

FACILITY PERMIT TO OPERATE NASA JET PROPULSION LAB

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
Process 1: INTERNAL COMBUSTION EQUIPMENT					
System 10: BUILDING 302					
INTERNAL COMBUSTION ENGINE, EMERGENCY POWER, DIESEL FUEL, CUMMINS, MODEL NO. QSX15-G9, DIESEL PARTICULATE FILTER AND, DIAGNOSTIC BACK PRESSURE MONITOR, JOHNSON MATTHEY, MODEL NO. CRT, WITH AFTERCOOLER, TURBOCHARGER, 755 BHP A/N:	D168			CO: 2.6 GRAM/BHP-HR DIESEL (4) [RULE 1303(a)(1) -BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; 40CFR 60 Subpart III, 6-28-2011]; NOX: 469 LBS/1000 GAL DIESEL (1) [RULE 2012, 5-6-2005]; NOX + ROG: 4.8 GRAM/BHP-HR DIESEL (4) [RULE 1303(a)(1) -BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; 40CFR 60 Subpart III, 6-28-2011]; PM: (9) [RULE 404, 2-7-1986]; PM: 0.15 GRAM/BHP-HR DIESEL (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1) -BACT, 12-6-2002; 40CFR 60 Subpart III, 6-28-2011]	B61.1, B61.3, D12.2, E193.1, E448.2, H23.9, I297.1, K67.10
Process 3: SURFACE COATING EQUIPMENT					
System 4: COATING OPERATION, BLDG. 18					
SPRAY COATING OPERATION, 6 FT. -9 IN. W. X 8 FT. - 0 IN. L. X 8 FT.- 0 IN. H. WITH 3-STAGE FILTER SYSTEM,, INCL. NINE HEPA FILTERS, 24" X 24" X 11.5", AND 5-HP EXHAUST FAN, WITH SPRAY BOOTH A/N: 526767 Permit to Construct Issued: 03/01/12	D38			PM: (9) [RULE 404, 2-7-1986]; VOC: (9) [RULE 1107, 11-9-2001; RULE 1107, 1-6-2006; RULE 1124, 9-21-2001; RULE 1145, 2-14-1997; RULE 1145, 12-4-2009; RULE 1171, 11-7-2003; RULE 1171, 5-1-2009]	A63.1, C6.3, D322.1, E71.6, E175.1, H23.13, K67.3, K67.7

- * (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.

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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.**

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SECTION H: DEVICE ID INDEX

Device Index For Section H			
Device ID	Section H Page No.	Process	System
D38	1	3	4
D168	1	1	10

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SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

FACILITY CONDITIONS

F1.1 The operator shall limit the material processed to no more than 1 ton(s) in any one year.

For the purpose of this condition, material processed shall be defined as the total of all non-ferrous metals melted at this facility.

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

[RULE 1407, 7-8-1994]

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]

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]

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

PROCESS CONDITIONS

P13.1 All devices under this process are subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	District Rule	109
VOC	District Rule	1164

[RULE 109, 5-2-2003; RULE 1164, 1-13-1995]

[Processes subject to this condition : 7]

SYSTEM CONDITIONS

S1.1 The operator shall limit the material processed to no more than 800 cubic feet per year.

For the purpose of this condition, material processed shall be defined as the total quantity of 100 percent Arsine used.

[RULE 1303(a)(1)-BACT, 5-10-1996]

[Systems subject to this condition : Process 7, System 1]

S1.2 The operator shall limit the material processed to no more than 400 cubic feet per year.

For the purpose of this condition, material processed shall be defined as the total quantity of 50 percent Arsine used.

[RULE 1303(a)(1)-BACT, 5-10-1996]

[Systems subject to this condition : Process 7, System 3]

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

DEVICE CONDITIONS

A. Emission Limits

A63.1 The operator shall limit emissions from this equipment as follows:

CONTAMINANT	EMISSIONS LIMIT
VOC	Less than or equal to 2.25 LBS IN ANY ONE DAY

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

[Devices subject to this condition : D38]

B. Material/Fuel Type Limits

B61.1 The operator shall only use fuel oil containing the following specified compounds:

Compound	weight percent
Sulfur less than or equal to	0.05

[RULE 1303(a)(1)-BACT, 5-10-1996]

[Devices subject to this condition : D168]

B61.3 The operator shall only use fuel oil containing the following specified compounds:

Compound	ppm by weight
Sulfur less than or equal to	15

[RULE 1470, 6-1-2007; RULE 431.2, 5-4-1990; RULE 431.2, 9-15-2000; 40CFR 60
 Subpart III, 6-28-2011]

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

[Devices subject to this condition : D168]

C. Throughput or Operating Parameter Limits

- C6.3 The operator shall use this equipment in such a manner that the differential pressure being monitored, as indicated below, does not exceed 0.7 inches water column.

To comply with this condition, the operator shall install and maintain a(n) differential pressure gauge to accurately indicate the differential pressure across the 3-stage filter media.

[RULE 1303(a)(1)-BACT, 5-10-1996]

[Devices subject to this condition : D38]

D. Monitoring/Testing Requirements

- D12.2 The operator shall install and maintain a(n) non-resettable elapsed time meter to accurately indicate the elapsed operating time of the engine.

**[RULE 1110.2, 7-9-2010; RULE 1304(a)-Modeling and Offset Exemption, 6-14-1996;
RULE 1470, 6-1-2007; RULE 2012, 5-6-2005; 40CFR 60 Subpart III, 6-28-2011]**

[Devices subject to this condition : D168]

- D322.1 The operator shall perform a weekly inspection of the equipment and filter media for leaks, broken or torn filter media, and improperly installed filter media.

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

[Devices subject to this condition : D38]

E. Equipment Operation/Construction Requirements

- E71.6 The operator shall not turn off the exhaust fan this equipment until 30 seconds after spraying operations have ceased when coatings containing Hexavalent chrome have been sprayed..

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

[RULE 1469.1, 3-4-2005]

[Devices subject to this condition : D38]

E175.1 The operator shall not use this equipment unless all exhaust air passes through the following:

3-stage dry particulate filters that has a single stage of HEPA filters individually DOP tested (or equivalent) with 0.3 micron particulates and certified to have a control efficiency of not less than 99.97%, as required by AQMD Rule 1469.1

[RULE 1303(a)(1)-BACT, 5-10-1996]

[Devices subject to this condition : D38]

E193.1 The operator shall operate and maintain this equipment according to the following requirements:

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

The diagnostic back pressure monitor shall be programmed to send an audible or remote alarm to the operator whenever the back pressure of the diesel particulate filter exceeds the maximum back pressure settings specified by the manufacturer.

The exhaust temperature of the engine shall be at least 465 degrees Fahrenheit, except during cold engine start-up which shall not exceed 30 minutes.

The diesel particulate filter shall be regenerated after every 24 consecutive cold starts and 30-minute idle sessions, or, whenever a warning signal is received from the back pressure monitor, whichever occurs first. The exhaust temperature of the engine shall be at least 465 degrees Fahrenheit during regeneration of the diesel particulate filter.

The engine shall not be operated for more than 720 minutes when it is operating below the regeneration temperature of 465 degrees Fahrenheit.

The operator shall keep adequate records of inspections, replacements and manual regenerations of the diesel particulate filter. All records shall be prepared in a format which is acceptable to the District, retained on the premises for at least five years and made available to District personnel upon request.

[RULE 1470, 5-4-2012]

[Devices subject to this condition : D168]

E448.2 The operator shall comply with the following requirements:

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

The engine shall not be operated more than 200 hours in any one year, which includes 50 hours in any one year for maintenance and testing.

Operation beyond the allotted time for engine maintenance and testing shall be allowed only in the event of a loss of grid power or up to 30 minutes prior to a rotating outage, provided that the utility distribution company has ordered rotating outages in the control area where the engine is located or has indicated that it expects to issue such an order at a certain time, and the engine is located in a utility service block that is subject to the rotating outage.

In the event as described in the paragraph above, the engine shall be terminated immediately after the utility distribution company advises that a rotating outage is no longer imminent or in effect.

This engine shall not be used as part of an interruptible service contract in which a facility receives a payment or reduced rates in return for reducing electric load on the grid when requested by the utility or the grid operator.

[RULE 1110.2, 7-9-2010; **RULE 1304(a)-Modeling and Offset Exemption, 6-14-1996;**
 RULE 1470, 6-1-2007; **RULE 2012, 5-6-2005]**

[Devices subject to this condition : D168]

H. Applicable Rules

H23.9 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
Sulfur compounds	District Rule	431.2
PM	District Rule	1470

[RULE 1470, 6-1-2007; **RULE 431.2, 5-4-1990;** RULE 431.2, 9-15-2000]

[Devices subject to this condition : D168]

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

H23.13 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	District Rule	109
PM	District Rule	481
Chromium, Hexavalent	District Rule	1469.1

[RULE 1469.1, 3-4-2005; **RULE 469, 5-7-1976; RULE 481, 1-11-2002**]

[Devices subject to this condition : D38]

I. Administrative

I297.1 This equipment shall not be operated unless the facility holds 382 pounds of NOx RTCs in its allocation account to offset the annual emissions increase for the first year of operation. RTCs held to satisfy this condition may be transferred only after one year from the initial start of operation. If the hold amount is partially satisfied by holding RTCs that expire midway through the hold period, those RTCs may be transferred upon their respective expiration dates. This hold amount is in addition to any other amount of RTCs required to be held under other condition(s) stated in this permit.

[**RULE 2005, 6-3-2011**]

[Devices subject to this condition : D168]

K. Record Keeping/Reporting

K67.3 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

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

Name of person conducting inspection and maintenance of the filter media.

Date, time and results of the inspection.

Date, time and description of repairs made.

Weekly record of pressure drop across the filter media.

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

[Devices subject to this condition : D38]

K67.7 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

Quantity of coatings used

Daily and calendar monthly VOC emissions in pounds

VOC content as applied (including water and exempt compounds)

[RULE 109, 5-2-2003; RULE 1124, 9-21-2001; RULE 1303(b)(2)-Offset, 5-10-1996]

[Devices subject to this condition : D38]

K67.10 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

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

An engine operating log shall be kept and maintained on file to record when this engine is started manually. The log shall list the date of operation, the timer reading in hours at the beginning and end of operation and the reason for operation.

By January 15th of each year, the operator shall total and record the total hours of operation (including hours for both manual operation and automatic operation) for the previous calendar year.

All records required by this permit shall be kept in a format that is acceptable to the District, shall be retained on the premises for at least five years and shall be made available to any District representative upon request.

[RULE 1110.2, 7-9-2010; **RULE 1304(a)-Modeling and Offset Exemption, 6-14-1996;**
RULE 1470, 6-1-2007; **RULE 2012, 5-6-2005; 40CFR 60 Subpart III, 6-28-2011]**

[Devices subject to this condition : D168]