#### SACRAMENTO METROPOLITAN

## **AIR QUALITY**

**MANAGEMENT DISTRICT** 

## DRAFT AUTHORITY TO CONSTRUCT

A/C NO.:	25397			
		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 88<sup>TH</sup> STREET, SACRAMENTO, CA 95828

DESCRIPTION: OXIDATION OVEN, MAKE: DESPATCH, 2.5 MMBTU/HR CAPACITY, NATURAL GAS

FIRED, SERVING CARBON FIBER MANUFACTURING LINE 31 (P/O 24683), VENTED TO

APC REGENERATIVE THERMAL OXIDIZER (P/O 24204).

### **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 oxidation oven 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 burner of the oxidation oven, 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	30 ppmvd corrected to 3% oxygen (A)
СО	200 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 oxidation oven burner 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)	1st Qtr (lb/qtr)	2nd Qtr (lb/qtr)	3rd Qtr (lb/qtr)	4th Qtr (lb/qtr)	(lb/year)
VOC	5.4	0.3	29	29	30	30	118
NOx	36.4	2.2	197	199	201	201	979
SOx	0.6	0.04	3	3	3	3	13
PM10	7.5	0.5	41	41	41	41	164
PM2.5	7.5	0.5	41	41	41	41	164
CO	147.9	8.9	799	808	816	816	3239

- (A) Emission factors for NOx and CO are based on 30 ppm NOx at 3% oxygen and 200 ppm CO at 3% oxygen respectively. Emission factors for VOC, SOx, and PM10 are from AP-42, Tables 1.4-1 and 1.4-2 (7/98) using an HHV of 1000 btu/scf. Emission factor for PM2.5 is the PM10 factor assuming all PM10 to be PM2.5.
- (B) Emissions are based on 2500 cf/hour; 24 hours/day; 90 days/quarter, 91 days/quarter, 92 days/quarter, and 92 days/quarter for each sequential quarter; and the emission factors in this table.

#### **EQUIPMENT OPERATION**

The oxidation oven must be fired only on pipeline quality natural gas.
 [Basis: SMAQMD Rule 201, Section 405 and Rule 202, Section 408]

10. The process areas of the oxidation oven must be vented to APC afterburner (P/O 24024) at all times that the oxidation oven is in operation.

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

#### **EMISSION OFFSETS**

11. 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 201, Section 303.1]

	Emissions to be Offset (A) (lb/quarter)			
Pollutant	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
VOC	29	29	30	30
NOx	197	199	201	201
PM10	41	41	41	41
PM2.5	41	41	41	41

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

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12. 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. 11.

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

Emission Reduction Credits	Pollutant	Emission Offsets Provided (lb/quarter)			
Emission reduction ordate	1 Gildtant	1st Quarter 2nd Quarter 3rd Qua		3rd Quarter	4th Quarter
ERC Certificate No. 12-01160	NOx	36	36	32	48
ERC Certificate No. 12-01162	NOx	3	3	3	3

13. 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. 11 prior to commencing operation.

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

Emission Reduction Credits	Pollutant	Emission Offsets Provided (lb/quarter)				
Emission Reduction Credits	Foliatant	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	
FRAQMD ERC Certificate No. 2001-30-S1-S1-S2 (A, B)	VOC	58	58	0	60	
ERC Loan from the Community Bank (C)	VOC	0	0	30	0	
FRAQMD ERC Certificate No. 2001-30-S1-S1-S2 (A, B)	NOx	316	320	69	176	
ERC Loan from the Community Bank (C, D)	NOx	0	0	157.8	74.4	
FRAQMD ERC Certificate No. 2001-30-S1-S1-S2 (A, B)	PM10	82	82	82	82	
FRAQMD ERC Certificate No. 2001-30-S1-S1-S2 (A, B)	PM2.5	82	82	82	82	

<sup>(</sup>A) Emission offset provided at an offset ratio of 2.0 to 1.0.

(D) NOx emission offset was provided at an offset ratio of 1.2 to 1.0.

<sup>(</sup>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.

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

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14. The borrowed emission reduction credits from the Community Bank specified in Condition No. 13 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]

15. 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. 13.

[Basis: SAMQD Rule 205, Section 315]

16. The permit will expire on October 1, 2022, unless replacement credits have been provided. To replace the Community Bank credits specified in Condition No. 13, 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**

17. 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]

18. 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]

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.

AQMD RULE NO.	RULE TITLE
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)
420	SULFUR CONTENT OF FUELS (8-13-81)

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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.