



## FACILITY PERMIT TO OPERATE

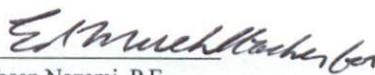
**NASA JET PROPULSION LAB  
4800 OAK GROVE DR  
PASADENA, CA 91109**

### 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   
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Deputy Executive Officer  
Engineering & Compliance

## FACILITY PERMIT TO OPERATE NASA JET PROPULSION LAB

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### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

| Equipment   | ID No. | Connected To | RECLAIM Source Type/<br>Monitoring Unit | Emissions *<br>And Requirements  | Conditions                                 |
|---|--------|--------------|---|--|--|
| <b>Process 1: INTERNAL COMBUSTION EQUIPMENT</b>   |        |              |   |  |  |
| <b>System 1: BUILDING 150</b>   |        |              |   |  |  |
| INTERNAL COMBUSTION ENGINE, EMERGENCY POWER, SERIAL NO. 9NR00534, 6 CYLINDERS, DIESEL FUEL, CATERPILLAR, MODEL 3306 ATTAC, WITH AFTERCOOLER, TURBOCHARGER, 377 BHP<br>A/N: 458450 | D3     |              | NOX: PROCESS UNIT**                     | NOX: 469 LBS/1000 GAL DIESEL (1) [RULE 2012, 5-6-2005]; PM: (9) [RULE 404, 2-7-1986]   | B61.1, B61.3, D12.2, E448.2, H23.9, K67.10 |
| INTERNAL COMBUSTION ENGINE, EMERGENCY POWER, DETROIT DIESEL, MODEL NO. 6063-TK35, DIESEL FUEL, WITH AFTERCOOLER, TURBOCHARGER, 550 BHP<br>A/N: 458447                             | D154   |              | NOX: PROCESS UNIT**                     | CO: 8.5 GRAM/BHP-HR DIESEL (4) [RULE 1303(a)(1)-BACT, 5-10-1996]; NOX: 6.9 GRAM/BHP-HR DIESEL (4) [RULE 1303(a)(1)-BACT, 5-10-1996]; NOX: 469 LBS/1000 GAL DIESEL (1) [RULE 2012, 5-6-2005]; PM: (9) [RULE 404, 2-7-1986]; PM: 0.4 GRAM/BHP-HR DIESEL (4) [RULE 1303(a)(1)-BACT, 5-10-1996]; ROG: 1 GRAM/BHP-HR DIESEL (4) [RULE 1303(a)(1)-BACT, 5-10-1996] | B59.1, B61.3, D12.2, E448.2, H23.9, K67.10 |

\* (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

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|---|--------|--------------|---|---|--|
| <b>Process 1: INTERNAL COMBUSTION EQUIPMENT</b>   |        |              |   |   |  |
| INTERNAL COMBUSTION ENGINE, EMERGENCY POWER, CUMMINS, MODEL NO. QSB7-G3, DIESEL FUEL, WITH AFTERCOOLER, TURBOCHARGER, 250 BHP<br>A/N: 509746                                  | D165   |              | NOX: PROCESS UNIT**                     | CO: 2.6 GRAM/BHP-HR DIESEL (4) [RULE 1303(a)(1)-BACT, 5-10-1996; 40CFR 60 Subpart III, 6-28-2011]; NOX: 469 LBS/1000 GAL DIESEL (1) [RULE 2012, 5-6-2005]; NOX + ROG: 3 GRAM/BHP-HR DIESEL (4) [RULE 1303(a)(1)-BACT, 5-10-1996; 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; 40CFR 60 Subpart III, 6-28-2011] | B61.1, B61.3, D12.2, E448.2, H23.9, K67.10         |
| <b>System 2: BUILDING 159</b>   |        |              |   |   |  |
| INTERNAL COMBUSTION ENGINE, EMERGENCY POWER, SERIAL NO. 5JF00700, 6 CYLINDERS, DIESEL FUEL, CATERPILLAR, MODEL 3116TA, WITH AFTERCOOLER, TURBOCHARGER, 187 BHP<br>A/N: 458449 | D4     |              | NOX: PROCESS UNIT**                     | NOX: 469 LBS/1000 GAL DIESEL (1) [RULE 2012, 5-6-2005]; PM: (9) [RULE 404, 2-7-1986]  | B61.1, B61.3, D12.2, E448.2, H23.9, K67.10         |
| <b>System 4: BUILDING 202</b>   |        |              |   |   |  |
| INTERNAL COMBUSTION ENGINE, EMERGENCY POWER, SERIAL NO. 28914A, 6 CYLINDERS, DIESEL FUEL, ONAN, MODEL 06110T, WITH AFTERCOOLER, TURBOCHARGER, 302 BHP<br>A/N: 285226          | D6     |              | NOX: PROCESS UNIT**                     | NOX: 469 LBS/1000 GAL DIESEL (1) [RULE 2012, 5-6-2005]; PM: (9) [RULE 404, 2-7-1986]  | B61.1, B61.3, D12.2, D135.1, E448.1, H23.9, K67.10 |
| <b>System 5: BUILDING 230</b>   |        |              |   |   |  |

\* (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

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|--|--------|--------------|---|--|-------------------------------------|
| <b>Process 1: INTERNAL COMBUSTION EQUIPMENT</b>  |        |              |   |  |                                     |
| INTERNAL COMBUSTION ENGINE, EMERGENCY POWER, 16 CYLINDERS, DIESEL FUEL, CATERPILLAR, MODEL 3516 DITA, WITH AFTERCOOLER, TURBOCHARGER, 2151 BHP<br>A/N: 458445                      | D7     |              | NOX: PROCESS UNIT**                     | NOX: 469 LBS/1000 GAL DIESEL (1) [RULE 2012, 5-6-2005]; PM: (9) [RULE 404, 2-7-1986]   | B61.1, C1.1, C177.1, H23.11, K67.10 |
| INTERNAL COMBUSTION ENGINE, EMERGENCY POWER, 16 CYLINDERS, DIESEL FUEL, CATERPILLAR, MODEL 3516 DITA, WITH AFTERCOOLER, TURBOCHARGER, 2151 BHP<br>A/N: 458444                      | D8     |              | NOX: PROCESS UNIT**                     | NOX: 469 LBS/1000 GAL DIESEL (1) [RULE 2012, 5-6-2005]; PM: (9) [RULE 404, 2-7-1986]   | B61.1, C1.1, C177.1, H23.11, K67.10 |
| INTERNAL COMBUSTION ENGINE, EMERGENCY POWER, SERIAL NO. 25Z05039, 16 CYLINDERS, DIESEL FUEL, CATERPILLAR, MODEL 3516 DITA, WITH AFTERCOOLER, TURBOCHARGER, 2151 BHP<br>A/N: 458443 | D9     |              | NOX: PROCESS UNIT**                     | CO: 8.5 GRAM/BHP-HR DIESEL (4) [RULE 1303(a)(1)-BACT, 5-10-1996]; NOX: 6.9 GRAM/BHP-HR DIESEL (4) [RULE 1303(a)(1)-BACT, 5-10-1996]; NOX: 469 LBS/1000 GAL DIESEL (1) [RULE 2012, 5-6-2005]; PM: (9) [RULE 404, 2-7-1986]; PM: 0.4 GRAM/BHP-HR DIESEL (4) [RULE 1303(a)(1)-BACT, 5-10-1996]; ROG: 1 GRAM/BHP-HR DIESEL (4) [RULE 1303(a)(1)-BACT, 5-10-1996] | B61.1, C1.1, C177.1, H23.11, K67.10 |
| <b>System 6: BUILDING 268</b>  |        |              |   |  |                                     |

\* (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  
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|--|--------|--------------|---|--|--|
| <b>Process 1: INTERNAL COMBUSTION EQUIPMENT</b>  |        |              |   |  |  |
| INTERNAL COMBUSTION ENGINE, EMERGENCY POWER, SERIAL NO. 6A162186, 6 CYLINDERS, DIESEL FUEL, DETROIT DIESEL, MODEL 6061-A4, 170 BHP<br>A/N: 285227  | D10    |              | NOX: PROCESS UNIT**                     | NOX: 469 LBS/1000 GAL DIESEL (1) [RULE 2012, 5-6-2005]; PM: (9) [RULE 404, 2-7-1986]   | B61.1, B61.3, D12.2, D135.1, E448.1, H23.9, K67.10 |
| <b>System 7: BUILDING 277</b>  |        |              |   |  |  |
| INTERNAL COMBUSTION ENGINE, EMERGENCY POWER, DIESEL FUEL, CATERPILLAR, MODEL NO. C18 DITA, DIESEL PARTICULATE FILTER AND, DIAGNOSTIC BACK PRESSURE MONITOR, JOHNSON MATTHEY, MODEL NO. CRT, WITH AFTERCOOLER, TURBOCHARGER, 900 BHP<br>A/N: 510207 | D166   |              | NOX: PROCESS UNIT**                     | CO: 2.6 GRAM/BHP-HR DIESEL (4) [RULE 1303(a)(1) -BACT, 5-10-1996; 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; 40CFR 60 Subpart III, 6-28-2011]; PM: (9) [RULE 404, 2-7-1986]; PM: 0.023 GRAM/BHP-HR DIESEL (4) [RULE 1303(a)(1)-BACT, 5-10-1996; 40CFR 60 Subpart III, 6-28-2011] | B61.1, B61.3, D12.2, E193.1, E448.2, H23.9, K67.10 |
| <b>System 8: BUILDING 298</b>  |        |              |   |  |  |
| INTERNAL COMBUSTION ENGINE, EMERGENCY POWER, 12 CYLINDERS, NATURAL GAS, CATERPILLAR, MODEL G398, 450 BHP<br>A/N: 285413  | D13    |              | NOX: PROCESS UNIT**                     | NOX: 3400 LBS/MMSCF NATURAL GAS (1) [RULE 2012, 5-6-2005]; PM: (9) [RULE 404, 2-7-1986]  | C1.1, D135.1, K67.10                               |
| <b>System 10: BUILDING 302</b>   |        |              |   |  |  |

\* (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.)  
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|--|--------|--------------|---|---|--|
| <b>Process 1: INTERNAL COMBUSTION EQUIPMENT</b>  |        |              |   |   |  |
| INTERNAL COMBUSTION ENGINE, EMERGENCY POWER, SERIAL NO. H880147524, 6 CYLINDERS, DIESEL FUEL, CUMMINS, MODEL NNTA855G2, WITH AFTERCOOLER, TURBOCHARGER, 535 BHP<br>A/N: 458452 | D15    |              | NOX: PROCESS UNIT**                     | <b>NOX:</b> 469 LBS/1000 GAL DIESEL (1) [RULE 2012, 5-6-2005]; <b>PM:</b> (9) [RULE 404, 2-7-1986]  | B61.1, B61.3, D12.2, E448.3, H23.9, K67.10 |
| <b>System 11: BUILDING 308</b>   |        |              |   |   |  |
| INTERNAL COMBUSTION ENGINE, EMERGENCY POWER, SERIAL NO. 703994-A, 8 CYLINDERS, NATURAL GAS, PROPANE, FORD, MODEL LSG-875106005-A, WITH TURBOCHARGER, 132 BHP<br>A/N: 366520    | D16    |              | NOX: PROCESS UNIT**                     | <b>NOX:</b> 139 LBS/1000 GAL PROPANE (5) [RULE 2012, 5-6-2005]; <b>NOX:</b> 3400 LBS/MMSCF NATURAL GAS (1) [RULE 2012, 5-6-2005]; <b>PM:</b> (9) [RULE 404, 2-7-1986] | C1.1, E114.1, K67.10                       |
| <b>System 13: BUILDING 310</b>   |        |              |   |   |  |
| INTERNAL COMBUSTION ENGINE, EMERGENCY POWER, 8 CYLINDERS, DIESEL FUEL, DETROIT DIESEL, MODEL 8083-7405 (8V-92TA), WITH AFTERCOOLER, TURBOCHARGER, 568 BHP<br>A/N: 458451       | D18    |              | NOX: PROCESS UNIT**                     | <b>NOX:</b> 469 LBS/1000 GAL DIESEL (1) [RULE 2012, 5-6-2005]; <b>PM:</b> (9) [RULE 404, 2-7-1986]  | B61.1, B61.3, C1.1, C177.1, H23.12, K67.10 |
| <b>System 15: BUILDING 249</b>   |        |              |   |   |  |
| INTERNAL COMBUSTION ENGINE, EMERGENCY POWER, 4 CYLINDERS, DIESEL FUEL, CUMMINS, MODEL 4B3.9-G2, 68 BHP<br>A/N: 458453  | D138   |              | NOX: PROCESS UNIT**                     | <b>NOX:</b> 469 LBS/1000 GAL DIESEL (1) [RULE 2012, 5-6-2005]; <b>PM:</b> (9) [RULE 404, 2-7-1986]  | B61.1, B61.3, D12.2, E448.3, H23.9, K67.10 |
| <b>System 16: EAST GATE</b>  |        |              |   |   |  |

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 (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.)  
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|---|--------|--------------|---|---|--|
| <b>Process 1: INTERNAL COMBUSTION EQUIPMENT</b>   |        |              |   |   |  |
| INTERNAL COMBUSTION ENGINE, EMERGENCY POWER, JOHN DEERE, MODEL NO. 3029TF150, DIESEL FUEL, 64 BHP<br>A/N: 458446  | D155   |              | NOX: PROCESS UNIT**                     | CO: 8.5 GRAM/BHP-HR DIESEL (4) [RULE 1303(a)(1)-BACT, 5-10-1996]; NOX: 6.9 GRAM/BHP-HR DIESEL (4) [RULE 1303(a)(1)-BACT, 5-10-1996]; NOX: 469 LBS/1000 GAL DIESEL (1) [RULE 2012, 5-6-2005]; PM: (9) [RULE 404, 2-7-1986]; PM: 0.4 GRAM/BHP-HR DIESEL (4) [RULE 1303(a)(1)-BACT, 5-10-1996]; ROG: 1 GRAM/BHP-HR DIESEL (4) [RULE 1303(a)(1)-BACT, 5-10-1996]                            | B59.1, B61.3, D12.2, E448.2, H23.9, K67.10 |
| INTERNAL COMBUSTION ENGINE, EMERGENCY POWER, KOHLER, MODEL NO. 100RZG, NATURAL GAS, WITH A THREE-WAY CATALYTIC CONVERTOR, JOHNSON MATTHEY, MODEL NO. CXX6-3, 144 BHP<br>A/N: 436668 | D159   |              | NOX: PROCESS UNIT**                     | CO: 2 GRAM/BHP-HR NATURAL GAS (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]; NOX: 1.5 GRAM/BHP-HR NATURAL GAS (4) [RULE 2005, 5-6-2005; RULE 2005, 6-3-2011]; NOX: 3400 LBS/MMSCF NATURAL GAS (1) [RULE 2012, 5-6-2005]; PM: (9) [RULE 404, 2-7-1986]; VOC: 1.5 GRAM/BHP-HR NATURAL GAS (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002] | C1.1, C1.8, D12.1, E71.4, K67.10           |
| <b>System 17: BUILDING 179</b>  |        |              |   |   |  |

\* (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.)  
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|---|--------|--------------|---|--|--|
| <b>Process 1: INTERNAL COMBUSTION EQUIPMENT</b>   |        |              |   |  |  |
| INTERNAL COMBUSTION ENGINE, EMERGENCY POWER, JOHN DEERE, MODEL NO. 6068HF485T, DIESEL FUEL, WITH AFTERCOOLER, TURBOCHARGER, 315 BHP<br>A/N: 468704  | D164   |              | NOX: PROCESS UNIT**                     | CO: 2.6 GRAM/BHP-HR (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]; NOX: 469 LBS/1000 GAL DIESEL (1) [RULE 2012, 5-6-2005]; NOX + ROG: 3 GRAM/BHP-HR (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 2005, 5-6-2005; RULE 2005, 6-3-2011]; PM: (9) [RULE 404, 2-7-1986]; PM: 0.15 GRAM/BHP-HR (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002] | B59.1, B61.3, D12.2, E448.2, H23.9, K67.10               |
| <b>System 19: BUILDING 224</b>  |        |              |   |  |  |
| INTERNAL COMBUSTION ENGINE, EMERGENCY POWER, DIESEL FUEL, CATERPILLAR, MODEL 3304B, WITH TURBOCHARGER, 186 BHP<br>A/N: 497713   | D14    |              | NOX: PROCESS UNIT**                     | NOX: 469 LBS/1000 GAL DIESEL (1) [RULE 2012, 5-6-2005]; PM: (9) [RULE 404, 2-7-1986]   | D12.2, E448.3, H23.9, K67.10                             |
| <b>Process 3: SURFACE COATING EQUIPMENT</b>   |        |              |   |  |  |
| <b>System 4: COATING OPERATION, BLDG. 18</b>  |        |              |   |  |  |
| 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<br>A/N: | 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 |
| <b>Process 4: DEGREASING/CLEANING EQUIPMENT</b>   |        |              |   |  |  |

\* (1) (1A) (1B) Denotes RECLAIM emission factor (2) (2A) (2B) Denotes RECLAIM emission rate  
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## FACILITY PERMIT TO OPERATE NASA JET PROPULSION LAB

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

| Equipment  | ID No. | Connected To | RECLAIM Source Type/<br>Monitoring Unit | Emissions *<br>And Requirements | Conditions                                     |
|--|--------|--------------|---|---------------------------------|--|
| <b>Process 4: DEGREASING/CLEANING EQUIPMENT</b>  |        |              |   |                                 |  |
| <b>System 3: BUILDING 103</b>  |        |              |   |                                 |  |
| CLEANER, MICROCEL CENTRIFUGAL SYSTEM, 38 IN. W. X 75 IN. L. X 67 IN. H., 28 GALLON CAPACITY<br>A/N: 375751   | D137   |              |   |                                 | H23.4  |
| <b>Process 5: FUEL STORAGE AND DISPENSING</b>  |        |              |   |                                 |  |
| FUEL DISPENSING NOZZLE, BELLOWS-LESS, PHASE II CARB ENHANCED VAPOR RECOVERY SYSTEM, GASOLINE, HEALY PHASE II EVR SYSTEM INCLUDING VEEDER-ROOT ISD SYSTEM (VR-202-A)<br>A/N: 471739 | D68    |              |   |                                 | J110.1, J121.1, J373.1, J373.2, J373.3, J373.4 |
| STORAGE TANK, UNDERGROUND, CARB ENHANCED VAPOR RECOVERY PHASE I, GASOLINE, WITH VAPOR RECOVERY SYSTEM, 10000 GALS<br>A/N: 471739   | D69    |              |   |                                 | C1.7, J109.1, J373.2, J373.3, J373.4, K67.1    |
| <b>Process 6: CIRCUIT BOARDS R &amp; D</b>   |        |              |   |                                 |  |
| <b>System 1: BUILDING 103</b>  |        |              |   |                                 |  |
| SOLDER MACHINE, GPD GLOBAL LTS-1000APC SOLDER DIP TINNING, WITH VAPOR PHASE REFLOW SYSTEM, R&D TECHNICAL SERVICES, MODEL NO. RD2, 7.1 KW<br>A/N: 401919                            | D75    |              |   |                                 | A63.2, B27.2                                   |
| <b>Process 7: MICRO-DEVICES R &amp; D</b>  |        |              |   |                                 |  |
| <b>System 1: BUILDING 302</b>  |        |              |   |                                 |  |
|  |        |              |   |                                 | P13.1  |
|  |        |              |   |                                 | S1.1   |

- \* (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 NASA JET PROPULSION LAB

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

| Equipment  | ID No. | Connected To | RECLAIM Source Type/<br>Monitoring Unit | Emissions *<br>And Requirements | Conditions |
|--|--------|--------------|---|---------------------------------|------------|
| <b>Process 7: MICRO-DEVICES R &amp; D</b>  |        |              |   |                                 | P13.1      |
| DEPOSITION REACTOR, THOMAS SWAN, MODEL NO. EPITOR II, METAL ORGANIC VAPOR PHASE EPITAXY<br>A/N: 346766 | D83    | C128         |   |                                 | K67.2      |
| <b>System 3: BUILDING 302</b>  |        |              |   |                                 | S1.2       |
| ETCHER, REACTIVE ION, PLASMA FAB<br>A/N: 454660  | D90    | C131         |   |                                 |            |
| ETCHER, PLASMA TECH, REACTIVE ION<br>A/N: 454660   | D101   | C131         |   |                                 |            |
| DEPOSITION REACTOR, MICROSCIENCE, CHEMICAL VAPOR DEPOSITION<br>A/N: 454660                             | D103   | C127         |   |                                 |            |
| DEPOSITION REACTOR, GSI, CHEMICAL VAPOR DEPOSITION<br>A/N: 454660                                      | D104   | C127         |   |                                 |            |
| DEPOSITION REACTOR, GLASS TECH, CHEMICAL VAPOR DEPOSITION<br>A/N: 454660                               | D105   | C127         |   |                                 |            |
| DEPOSITION REACTOR, JPL, CHEMICAL VAPOR DEPOSITION<br>A/N: 454660                                      | D106   | C127         |   |                                 |            |
| FURNACE, THERMCO, MINI BRUTE, DIFFUSION<br>A/N: 454660   | D108   | C127         |   |                                 |            |
| FURNACE, THERMCO, MINI BRUTE, DIFFUSION<br>A/N: 454660   | D109   | C127         |   |                                 |            |

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>* (1) (1A) (1B) Denotes RECLAIM emission factor</li> <li>(3) Denotes RECLAIM concentration limit</li> <li>(5) (5A) (5B) Denotes command and control emission limit</li> <li>(7) Denotes NSR applicability limit</li> <li>(9) See App B for Emission Limits</li> </ul> | <ul style="list-style-type: none"> <li>(2) (2A) (2B) Denotes RECLAIM emission rate</li> <li>(4) Denotes BACT emission limit</li> <li>(6) Denotes air toxic control rule limit</li> <li>(8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)</li> <li>(10) See section J for NESHAP/MACT requirements</li> </ul> |
|--|--|

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

## FACILITY PERMIT TO OPERATE NASA JET PROPULSION LAB

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

| Equipment   | ID No. | Connected To | RECLAIM Source Type/<br>Monitoring Unit | Emissions *<br>And Requirements | Conditions |
|---|--------|--------------|---|---------------------------------|------------|
| <b>Process 7: MICRO-DEVICES R &amp; D</b>   |        |              |   |                                 | P13.1      |
| FURNACE, THERMCO, MINI BRUTE, DIFFUSION<br>A/N: 454660  | D110   | C127         |   |                                 |            |
| FURNACE, TYSTAR, TYTAN, LPCVD<br>A/N: 454660  | D117   | C131         |   |                                 |            |
| FURNACE, TYSTAR, TYTAN, LPCVD<br>A/N: 454660  | D118   | C127         |   |                                 |            |
| FURNACE, TYSTAR, TYTAN, LPCVD<br>A/N: 454660  | D119   | C127         |   |                                 |            |
| FURNACE, TYSTAR, TYTAN, LPCVD<br>A/N: 454660  | D120   | C127         |   |                                 |            |
| DEPOSITION REACTOR, PLASMA THERM, MODEL NO. 790, PLASMA ENHANCED CHEMICAL VAPOR DEPOSITION<br>A/N: 454660 | D124   | C127         |   |                                 |            |
| ETCHER, PLASMA THERM, MODEL NO. SLR770, ELECTRON CYCLOTRON<br>A/N: 454660                                 | D125   | C131         |   |                                 |            |
| ETCHER, SURFACE TECHNOLOGY, MULTIPLEX INDUCTIVELY COUPLED<br>A/N: 454660                                  | D126   | C131         |   |                                 |            |
| ETCHER, REACTIVE ION, CHLORINE, UNAXIS, MODEL NO. SLN-ICP<br>A/N: 454660                                  | D160   | C131         |   |                                 | B27.4      |
| ETCHER, REACTIVE ION, FLUORINE, UNAXIS, MODEL NO. SLN-ICP<br>A/N: 454660                                  | D161   | C131         |   |                                 |            |

- \* (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 NASA JET PROPULSION LAB

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

| Equipment  | ID No. | Connected To   | RECLAIM Source Type/<br>Monitoring Unit | Emissions *<br>And Requirements                      | Conditions                         |
|--|--------|--|---|--|------------------------------------|
| <b>Process 7: MICRO-DEVICES R &amp; D</b>  |        |  |   |  | P13.1                              |
| FURNACE, WET OXIDATION, TYSTAR, MODEL NO. MINI TYTAN 4600<br>A/N: 454660   | D162   | C131   |   |  |                                    |
| FURNACE, LPCVD, TYSTAR, MODEL NO. MINI TYTAN 4600<br>A/N: 454660   | D163   | C127   |   |  | B27.5                              |
| <b>System 4: BUILDING 302</b>  |        |  |   |  |                                    |
| DEGREASER, AIRLESS, AIR-TIGHT, TIYODA-SEREC, CLEANING CHAMBER DIMENSIONS: 8 IN. DIA. X 12 IN. H., 5 LBS ACTIVATED CARBON FILTER<br>A/N: 415437 | D158   |  |   | <b>HAP: (10) [40CFR 63 Subpart T, #30, 6-5-1995]</b> | A63.3, B27.3, E71.5, H23.8, K67.11 |
| <b>Process 8: AIR POLLUTION CONTROL</b>  |        |  |   |  |                                    |
| <b>System 1: BUILDING 302</b>  |        |  |   |  |                                    |
| INCINERATOR, CONTROLLED DECOMPOSITION OXIDATION UNITS, 14 TOTAL, EACH DELATECH, MODEL NO. 805, 3 KVA<br>A/N: 415436                            | C127   | D103 D104<br>D105 D106<br>D108 D109<br>D110 D118<br>D119 D120<br>D124 C131<br>D163 |   |  |                                    |
| SCRUBBER, AIXTRON, MODEL NO. A2STE, WITH TWO ABSORPTION COLUMNS<br>A/N: 415436   | C128   | D83 C131   |   |  |                                    |
| SCRUBBER, VIRON, MODEL NO. VHS108108FRP, WITH MIST ELIMINATOR<br>A/N: 415436   | C131   | D90 D101 D117<br>D125 D126<br>C127 C128<br>D160 D161<br>D162                       |   | <b>PM: (9) [RULE 404, 2-7-1986]</b>                  | C8.1, C8.2, K67.4                  |

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>* (1) (1A) (1B) Denotes RECLAIM emission factor</li> <li>(3) Denotes RECLAIM concentration limit</li> <li>(5) (5A) (5B) Denotes command and control emission limit</li> <li>(7) Denotes NSR applicability limit</li> <li>(9) See App B for Emission Limits</li> </ul> | <ul style="list-style-type: none"> <li>(2) (2A) (2B) Denotes RECLAIM emission rate</li> <li>(4) Denotes BACT emission limit</li> <li>(6) Denotes air toxic control rule limit</li> <li>(8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)</li> <li>(10) See section J for NESHAP/MACT requirements</li> </ul> |
|--|--|

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

## FACILITY PERMIT TO OPERATE NASA JET PROPULSION LAB

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

| Equipment  | ID No. | Connected To | RECLAIM Source Type/<br>Monitoring Unit | Emissions *<br>And Requirements   | Conditions                          |
|--|--------|--------------|---|---|-------------------------------------|
| <b>Process 10: R219 EXEMPT EQUIPMENT SUBJECT TO SOURCE-SPECIFIC RULES</b>                              |        |              |   |   |                                     |
| RULE 219 EXEMPT EQUIPMENT, LAMINATING EQUIPMENT, LOW USE OR EMISSIONS                                  | E140   |              |   | <b>VOC: (9)</b> [RULE 1168, 1-7-2005; <b>RULE 1171, 11-7-2003; RULE 1171, 5-1-2009]</b>   | H23.5                               |
| RULE 219 EXEMPT EQUIPMENT, COOLING TOWERS  | E141   |              |   |   | H23.2                               |
| RULE 219 EXEMPT EQUIPMENT, REFRIGERANT RECOVERY AND/OR RECYCLING UNITS,                                | E142   |              |   |   | H23.3                               |
| RULE 219 EXEMPT EQUIPMENT, ABRASIVE BLASTING EQUIPMENT, GLOVE-BOX, <= 53 FT3, WITH DUST FILTER         | E143   |              |   | <b>PM: (9)</b> [RULE 1140, 2-1-1980; <b>RULE 1140, 8-2-1985; RULE 404, 2-7-1986; RULE 405, 2-7-1986]</b>                            | D322.3,<br>D381.1,<br>E102.1, K67.5 |
| RULE 219 EXEMPT EQUIPMENT, CLEANING EQUIPMENT  | E144   |              |   |   | H23.4                               |
| RULE 219 EXEMPT EQUIPMENT, COATING EQUIPMENT, LOW USE OR EMISSIONS                                     | E145   |              |   | <b>VOC: (9)</b> [RULE 1107, 11-9-2001; <b>RULE 1107, 1-6-2006; RULE 1124, 9-21-2001; RULE 1171, 11-7-2003; RULE 1171, 5-1-2009]</b> | H23.5                               |
| RULE 219 EXEMPT EQUIPMENT, FOAM PACKAGING EQUIPMENT USING <= 20 GPD                                    | E146   |              |   |   |                                     |
| RULE 219 EXEMPT EQUIPMENT, EQUIPMENT USED FOR THE TRANSFER OF <20,000 GPD OF UNHEATED ORGANIC MATERIAL | E147   |              |   |   |                                     |
| RULE 219 EXEMPT EQUIPMENT, AIR CONDITIONING UNITS  | E148   |              |   |   | H23.3                               |
| RULE 219 EXEMPT EQUIPMENT, REFRIGERATION UNITS   | E149   |              |   |   | H23.3                               |
| RULE 219 EXEMPT EQUIPMENT, EXEMPT HAND WIPING OPERATIONS   | E150   |              |   | <b>VOC: (9)</b> [RULE 1171, 11-7-2003; <b>RULE 1171, 5-1-2009]</b>  | H23.5                               |

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

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

## FACILITY PERMIT TO OPERATE NASA JET PROPULSION LAB

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

| Equipment  | ID No. | Connected To | RECLAIM Source Type/<br>Monitoring Unit | Emissions *<br>And Requirements  | Conditions |
|--|--------|--------------|---|--|------------|
| <b>Process 10: R219 EXEMPT EQUIPMENT SUBJECT TO SOURCE-SPECIFIC RULES</b>                                  |        |              |   |  |            |
| RULE 219 EXEMPT EQUIPMENT, COATING EQUIPMENT, PORTABLE, ARCHITECTURAL COATINGS                             | E151   |              |   | VOC: (9) [RULE 1113, 11-8-1996; RULE 1113, 6-3-2011; RULE 1171, 11-7-2003; RULE 1171, 5-1-2009]                                | K67.6      |
| RULE 219 EXEMPT EQUIPMENT, SMALL BOILERS, WATER HEATERS AND PROCESS HEATERS, >1 MMBTU/HR AND <= 2 MMBTU/HR | E152   |              |   | CO: 400 PPMV (5A) [RULE 1146.2, 5-5-2006]; CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981] |            |
| RULE 219 EXEMPT EQUIPMENT, FIRE EXTINGUISHING EQUIPMENT USING HALONS                                       | E153   |              |   |  | H23.10     |

\* (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 NASA JET PROPULSION LAB**

## **SECTION D: 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  
 NASA JET PROPULSION LAB  
 SECTION D: DEVICE ID INDEX**

| <b>Device Index For Section D</b> |                           |                |               |
|-----------------------------------|---------------------------|----------------|---------------|
| <b>Device ID</b>                  | <b>Section D Page No.</b> | <b>Process</b> | <b>System</b> |
| D3                                | 1                         | 1              | 1             |
| D4                                | 2                         | 1              | 2             |
| D6                                | 2                         | 1              | 4             |
| D7                                | 3                         | 1              | 5             |
| D8                                | 3                         | 1              | 5             |
| D9                                | 3                         | 1              | 5             |
| D10                               | 4                         | 1              | 6             |
| D13                               | 4                         | 1              | 8             |
| D14                               | 7                         | 1              | 19            |
| D15                               | 5                         | 1              | 10            |
| D16                               | 5                         | 1              | 11            |
| D18                               | 5                         | 1              | 13            |
| D38                               | 7                         | 3              | 4             |
| D68                               | 8                         | 5              | 0             |
| D69                               | 8                         | 5              | 0             |
| D75                               | 8                         | 6              | 1             |
| D83                               | 9                         | 7              | 1             |
| D90                               | 9                         | 7              | 3             |
| D101                              | 9                         | 7              | 3             |
| D103                              | 9                         | 7              | 3             |
| D104                              | 9                         | 7              | 3             |
| D105                              | 9                         | 7              | 3             |
| D106                              | 9                         | 7              | 3             |
| D108                              | 9                         | 7              | 3             |
| D109                              | 9                         | 7              | 3             |
| D110                              | 10                        | 7              | 3             |
| D117                              | 10                        | 7              | 3             |
| D118                              | 10                        | 7              | 3             |
| D119                              | 10                        | 7              | 3             |
| D120                              | 10                        | 7              | 3             |
| D124                              | 10                        | 7              | 3             |
| D125                              | 10                        | 7              | 3             |
| D126                              | 10                        | 7              | 3             |
| C127                              | 11                        | 8              | 1             |
| C128                              | 11                        | 8              | 1             |

**FACILITY PERMIT TO OPERATE  
 NASA JET PROPULSION LAB  
 SECTION D: DEVICE ID INDEX**

| <b>Device Index For Section D</b> |                           |                |               |
|-----------------------------------|---------------------------|----------------|---------------|
| <b>Device ID</b>                  | <b>Section D Page No.</b> | <b>Process</b> | <b>System</b> |
| C131                              | 11                        | 8              | 1             |
| D137                              | 8                         | 4              | 3             |
| D138                              | 5                         | 1              | 15            |
| E140                              | 12                        | 10             | 0             |
| E141                              | 12                        | 10             | 0             |
| E142                              | 12                        | 10             | 0             |
| E143                              | 12                        | 10             | 0             |
| E144                              | 12                        | 10             | 0             |
| E145                              | 12                        | 10             | 0             |
| E146                              | 12                        | 10             | 0             |
| E147                              | 12                        | 10             | 0             |
| E148                              | 12                        | 10             | 0             |
| E149                              | 12                        | 10             | 0             |
| E150                              | 12                        | 10             | 0             |
| E151                              | 13                        | 10             | 0             |
| E152                              | 13                        | 10             | 0             |
| E153                              | 13                        | 10             | 0             |
| D154                              | 1                         | 1              | 1             |
| D155                              | 6                         | 1              | 16            |
| D158                              | 11                        | 7              | 4             |
| D159                              | 6                         | 1              | 16            |
| D160                              | 10                        | 7              | 3             |
| D161                              | 10                        | 7              | 3             |
| D162                              | 11                        | 7              | 3             |
| D163                              | 11                        | 7              | 3             |
| D164                              | 7                         | 1              | 17            |
| D165                              | 2                         | 1              | 1             |
| D166                              | 4                         | 1              | 7             |

## **FACILITY PERMIT TO OPERATE NASA JET PROPULSION LAB**

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

**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.

## FACILITY PERMIT TO OPERATE NASA JET PROPULSION LAB

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

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

[RULE 431.2, 9-15-2000]

#### 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]

## FACILITY PERMIT TO OPERATE NASA JET PROPULSION LAB

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

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]

### 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]

A63.2 The operator shall limit emissions from this equipment as follows:

| CONTAMINANT | EMISSIONS LIMIT                              |
|-------------|--|
| VOC         | Less than or equal to 4.8 LBS IN ANY ONE DAY |

## FACILITY PERMIT TO OPERATE NASA JET PROPULSION LAB

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

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

[Devices subject to this condition : D75]

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

| CONTAMINANT | EMISSIONS LIMIT                                 |
|-------------|---|
| VOC         | Less than or equal to 2.29 LBS IN ANY ONE MONTH |

The operator shall calculate the emission limit(s) in a manner approved by the District.

**[RULE 1303(b)(2)-Offset, 5-10-1996; 40CFR 63 Subpart T, 12-8-2000]**

[Devices subject to this condition : D158]

#### **B. Material/Fuel Type Limits**

B27.2 The operator shall not use materials, with the exception of those containing isopropyl alcohol and lead, containing any toxic air contaminants (TACs) identified in the SCAQMD Rule 1401, as amended 15-jun-2001.

[RULE 1401, 6-15-2001]

[Devices subject to this condition : D75]

B27.3 The operator shall not use materials, with the exception of those containing ethyl benzene, hexane, IPA, MEK, methanol, methylene chloride, trichloroethylene, toluene and xylene, containing any toxic air contaminants (TACs) identified in the SCAQMD Rule 1401, as amended 05/03/2002.

## FACILITY PERMIT TO OPERATE NASA JET PROPULSION LAB

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

[RULE 1401, 5-3-2002]

[Devices subject to this condition : D158]

- B27.4 The operator shall not use materials, with the exception of those containing chlorine, containing any toxic air contaminants (TACs) identified in the SCAQMD Rule 1401, as amended 03/04/2005.

[RULE 1401, 3-4-2005]

[Devices subject to this condition : D160]

- B27.5 The operator shall not use materials, with the exception of those containing ammonia, containing any toxic air contaminants (TACs) identified in the SCAQMD Rule 1401, as amended 03/04/2005.

[RULE 1401, 3-4-2005]

[Devices subject to this condition : D163]

- B59.1 The operator shall only use the following material(s) in this device :

Fuel oil with a sulfur content that complies with Rule 431.2.

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

[Devices subject to this condition : D154, D155, D164]

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

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

| Compound                     | weight percent |
|------------------------------|----------------|
| Sulfur less than or equal to | 0.05           |

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

[Devices subject to this condition : D3, D4, D6, D7, D8, D9, D10, D15, D18, D138, D165, D166]

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]**

[Devices subject to this condition : D3, D4, D6, D10, D15, D18, D138, D154, D155, D164, D165, D166]

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

C1.1 The operator shall limit the operating time to no more than 200 hour(s) in any one year.

To comply with this condition, the operator shall install and maintain a(n) non-resettable elapsed time meter to accurately indicate the elapsed operating time of the engine.

**[RULE 1304(a)-Modeling and Offset Exemption, 6-14-1996; RULE 2012, 5-6-2005]**

## **FACILITY PERMIT TO OPERATE NASA JET PROPULSION LAB**

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

[Devices subject to this condition : D7, D8, D9, D13, D16, D18, D159]

- C1.7 The operator shall limit the material processed to no more than 18750 gallon(s) per month.

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

[Devices subject to this condition : D69]

- C1.8 The operator shall limit the operating time to no more than 50 hour(s) in any one year.

For the purpose of this condition, operating time shall be defined as maintenance and testing hours only. Operation beyond 50 hours per year for maintenance and testing is allowed only during emergencies resulting in an interruption of service of the primary power supply or during Stage II or III electrical emergencies declared by the electrical grid operator. Operators are allowed to use emergency spark-ignition engines as part of an interruptible electric service program.

An interruptible electric service program is a program in which the facility receives payment or reduced rates in return for a requirement to reduce its electric load on the grid when requested to do so by the utility, the grid operator or other organization.

**[RULE 1304(a)-Modeling and Offset Exemption, 6-14-1996]**

[Devices subject to this condition : D159]

- 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.

## **FACILITY PERMIT TO OPERATE NASA JET PROPULSION LAB**

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

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

[Devices subject to this condition : D38]

- C8.1 The operator shall use this equipment in such a manner that the pH being monitored, as indicated below, is not less than 7 of the pH scale.

To comply with this condition, the operator shall install and maintain a(n) pH meter to accurately indicate the pH of the caustic solution.

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

[Devices subject to this condition : C131]

- C8.2 The operator shall use this equipment in such a manner that the flow rate being monitored, as indicated below, is not less than 270 gpm.

To comply with this condition, the operator shall install and maintain a(n) flow meter to accurately indicate the flow rate of the caustic solution supplied to the scrubber.

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

[Devices subject to this condition : C131]

- C177.1 The operator shall set and maintain the fuel injection timing of the engine at 4 degrees retarded relative to standard timing.

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

[Devices subject to this condition : D7, D8, D9, D18]

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

## **FACILITY PERMIT TO OPERATE NASA JET PROPULSION LAB**

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

D12.1 The operator shall install and maintain a(n) temperature reading device to accurately indicate the temperature at the inlet and outlet of the catalyst.

The operator shall also install and maintain a device to continuously record the parameter being measured.

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

[Devices subject to this condition : D159]

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 : D3, D4, D6, D10, D14, D15, D138, D154, D155,  
D164, D165, D166]

D135.1 The operator shall inspect, adjust, and certify the ignition or fuel injection timing of this engine a minimum of once every 3 years of operation. Inspections, adjustments, and certifications shall be performed by a qualified mechanic and performed in accordance with the engine manufacturer's specifications and procedures.

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

[Devices subject to this condition : D6, D10, D13]

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]**

## **FACILITY PERMIT TO OPERATE NASA JET PROPULSION LAB**

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

[Devices subject to this condition : D38]

D322.3 The operator shall perform annual 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 : E143]

D381.1 The operator shall conduct an inspection for visible emissions from all stacks and other emission points of this equipment whenever there is a public complaint of visible emissions, whenever visible emissions are observed, and on an annual basis, at least, unless the equipment did not operate during the entire annual period. The routine annual inspection shall be conducted while the equipment is in operation and during daylight hours. If any visible emissions (not including condensed water vapor) are detected, the operator shall take corrective action(s) that eliminates the visible emissions within 24 hours and report the visible emissions as a potential deviation in accordance with the reporting requirements in Section K of this permit.

The operator shall keep the records in accordance with the recordkeeping requirements in Section K of this permit and the following records:

- 1). Stack or emission point identification;
- 2). Description of any corrective actions taken to abate visible emissions; and
- 3). Date and time visible emission was abated.

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

[Devices subject to this condition : E143]

## **FACILITY PERMIT TO OPERATE NASA JET PROPULSION LAB**

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

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

E71.4 The operator shall only operate this equipment during emergencies resulting in an interruption of service of the primary power supply or during Stage II or III electrical emergency declared by the California Independent System Operator. The engine may also be operated for maintenance and testing purposes.

**[RULE 1304(a)-Modeling and Offset Exemption, 6-14-1996]**

[Devices subject to this condition : D159]

E71.5 The operator shall not operate this equipment if the concentration of hydrocarbons from the carbon filter exceeds 15 ppmv, as methane, using a photo ionization detector or any other AQMD-approved method. The carbon shall be changed before this concentration is reached. Hydrocarbon concentrations shall be measured each time the equipment is in operation and records shall be maintained of the measurement dates, measured concentrations and the carbon replacement dates. These records shall be retained at the facility for at least five years.

**[RULE 109, 5-2-2003; RULE 1303(a)(1)-BACT, 5-10-1996]**

[Devices subject to this condition : D158]

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..

[RULE 1469.1, 3-4-2005]

[Devices subject to this condition : D38]

## **FACILITY PERMIT TO OPERATE NASA JET PROPULSION LAB**

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

E102.1 The operator shall discharge dust collected in this equipment only into closed containers.

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

[Devices subject to this condition : E143]

E114.1 The operator shall not use this equipment in conjunction with any utility voluntary demand reduction program.

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

[Devices subject to this condition : D16]

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:

## **FACILITY PERMIT TO OPERATE NASA JET PROPULSION LAB**

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

**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 : D166]

E448.1 The operator shall comply with the following requirements:

## **FACILITY PERMIT TO OPERATE NASA JET PROPULSION LAB**

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

**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 20 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 1470, 6-1-2007]

[Devices subject to this condition : D6, D10]

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

## **FACILITY PERMIT TO OPERATE NASA JET PROPULSION LAB**

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

**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 : D3, D4, D154, D155, D164, D165, D166]

E448.3 The operator shall comply with the following requirements:

## FACILITY PERMIT TO OPERATE NASA JET PROPULSION LAB

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

**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 30 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 1470, 6-1-2007]

[Devices subject to this condition : D14, D15, D138]

#### **H. Applicable Rules**

H23.2 This equipment is subject to the applicable requirements of the following rules or regulations:

| Contaminant             | Rule          | Rule/Subpart |
|-------------------------|---------------|--------------|
| Chromium,<br>Hexavalent | District Rule | 1404         |

[RULE 1404, 4-6-1990]

## FACILITY PERMIT TO OPERATE NASA JET PROPULSION LAB

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

[Devices subject to this condition : E141]

H23.3 This equipment is subject to the applicable requirements of the following rules or regulations:

| Contaminant  | Rule             | Rule/Subpart |
|--------------|------------------|--------------|
| Refrigerants | District Rule    | 1415         |
| Refrigerants | 40CFR82, SUBPART | F            |

[RULE 1415, 12-3-2010; **40CFR 82 Subpart F, 5-14-1993**]

[Devices subject to this condition : E142, E148, E149]

H23.4 This equipment is subject to the applicable requirements of the following rules or regulations:

| Contaminant | Rule          | Rule/Subpart |
|-------------|---------------|--------------|
| ROG         | District Rule | 1122         |

[**RULE 1122, 10-1-2004**; RULE 1122, 5-1-2009]

[Devices subject to this condition : D137, E144]

H23.5 This equipment is subject to the applicable requirements of the following rules or regulations:

| Contaminant | Rule          | Rule/Subpart |
|-------------|---------------|--------------|
| VOC         | District Rule | 109          |

[**RULE 109, 5-2-2003**]

## FACILITY PERMIT TO OPERATE NASA JET PROPULSION LAB

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

[Devices subject to this condition : E140, E145, E150]

H23.8 This equipment is subject to the applicable requirements of the following rules or regulations:

| Contaminant | Rule             | Rule/Subpart |
|-------------|------------------|--------------|
| VOC         | District Rule    | 109          |
| HAPs        | 40CFR63, SUBPART | T            |
| VOC         | District Rule    | 1122         |

**[RULE 109, 5-2-2003; RULE 1122, 10-1-2004; RULE 1122, 5-1-2009; 40CFR 63 Subpart T, 12-8-2000]**

[Devices subject to this condition : D158]

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 : D3, D4, D6, D10, D14, D15, D138, D154, D155, D164, D165, D166]

H23.10 This equipment is subject to the applicable requirements of the following rules or regulations:

## FACILITY PERMIT TO OPERATE NASA JET PROPULSION LAB

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

| Contaminant | Rule          | Rule/Subpart |
|-------------|---------------|--------------|
| Halon       | District Rule | 1418         |

[RULE 1418, 9-10-1999]

[Devices subject to this condition : E153]

H23.11 This equipment is subject to the applicable requirements of the following rules or regulations:

| Contaminant         | Rule          | Rule/Subpart |
|---------------------|---------------|--------------|
| Sulfur<br>compounds | District Rule | 431.2        |

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

[Devices subject to this condition : D7, D8, D9]

H23.12 This equipment is subject to the applicable requirements of the following rules or regulations:

| Contaminant         | Rule          | Rule/Subpart |
|---------------------|---------------|--------------|
| Sulfur<br>compounds | District Rule | 431.2        |
| PM                  | District Rule | 1470         |

This equipment shall be operated in compliance with Rule 1470 effective 1/1/2008.

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

## FACILITY PERMIT TO OPERATE NASA JET PROPULSION LAB

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

[Devices subject to this condition : D18]

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,<br>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]

#### **J. Rule 461**

J109.1 The operator shall use, except for diesel transfer, the phase I vapor recovery system in full operation whenever this equipment is in use. This system shall be installed, operated and maintained to meet all CARB certification requirements.

[**RULE 461, 6-3-2005**; RULE 461, 3-7-2008]

[Devices subject to this condition : D69]

J110.1 The operator shall use, except for diesel transfer, the phase II vapor recovery system in full operation whenever gasoline from this equipment is dispensed to motor vehicles as defined in Rule 461. This system shall be installed, operated and maintained to meet all CARB certification requirements.

## **FACILITY PERMIT TO OPERATE NASA JET PROPULSION LAB**

### **SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS**

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

[**RULE 461, 6-3-2005**; RULE 461, 3-7-2008]

[Devices subject to this condition : D68]

J121.1 The operator shall replace seals, fittings, and piping with methanol-compatible materials before the dispensing system is charged with methanol.

[RULE 1170, 5-6-1988]

[Devices subject to this condition : D68]

J373.1 The operator shall comply with the following gasoline transfer and dispensing requirements:

## FACILITY PERMIT TO OPERATE NASA JET PROPULSION LAB

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

a). The Phase II vapor recovery systems shall be installed, operated, and maintained such that the maximum allowable pressure through the system including nozzle, vapor hose, swivels, and underground piping does not exceed the dynamic back pressures described by the California Air Resources Board (CARB) Executive Order by which the system was certified:

Nitrogen Flowrates (CFH)      Dynamic Back Pressure (Inches of Water)

60                                      0.50

Within thirty days of the issuance date of this permit or within thirty days of the start of operation of the equipment, dynamic back pressure tests shall be conducted to determine the Phase II system vapor recovery back pressures. The tests shall be conducted in accordance with CARB Test Procedure Method TP-201.4. Results shall be submitted to the AQMD, Engineering and Compliance, within thirty (30) days of tests.

The AQMD shall be notified by e-mail at [R461testing@aqmd.gov](mailto:R461testing@aqmd.gov) or by facsimile at telephone number (909) 396-3606 at least twenty-four hours prior to testing. Such notification shall include the name of the owner or operator; the name of the contractors; the location of the facility; and the scheduled start and completion dates of the dynamic back pressure test.

The test shall be conducted as frequently as that required by the most recent amendment to Rule 461 or CARB Executive Order requirements, whichever is more stringent.

[**RULE 461, 6-3-2005**; RULE 461, 3-7-2008]

[Devices subject to this condition : D68]

J373.2 The operator shall comply with the following gasoline transfer and dispensing requirements:

## **FACILITY PERMIT TO OPERATE NASA JET PROPULSION LAB**

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

Depending on the system configuration, a leak rate test of drop tube/drain valve assembly shall be conducted to quantify the pressure integrity of both the drop tube and drain valve seal or a leak rate test of drop tube overflow prevention device and drain valve shall be conducted to quantify the pressure integrity of the drop tube overflow prevention device and the pressure integrity of the spill container drain valve. Either test shall be conducted as a performance test and as a reverification test.

The test shall be conducted in accordance with test procedure method TP-201.1C or TP-201.1D, respectively. Results shall be submitted to the AQMD, Office of Engineering and Compliance, within seventy-two (72) hours of test.

**[RULE 461, 6-3-2005; RULE 461, 3-7-2008]**

[Devices subject to this condition : D68, D69]

J373.3 The operator shall comply with the following gasoline transfer and dispensing requirements:

A leak rate and cracking pressure test of pressure/vacuum relief vent valves shall be conducted within thirty days (30) after the start of operation of the opw phase I EVR equipment and at least once every three (3) years thereafter to determine the pressure and vacuum at which the pressure/vacuum vent valve actuates, and to determine the volumetric leak rate at a given pressure.

The test shall be conducted in accordance with the test procedure method TP-201.1E. Results shall be submitted to the AQMD, Office of Engineering and Compliance, within seventy-two (72) hours of test. This test result shall be kept on site for three (3) years and made available to District representatives upon request.

**[RULE 461, 6-3-2005; RULE 461, 3-7-2008]**

[Devices subject to this condition : D68, D69]

## **FACILITY PERMIT TO OPERATE NASA JET PROPULSION LAB**

### **SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS**

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

J373.4 The operator shall comply with the following gasoline transfer and dispensing requirements:

## **FACILITY PERMIT TO OPERATE NASA JET PROPULSION LAB**

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

All phase I and phase II vapor recovery equipment at this facility shall be installed, operated and maintained to meet all California Air Resources Board certification requirements.

A static torque test of rotatable phase I adaptors shall be conducted to quantify the amount of static torque required to start the rotation of the rotatable phase I adaptors. The test shall be conducted in accordance with the test procedure method outlined in TP-201.1B as a performance test and as a reverification test. Results shall be submitted to the AQMD, Office of Engineering and Compliance, within seventy-two (72) hours of test.

A static pressure leak decay test shall be conducted to demonstrate that the storage tanks, the remote and/or nozzle vapor recovery check valves, associated vapor return piping and fittings are free from vapor leaks. The test shall be conducted in accordance with CARB test procedure method TP-201.3 as a performance test and as a reverification test. Results shall be submitted to the AQMD, Office of Engineering and Compliance, within seventy-two (72) hours of test.

A static pressure performance test for the Healy clean air separator using both the vacuum decay procedure and the positive pressure procedure shall be conducted to quantify the vapor tightness of the Healy clean air separator tank pressure management system. These tests shall be conducted in accordance with exhibit 4 of CARB Executive Order VR-202-A as a performance test and reverification test. Results shall be submitted to the AQMD, Office of Engineering and Compliance within seventy-two (72) hours of

A vapor to liquid volume ratio test shall be conducted to quantify the vapor to liquid (v/l) volumetric ratio of the Healy clean air separator system. The test shall be conducted in accordance with exhibit 5 of CARB Executive Order VR-202-A as a performance test and as a reverification test. Results shall be submitted to the AQMD, Office of Engineering and Compliance within seventy-two (72) hours of test.

A nozzle bag test shall be conducted on the Healy phase II EVR nozzles to verify the integrity of the vapor valve. The test shall be conducted on any newly installed or replaced Healy phase II EVR nozzles and in accordance with exhibit 7 of CARB

## **FACILITY PERMIT TO OPERATE NASA JET PROPULSION LAB**

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

Executive Order VR-202-A results shall be submitted to the AQMD, Office of Engineering and Compliance within seventy-two (72) hours of test.

The static pressure leak decay test TP-201.3, shall be conducted in accordance with exhibit 8 of CARB Executive Order VR-202-A verification of completing each step as outlined shall be documented by submitting a copy of exhibit 8 to the AQMD, Office of Engineering and Compliance within seventy-two (72) hours of test.

An ISD operability test shall be conducted in accordance with exhibit 9 of CARB Executive Order VR-202-A to verify the equipment's operability for vapor containment monitoring and vapor collection monitoring. The test shall be conducted as a performance test and as a reverification test. Furthermore, the ISD operability test shall be conducted immediately whenever a vapor pressure sensor or a vapor flow meter is replaced. Results shall be submitted to the AQMD, Office of Engineering and Compliance within

The AQMD shall be notified by e-mail at R461testing@aqmd.gov or by facsimile at telephone number (909) 396-3606 at least seventy-two (72) hours prior to any of the above mentioned testing requirements. Such notification shall include the name of the owner or operator; the name of the contractor; the location of the facility; and the scheduled start and completion dates of the tests to be performed.

The testing for the above mentioned tests shall be conducted in accordance with the most recent Rule 461 amendment or CARB Executive Order requirements, whichever is more stringent.

The vapor return piping shall only use straight length Upp piping and installed in accordance with the manufacturer's instructions and specified conditions as outlined in CARB approval letter #02-13.

All records and test results that are required to be maintained by rule 461 shall be kept on site for five years and made available to District representatives upon request.

**[RULE 461, 6-3-2005; RULE 461, 3-7-2008]**

## **FACILITY PERMIT TO OPERATE NASA JET PROPULSION LAB**

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

[Devices subject to this condition : D68, D69]

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

K67.1 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

Records which clearly identify and locate the methanol compatible storage tank and its piping, such records shall state the tank manufacturer and date of installation.

[RULE 1170, 5-6-1988]

[Devices subject to this condition : D69]

K67.2 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

Monthly records of the total amount of 100 percent Arsine used. All records shall be prepared in a format which is acceptable to the AQMD

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

[Devices subject to this condition : D83]

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

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.

## **FACILITY PERMIT TO OPERATE NASA JET PROPULSION LAB**

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

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

[Devices subject to this condition : D38]

K67.4 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

Flow rate of the scrubbing solution, determined and recorded once every day.

Scrubbing solution pH, determined and recorded once every day.

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

[Devices subject to this condition : C131]

K67.5 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

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

Date, time, and results of inspection.

Date, time and description of repairs made.

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

[Devices subject to this condition : E143]

K67.6 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

## **FACILITY PERMIT TO OPERATE NASA JET PROPULSION LAB**

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

For architectural applications where thinners, reducers, or other VOC containing materials are added, maintain daily records for each coating consisting of (a) coating type, (b) VOC content as applied in grams per liter (g/l) of materials used for low-solids coatings, (c) VOC content as applied in g/l of coating, less water and exempt solvent, for other coatings.

For architectural applications where no thinners, reducers, or other VOC containing materials are added, maintain semi-annual records for all coating consisting of (a) coating type, (b) VOC content as supplied in grams per liter (g/l) of materials for low-solids coatings, (c) VOC content as supplied in g/l of coating, less water and exempt solvent, for other coatings.

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

[Devices subject to this condition : E151]

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):

## **FACILITY PERMIT TO OPERATE NASA JET PROPULSION LAB**

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

**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 : D3, D4, D6, D7, D8, D9, D10, D13, D14, D15, D16, D18, D138, D154, D155, D159, D164, D165, D166]

K67.11 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

Type of solvent used.

Total quantity of solvent used in any one day and in any one month.

Daily and monthly VOC emissions expressed in pounds per day or month.

VOC content of the solvent.

[**RULE 109, 5-2-2003**]

[Devices subject to this condition : D158]

## 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/<br>Monitoring Unit | Emissions*<br>And Requirements  | Conditions   |
|--|--------|--------------|---|---|--|
| <b>Process 1: INTERNAL COMBUSTION EQUIPMENT</b>  |        |              |   |   |  |
| <b>System 10: BUILDING 302</b>   |        |              |   |   |  |
| 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<br>A/N: 540642<br>Permit to Construct Issued: 11/07/12 | 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: 0.023 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 |
| <b>Process 3: SURFACE COATING EQUIPMENT</b>  |        |              |   |   |  |
| <b>System 4: COATING OPERATION, BLDG. 18</b>   |        |              |   |   |  |
| 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<br>A/N: 526767<br>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 (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 NASA JET PROPULSION LAB**

## **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  
NASA JET PROPULSION LAB**

**SECTION H: DEVICE ID INDEX**

| <b>Device Index For Section H</b> |                           |                |               |
|-----------------------------------|---------------------------|----------------|---------------|
| <b>Device ID</b>                  | <b>Section H Page No.</b> | <b>Process</b> | <b>System</b> |
| D38                               | 1                         | 3              | 4             |
| D168                              | 1                         | 1              | 10            |

## **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:**

#### **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]

## 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:

#### 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]

## 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:

#### 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]

## **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:**

[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..

## **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:**

[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:

## **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:**

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:

## 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:**

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]

## 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:**

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,<br>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):

## 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:**

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):

## **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:**

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]