURCE REVIEW (8-23-12)
217	PUBLIC NOTICE REQUIREMENTS FOR PERMITS (8-23-12)
401	RINGELMANN CHART (4-19-83)
402	NUISANCE (8-3-77)
406	SPECIFIC CONTAMINANTS (12-6-78)
411	NO _x FROM BOILERS, PROCESS HEATERS, AND STEAM GENERATORS (8-23-07)
420	SULFUR CONTENT OF FUELS (8-13-81)

In addition, the conditions on this Authority to Construct may reflect some, but not all, requirements of these rules. There may be other conditions that are applicable to the operation of your equipment. Future changes in prohibitory rules may establish more stringent requirements which may supersede the conditions listed here.

For further information please consult your AQMD rulebook or contact the AQMD for assistance.