

SMAQMD BACT CLEARINGHOUSE

ACTIVE

CATEGORY Type: **MANUFACTURING PROCESS**

BACT Category: LAE / PSD BACT

BACT Determination Number:	392	BACT Determination Date:	10/13/2025
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Equipment Information

Permit Number: N/A - Generic BACT Determination
Equipment Description: CARBON FIBER MANUFACTURING LINE
Unit Size/Rating/Capacity: ALL
Equipment Location: N/A - Generic BACT Determination

BACT Determination Information

District Contact: JEFF WEISS **Phone No.:** (916) 704-9995 **Email:** JWEISS@AIRQUALITY.ORG

ROCs	Standard:	
	Technology Description:	
	Basis:	
NOx	Standard:	No Standard
	Technology Description:	
	Basis:	
SOx	Standard:	
	Technology Description:	
	Basis:	
PM10	Standard:	
	Technology Description:	
	Basis:	
PM2.5	Standard:	
	Technology Description:	
	Basis:	
CO	Standard:	
	Technology	

	Description:	
	Basis:	
LEAD	Standard:	
	Technology Description:	
	Basis:	
Comments:	This is a generic BACT determination based on BACT determinations made, and published, by other air agencies in California and/or other States.	

Printed:

10/14/2025



BEST AVAILABLE CONTROL TECHNOLOGY DETERMINATION

DETERMINATION NOS.: 392
DATE: June 12, 2025
ENGINEER: Jeff Weiss

Category/General Equip Description: Carbon Fiber Manufacturing Process (MCCFC)
Equipment Specific Description: Carbon Fiber Manufacturing Line
Equipment Size/Rating: Major Source BACT
Previous BACT Det. No.: Not Applicable

The previous BACT determination for this equipment category was performed in May, 2015 for A/C 24518 for the new carbon fiber manufacturing line that was being built at Mitsubishi Chemical Carbon Fiber and Composites. The carbon fiber manufacturing process involves slowly passing very long strands of a precursor material through a series of ovens and furnaces. The high temperatures of the ovens and furnaces changes the material's molecular structure as it removes non-carbon atoms. Large amounts of VOC, NO_x, PM (silica), and HCN (hydrogen cyanide) emissions are treated in several thermal oxidizers and a baghouse before release to the atmosphere. Each batch involves a continuous process over the course of a week.

A/C 24518 triggered BACT for VOC, NO_x, SO_x, PM₁₀, and PM_{2.5}. This new BACT determination is being performed because the District has received an application for carbon fiber manufacturing that only triggers BACT for NO_x. Since it is expected that the next BACT determination will be required long after this BACT determination expires, this analysis will only pertain to BACT for NO_x.

BACT/T-BACT ANALYSIS

A. ACHIEVED IN PRACTICE (Rule 202, §205.1a):

The following control technologies are currently employed as BACT/T-BACT for carbon fiber manufacturing by the following air pollution control authorities:

US EPA

BACT

Source: [EPA RACT/BACT/LAER Clearinghouse](#)

There are no BACT standards published in the clearinghouse for this equipment category.

RULE REQUIREMENTS:

None.

California Air Resource Board (CARB)

BACT

Source: [CARB BACT Clearinghouse](#)
[CARB BACT Guidelines Search](#)

There are no BACT standards published in the clearinghouse for this equipment category.

RULE REQUIREMENTS:

None.

Sacramento Metropolitan AQMD

BACT

Source: [SMAQMD BACT Clearinghouse](#)
[SMAQMD P/O 24518](#)

There are no BACT strategies for NOx. No technologies at the time were found to be achieved in practice and no technologies were deemed technologically feasible.

RULE REQUIREMENTS:

None

South Coast AQMD

BACT

Source: [SCAQMD BACT Guidelines for Non-Major Polluting Facilities \(2/2/2024\)](#)
[SCAQMD BACT Guidelines for Major Polluting Facilities](#)

There is a minor source BACT standard for VOC for “Electric Furnace -- Pyrolyzing, Carbonizing, and Graphitizing” (Page 44). This determination has no standard for NOx.

RULE REQUIREMENTS:

Source: [Regulation IV - Prohibitions](#)
[Regulation XI - Source Specific Standards](#)

There are no rules for this source category

San Joaquin Valley APCD

BACT

Source: [SJVAPCD BACT Clearinghouse](#)

There are no BACT standards published in the clearinghouse for this equipment category

RULE REQUIREMENTS:

Source: [Current District Rules and Regulations | Valley Air District](#)

There are no rules for this source category.

San Diego County APCD

BACT

Source: [NSR Requirements for BACT \(11/2023\)](#)

There are no BACT standards published in the clearinghouse for this equipment category.

RULE REQUIREMENTS:

Source: [San Diego Rules and Regulations](#)

There are no rules for this source category.

Bay Area AQMD

BACT

Source: [BAAQMD BACT Workbook](#)

There are no BACT standards published in the clearinghouse for this equipment category.

RULE REQUIREMENTS:

Source: [BAAQMD Current Rules](#)

There are no rules for this source category.

Summary of Achieved in Practice Control Technologies

No achieved in practice control technology was identified for NOx.

