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## FACILITY PERMIT TO OPERATE

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**HITCO CARBON COMPOSITES INC  
1600 W 135TH ST  
GARDENA, CA 90249**

### NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR A COPY THEREOF MUST BE KEPT AT THE LOCATION FOR WHICH IT IS ISSUED.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT SHALL NOT BE CONSTRUED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF ANY OTHER FEDERAL, STATE OR LOCAL GOVERNMENTAL AGENCIES.

Barry R. Wallerstein, D. Env.  
EXECUTIVE OFFICER

By *Ed Muehlbacher for*  
Mohsen Nazemi, P.E.  
Deputy Executive Officer  
Engineering & Compliance

## FACILITY PERMIT TO OPERATE HITCO CARBON COMPOSITES INC

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## FACILITY PERMIT TO OPERATE HITCO CARBON COMPOSITES INC

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 6 : FURNACES</b>					
AFTERBURNER, HOT ROCK, TELLKAMP, MODEL NO. ROXIDIZER 25, 12 FT 6 IN W. X 26 FT L. X 11 FT 8 IN H., NATURAL GAS, 25,000 CFM, WITH 5 MM BTU/HR GAS INJECTION SYSTEM, 2.4 MMBTU/HR A/N: 492308 Permit to Construct Issued: 02/20/09	C211	D42 D43 D44 D45 D46 D47 D48 D49 D50 D51 D52 D80 D130 D142 D143	NOX: PROCESS UNIT**	CO: 2000 PPMV (5) [RULE 407,4-2-1982] ; NOX: 130 LBS/MMSCF NATURAL GAS (1) [RULE 2012,5-6-2005] ; PM: (9) [RULE 404,2-7-1986]  PM: 0.1 GRAINS/SCF (5) [RULE 409,8-7-1981]	A72.1, C409.1, D28.3, D182.4, D328.2
<b>Process 9 : AUTOCLAVES/HYDROCLAVES</b>					
AUTOCLAVE, CUSTOM MADE, THERMAL EQUIP. CORP., 24 FT DIA. X 75 FT., NATURAL GAS, 100 H.P. COMBUSTION BLOWER, 1000 H.P. AUTOCLAVE FAN, WITH LOW NOX BURNER, FLUE GAS RECIRCULATION, 24 MMBTU/HR WITH A/N: 475589 Permit to Construct Issued: 05/09/08	D203		NOX: LARGE SOURCE**	CO: 2000 PPMV NATURAL GAS (5) [RULE 409,8-7-1981] ; CO: 50 PPMV NATURAL GAS (4) [RULE 1303(a)(1)-BACT,5-10-1996;RULE 1303(a)(1)-BACT,12-6-2002]  NOX: 30 PPMV NATURAL GAS (4) [RULE 2005,5-6-2005] ; NOX: 30 PPMV NATURAL GAS (3) [RULE 2012,5-6-2005] ; PM: 0.1 GRAINS/SCF NATURAL GAS (5) [RULE 407,4-2-1982]  PM: (9) [RULE 404,2-7-1986]	A63.3, B59.9, D28.2, D328.2, E133.1, E440.1, K40.1, K67.9

\* (1)(1A)(1B) Denotes RECLAIM emission factor (2)(2A)(2B) Denotes RECLAIM emission rate  
 (3) Denotes RECLAIM concentration limit (4) Denotes BACT emission limit  
 (5)(5A)(5B) Denotes command and control emission limit (6) Denotes air toxic control rule limit  
 (7) Denotes NSR applicability limit (8)(8A)(8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)  
 (9) See App B for Emission Limits (10) See Section J for NESHAP/MACT requirements

\*\* Refer to Section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

## FACILITY PERMIT TO OPERATE HITCO CARBON COMPOSITES INC

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 9 : AUTOCLAVES/HYDROCLAVES</b>					
BURNER, NATURAL GAS, NORTH AMERICAN MFG., MODEL 4796-18, MAGNA-FLAME, WITH LOW NOX BURNER, 24 MMBTU/HR					

\* (1)(1A)(1B) Denotes RECLAIM emission factor  
 (3) Denotes RECLAIM concentration limit  
 (5)(5A)(5B) Denotes command and control emission limit  
 (7) Denotes NSR applicability limit  
 (9) See App B for Emission Limits

(2)(2A)(2B) Denotes RECLAIM emission rate  
 (4) Denotes BACT emission limit  
 (6) Denotes air toxic control rule limit  
 (8)(8A)(8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)  
 (10) See Section J for NESHAP/MACT requirements

\*\* Refer to Section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

**FACILITY PERMIT TO OPERATE  
HITCO CARBON COMPOSITES INC**

**SECTION H: DEVICE ID INDEX**

**The following sub-section provides an index  
to the devices that make up the facility  
description sorted by device ID.**

# FACILITY PERMIT TO OPERATE HITCO CARBON COMPOSITES INC

## SECTION H: DEVICE ID INDEX

Device Index For Section H			
Device ID	Section H Page No.	Process	System
D203	1	9	0
C211	1	6	0

## FACILITY PERMIT TO OPERATE HITCO CARBON COMPOSITES INC

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

#### FACILITY CONDITIONS

F2.1 The operator shall limit emissions from this facility as follows:

CONTAMINANT	EMISSIONS LIMIT
Single Volatile Hazardous Air Pollutant (VHAP)	Less than 10 TONS IN ANY 12-MONTH PERIOD
Combination of Volatile Hazardous Air Pollutants (VHAPs)	Less than 25 TONS IN ANY 12-MONTH PERIOD

The operator shall maintain records in a manner approved by the District, to demonstrate compliance with this condition.

**[40CFR 63 Subpart GG, 4-20-2006]**

F9.1 Except for open abrasive blasting operations, the operator shall not discharge into the atmosphere from any single source of emissions whatsoever any air contaminant for a period or periods aggregating more than three minutes in any one hour which is:

- (a) As dark or darker in shade as that designated No.1 on the Ringelmann Chart, as published by the United States Bureau of Mines; or
- (b) Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in subparagraph (a) of this condition.

**[RULE 401, 3-2-1984; RULE 401, 11-9-2001]**

F14.1 The operator shall not use fuel oil containing sulfur compounds in excess of 0.05 percent by weight.

**[RULE 431.2, 5-4-1990; RULE 431.2, 9-15-2000]**

## FACILITY PERMIT TO OPERATE HITCO CARBON COMPOSITES INC

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

- F14.2 The operator shall not purchase diesel fuel containing sulfur compounds in excess of 15 ppm by weight as supplied by the supplier.

This condition shall become effective on or after June 1, 2004.

[RULE 431.2, 9-15-2000]

### DEVICE CONDITIONS

#### A. Emission Limits

- A63.3 The operator shall limit emissions from this equipment as follows:

CONTAMINANT	EMISSIONS LIMIT
VOC	Less than 81 LBS IN ANY ONE DAY

For the purposes of this condition, the limit(s) shall be based on the total combined emissions from equipment subject to this condition.

[RULE 1303(b)(2)-Offset, 5-10-1996]

[Devices subject to this condition : D203]

- A72.1 The operator shall maintain this equipment to achieve a minimum overall control efficiency of 95 percent for ROG during the normal operation of the equipment it vents.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition : C211]

#### B. Material/Fuel Type Limits

## **FACILITY PERMIT TO OPERATE HITCO CARBON COMPOSITES INC**

### **SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE**

The operator shall comply with the terms and conditions set forth below:

B59.9 The operator shall not use the following material(s) in this device :

Materials containing any toxic air contaminants identified in Rule 1401, Table 1 with an effective date of March 4, 2005 or earlier.

[RULE 1401, 3-4-2005]

[Devices subject to this condition : D203]

### **C. Throughput or Operating Parameter Limits**

C409.1 The operator shall ensure that burner used in this equipment shall meet the following specified requirements:

The burner shall only be used for the start-up of the equipment before the process air stream from the manufacturing operations is introduced into the oxidizer and shall be used for less than 504 minutes in any one day..

A oxidizer burner operating monitor shall be installed and maintained to continuously measure and record the time the start-up burner is in operation in minutes per day. The burner operation monitoring and recording system shall be in operation whenever the equipment it serves is in operation.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition : C211]

### **D. Monitoring/Testing Requirements**

## FACILITY PERMIT TO OPERATE HITCO CARBON COMPOSITES INC

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

D28.2 The operator shall conduct source test(s) in accordance with the following specifications:

The test shall be conducted within 90 days of the approval of the test protocol by the District, but no later than 180 days after initial start-up.

The test shall be conducted pursuant to a source test protocol that shall be submitted to the District no later than 60 days after the initial start-up of this equipment unless otherwise approved by the District. The test protocol shall be approved in writing by the District before the test commences. The test protocol shall include the completed District Forms ST-1 and ST-2, identity of the testing laboratory, a statement from the lab certifying it meets District Rule 304(k) and include details of sampling and analytical procedures.

The test shall be conducted to determine the oxides of nitrogen, carbon monoxide, volatile organic compounds, oxygen content, flow rate, and temperature at the exhaust of the autoclave.

The test shall be conducted after a written notice of the source tests shall be submitted to the District Engineer Shailesh Patel at least 14 days prior to source testing date so that an observer from the District may be present.

The test shall be conducted by a testing laboratory certified by the California Air Resources Board in the required test methods for criteria pollutants to be measured, and in compliance with District Rule 304 (no conflict of interest).

The test shall be conducted using sampling facilities that comply with the District guidelines for construction of sampling and testing facilities, pursuant to Rule 217.

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 2005, 5-6-2005]**

[Devices subject to this condition : D203]

## FACILITY PERMIT TO OPERATE HITCO CARBON COMPOSITES INC

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

D28.3 The operator shall conduct source test(s) in accordance with the following specifications:

The test shall be conducted no later than 180 days after the initial start-up of this equipment unless otherwise approved in writing by the District.

The test shall be conducted after source test protocol approval in writing by the District. A source test protocol shall be submitted to the District no later than 60 days after the initial start-up of this equipment unless otherwise approved in writing by the District. The test protocol shall include the completed District forms ST-1 and ST-2 specifying the proposed operating conditions of the equipment during the test, the identity of the testing laboratory, a statement from the testing laboratory certify.

The test shall be conducted but may not be limited to, testing of the oxidizer for Volatile Organic Compound (VOC) in ppmv and lbs/hr, VOC destruction efficiency, VOC collection efficiency, usage of all VOC-containing materials during the test, oxygen content, NOx in ppmv and lbs/hr, CO in ppmv and lbs/hr, moisture content, flow rate, temperature.

The test shall be conducted while the oxidizer is operating at a temperature of not less than the minimum operating temperature specified in this permit. If the operating temperature during the source test is greater than the minimum operating temperature specified in this permit, the minimum operating temperature may be increased at the time a permit to operate is issued to reflect the operating temperature during the source test.

The test shall be conducted after notifying the District the source testing date at least 14 days prior to the testing date so that an observer from the district may be present. Two complete copies of the source test reports shall be submitted to the District within 45 days after the source testing date unless otherwise approved in writing by the District. The source test report shall include, but may not be limited to, all testing data required by this condition.

The test shall be conducted by a testing laboratory certified by the California Air Resources Board in the required test methods for criteria pollutants to be measured, and in compliance with District Rule 304 (no conflict of interest) shall conduct the test. The operator shall submit results of all preliminary tests that are conducted on this equipment within 45 days after testing date unless otherwise approved in writing by the District.

The test shall be conducted once sampling facilities comply with the District guidelines for construction of sampling and testing facilities, pursuant to Rule 217.

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]**

[Devices subject to this condition : C211]

## FACILITY PERMIT TO OPERATE HITCO CARBON COMPOSITES INC

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

D182.4 The operator shall test this equipment in accordance with the following specifications:

The combustion chamber temperature shall be maintained at a minimum of 1,400 degrees Fahrenheit whenever the equipment it serves is in operation.

The operator shall operate and maintain a temperature measuring and recording system to continuously measure and record the combustion chamber temperature pursuant to the operation and maintenance requirements specified in 40 CFR Part 64.7. Such a system shall have an accuracy of within 1% of the temperature being monitored and shall be inspected, maintained, and calibrated on an annual basis in accordance with the manufacturer's specifications using an applicable AQMD or EPA approved method.

For the purpose of this condition, a deviation shall be defined as when a combustion chamber temperature of less than 1,400 degrees Fahrenheit occurs during normal operation of the equipment it serves. The operator shall review the records of the combustion chamber temperature on a daily basis to determine if a deviation occurs or shall install an alarm system to alert the operator when a deviation occurs.

Whenever a deviation occurs, the operator shall inspect this equipment to identify the cause of such a deviation, take immediate corrective action to maintain the combustion chamber temperature at or above 1,400 degrees Fahrenheit, and keep records of the duration and cause (including unknown cause, if applicable) of the deviation and the corrective action taken.

All deviations shall be reported to the AQMD on a semi-annual basis pursuant to the requirements specified in 40 CFR Part 64.9 and Condition Nos. 22 and 23 in Section K of this permit. The semi-annual monitoring report shall include the total operating time of this equipment and the total accumulated duration of all deviations for each semi-annual reporting period specified in Condition No. 23 in Section K of this permit.

The operator shall submit an application with a Quality Improvement Plan (QIP) in accordance with 40 CFR Part 64.8 to the AQMD if an accumulation of deviations exceeds 5 percent duration of this equipment's total operating time for any semi-annual reporting period specified in Condition No. 23 in Section K of this permit. The required QIP shall be submitted to the AQMD within 90 calendar days after the due date for the semi-annual monitoring report.

The operator shall inspect and maintain all components of this equipment on an annual basis in accordance with the manufacturer's specifications.

The operator shall keep adequate records in a format that is acceptable to the AQMD to demonstrate compliance with all applicable requirements specified in this condition and 40 CFR Part 64.9 for a minimum of five years.

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]**

[Devices subject to this condition : C211]

## **FACILITY PERMIT TO OPERATE HITCO CARBON COMPOSITES INC**

### **SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE**

The operator shall comply with the terms and conditions set forth below:

D328.2 The operator shall determine compliance with the CO emission limit(s) either: (a) conducting a source test at least once every five years using AQMD Method 100.1 or 10.1; or (b) conducting a test at least annually using a portable analyzer and AQMD-approved test method. The test shall be conducted when the equipment is operating under normal conditions to demonstrate compliance with CO limit(s). The operator shall comply with all general testing, reporting, and recordkeeping requirements in Sections E and K of this permit.

**[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]**

[Devices subject to this condition : D203, C211]

#### **E. Equipment Operation/Construction Requirements**

E133.1 The operator shall maintain an interlock so that the burner can only be operated between 6.0 MM BTU/HR AND 24 MM BTU/HR firing rates, except during the start-up and shut-down periods.

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]**

[Devices subject to this condition : D203]

E440.1 The operator shall operate and maintain this equipment according to the following specifications:

The operator shall have the burner equipped with a control system to automatically regulate the combustion air, fuel, and, if applicable, recirculated flue gas as the load varies. The control system shall be adjusted and tuned at least once a year according to the manufacturers specifications to maintain its ability to repeat the same performance at the same firing rate

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]**

[Devices subject to this condition : D203]

#### **K. Record Keeping/Reporting**

## **FACILITY PERMIT TO OPERATE HITCO CARBON COMPOSITES INC**

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

K40.1 The operator shall provide to the District a source test report in accordance with the following specifications:

Two completed copies of the source test reports shall be submitted to the District within 60 days after the source testing date. The test report shall include, but not limited to, all testing data required by this condition.

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]**

[Devices subject to this condition : D203]

K67.9 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

In addition to the recordkeeping requirements in Rule 109, the operator shall keep adequate records of the materials processed in this equipment and the resultant VOC emissions on a daily basis to verify compliance with all permit conditions

The operator shall maintain adequate records for a period of five years to verify compliance with all the permit conditions

**[RULE 109, 5-2-2003; RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]**

[Devices subject to this condition : D203]