MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT
14306 Park Avenue, Victorville, CA 92392-2310
760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

AUTHORITY TO CONSTRUCT

B010789

If construction is not completed by the expiration date of this permit, it may be renewed for one additional year upon payment of applicable fees. Any additional extension will require the written approval of the Air Pollution Control Officer. This Authority to Construct may serve as a temporary Permit to Operate provided the APCO is given prior notice of intent to operate and the Permit to Operate is not specifically denied.

EXPIRES LAST DAY OF: SEPTEMBER 2019

OWNER OR OPERATOR (Co.#133)

NASA/Goldstone
93 Goldstone Rd.
Fort Irwin, CA 92310

EQUIPMENT LOCATION (Fac.#611)

NASA/Goldstone Deep Space Communications Complex
Goldstone Lake
Fort Irwin, CA 92311

Description:
PROPANE IC ENGINE, PORTABLE GENERATOR consisting of: Year of Manufacture 2009, USEPA Family Name BPSIB5.702ED, stack height 2', stack diameter 2", exhaust flow rate of 735 cubic feet per minute at 1250 degrees Fahrenheit.

One General Motors, Propane fired internal combustion engine Model No. 8.1 and Serial No. 21400S09, Four-Stroke Rich Burn, Turbo Charged, producing 162 bhp with 8 cylinders at 1800 rpm while consuming a maximum of 7 gal/hr. This equipment powers a Kohler Generator Model No. 100 REZG and Serial No. 2270879, rated at 100 kW(e).

EMISSIONS RATES

Emission Type	Est. Max Load	Unit
CO	0.0895	gm/bhp-hr
NOx	0.246	gm/bhp-hr
PM10	0.0149	gm/bhp-hr
SOx	0.002	gm/bhp-hr
VOC	0.0224	gm/bhp-hr

CONDITIONS:

1. This equipment shall be installed, operated and maintained in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles in a manner consistent with good air pollution control practice for minimizing emissions. Unless otherwise noted, this equipment shall also be operated in accordance with all data and

Fee Schedule: 1 (C) | Rating: 162 bhp | SIC: 9661 | SCC: 20301001 | Location/Coordinates: +35.30046, -116.80306

This permit does not authorize the emission of air contaminants in excess of those allowed by law, including Division 26 of the Health and Safety Code of the State of California and the Rules and Regulations of the District. This permit cannot be construed as permission to violate existing laws, ordinances, statutes or regulations of this or other governmental agencies. This permit must be renewed by the expiration date above. If billing for renewal fee required by Rule 301(c) is not received by expiration date above, please contact the District.

NASA/Goldstone
93 Goldstone Rd.
Fort Irwin, CA 92310

By: **COPY**
Brad Poiriez
Air Pollution Control Officer

Permit: B010789 Issue Date: DRAFT

specifications submitted with the application for this permit.
[District Rule 1302(C)(2)(a)]

2. This engine cannot remain at a location for more than twelve (12) consecutive months. A location is any single site at a building, structure, facility, or installation. Any engine (or engines) that replaces an engine at a location and that is intended to perform the same or similar function as the engine replaced will be included in calculating the consecutive time period.
[40 CFR 1068.30 "nonroad engine" (2)(iii)]

If the owner/operator intends to utilize this engine as a stationary engine, a permit modification must be submitted to the District prior to stationary operation, and the engine is subject to all stationary engine regulations.
[District Rule 1302(C)(2)(a)]

3. This unit shall only be fired on Propane or LPG.
[District Rule 431]

4. A non-resettable four-digit (9,999) hour timer shall be installed and maintained on this unit to indicate elapsed engine operating time.
[District Rule 1302(C)(2)(a)]

5. Facility-wide emissions shall not exceed 80 tons per year of NOx, 24 tons per year of VOC, and 18 tons per year of PM10. Facility-wide emissions shall be calculated and recorded, in tons, on a calendar month basis and totaled for each consecutive twelve-month basis. For emergency engines, only emissions generated during testing and maintenance shall apply toward the facility-wide emission limits. These records shall be maintained as current for a minimum of five (5) years, and made available upon District, State and/or Federal request.
[District Rule 221(B)]

6. The owner/operator shall maintain an operations log for this equipment, current and on-site (or at a central location), for a minimum of five (5) years, and this log shall be provided to District, State and/or Federal personnel, upon request. The log shall include, at a minimum, the information specified below:
a. Date and location of each use; and,
b. Duration of each use (in hours) and the type of use (regular prime use, emergency, testing & maintenance, etc.); and,
c. Calendar year operation in terms of fuel consumption (in gallons or equivalent) and total hours.
[District Rule 1203 (D)(1)(d)(ii)]

7. A facility wide Comprehensive Emission Inventory (CEI) for all emitted criteria and toxic air pollutants must be submitted to the District, in a format approved by the District, upon District request.
[District Rule 107(b), H&S Code 39607 & 44341-44342, and 40 CFR 51, Subpart A]

MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT
14306 Park Avenue, Victorville, CA 92392-2310
760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

AUTHORITY TO CONSTRUCT

B011623

If construction is not completed by the expiration date of this permit, it may be renewed for one additional year upon payment of applicable fees. Any additional extension will require the written approval of the Air Pollution Control Officer. This Authority to Construct may serve as a temporary Permit to Operate provided the APCO is given prior notice of intent to operate and the Permit to Operate is not specifically denied.

EXPIRES LAST DAY OF: SEPTEMBER 2019

OWNER OR OPERATOR (Co.#133)

NASA/Goldstone
93 Goldstone Rd.
Fort Irwin, CA 92310

EQUIPMENT LOCATION (Fac.#611)

NASA/Goldstone Deep Space Communications Complex
Goldstone Lake
Fort Irwin, CA 92311

Description:
PROPANE IC ENGINE, PORTABLE GENERATOR consisting of: Year of Manufacture 2010, USEPA Family Name BPSIB5.702ED, stack height 2', stack diameter 2", exhaust flow rate of 735 cubic feet per minute at 1250 degrees Fahrenheit.

One General Motors, Propane fired internal combustion engine Model No. 8.1 and Serial No. 23472, Four-Stroke Rich Burn, Turbo Charged, producing 162 bhp with 8 cylinders at 1800 rpm while consuming a maximum of 7 gal/hr. This equipment powers a Kohler Generator Model No. 100 REZG and Serial No. 2335656, rated at 100 kW(e).

EMISSIONS RATES

Emission Type	Est. Max Load	Unit
CO	0.0895	gm/bhp-hr
NOx	0.246	gm/bhp-hr
PM10	0.0149	gm/bhp-hr
SOx	0.002	gm/bhp-hr
VOC	0.0224	gm/bhp-hr

CONDITIONS:

1. This equipment shall be installed, operated and maintained in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles in a manner consistent with good air pollution control practice for minimizing emissions. Unless otherwise noted, this equipment shall also be operated in accordance with all data and

Fee Schedule: 1 (b) | Rating: 162 bhp | SIC: 9661 | SCC: 20201001 | Location/Coordinates: +35.30046, -116.80306

This permit does not authorize the emission of air contaminants in excess of those allowed by law, including Division 26 of the Health and Safety Code of the State of California and the Rules and Regulations of the District. This permit cannot be construed as permission to violate existing laws, ordinances, statutes or regulations of this or other governmental agencies. This permit must be renewed by the expiration date above. If billing for renewal fee required by Rule 301(c) is not received by expiration date above, please contact the District.

NASA/Goldstone
93 Goldstone Rd.
Fort Irwin, CA 92310

By: **COPY**
Brad Poiriez
Air Pollution Control Officer

Permit: B011623 Issue Date: DRAFT

specifications submitted with the application for this permit.
[District Rule 1302(C)(2)(a)]

2. This engine cannot remain at a location for more than twelve (12) consecutive months. A location is any single site at a building, structure, facility, or installation. Any engine (or engines) that replaces an engine at a location and that is intended to perform the same or similar function as the engine replaced will be included in calculating the consecutive time period.
[40 CFR 1068.30 "nonroad engine" (2)(iii)]

If the owner/operator intends to utilize this engine as a stationary engine, a permit modification must be submitted to the District prior to stationary operation, and the engine is subject to all stationary engine regulations.
[District Rule 1302(C)(2)(a)]

3. This unit shall only be fired on Propane or LPG.
[District Rule 431]

4. A non-resettable four-digit (9,999) hour timer shall be installed and maintained on this unit to indicate elapsed engine operating time.
[District Rule 1302(C)(2)(a)]

5. Facility-wide emissions shall not exceed 80 tons per year of NOx, 24 tons per year of VOC, and 18 tons per year of PM10. Facility-wide emissions shall be calculated and recorded, in tons, on a calendar month basis and totaled for each consecutive twelve-month basis. For emergency engines, only emissions generated during testing and maintenance shall apply toward the facility-wide emission limits. These records shall be maintained as current for a minimum of five (5) years, and made available upon District, State and/or Federal request.
[District Rule 221(B)]

6. The owner/operator shall maintain an operations log for this equipment, current and on-site (or at a central location), for a minimum of five (5) years, and this log shall be provided to District, State and/or Federal personnel, upon request. The log shall include, at a minimum, the information specified below:
a. Date and location of each use; and,
b. Duration of each use (in hours) and the type of use (regular prime use, emergency, testing & maintenance, etc.); and,
c. Calendar year operation in terms of fuel consumption (in gallons or equivalent) and total hours.
[Rule 1203(D)(1)(d)(ii)]

7. A facility wide Comprehensive Emission Inventory (CEI) for all emitted criteria and toxic air pollutants must be submitted to the District, in a format approved by the District, upon District request.
[District Rule 107(b), H&S Code 39607 & 44341-44342, and 40 CFR 51, Subpart A]

MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT
14306 Park Avenue, Victorville, CA 92392-2310
760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

AUTHORITY TO CONSTRUCT

B012692

If construction is not completed by the expiration date of this permit, it may be renewed for one additional year upon payment of applicable fees. Any additional extension will require the written approval of the Air Pollution Control Officer. This Authority to Construct may serve as a temporary Permit to Operate provided the APCO is given prior notice of intent to operate and the Permit to Operate is not specifically denied.

EXPIRES LAST DAY OF: SEPTEMBER 2019

OWNER OR OPERATOR (Co.#133)

NASA/Goldstone
93 Goldstone Rd.
Fort Irwin, CA 92310

EQUIPMENT LOCATION (Fac.#611)

NASA/Goldstone Deep Space Communications Complex
Goldstone Lake
Fort Irwin, CA 92311

Description:
DIESEL IC ENGINE, PORTABLE, WELDER consisting of: Year of Manufacture 2015, Tier 4, USEPA Family Name FDZXL02.9020, stack height 5' and a stack diameter of 2".

One Deutz, Diesel fired internal combustion engine Model No. TD2.9L4 and Serial No. 11842669, Direct Injected, Turbo Charged, Electronic Control Module, producing 72 bhp with 3 cylinders at 2200 rpm while consuming a maximum of 4 gal/hr. This equipment powers a Miller Welder Model No. 907062-07-01 and Serial No. LC432006, rated at 600 ampere.

EMISSIONS RATES

Emission Type	Est. Max Load	Unit
CO	0.022	gm/bhp-hr
NOx	2.76	gm/bhp-hr
PM10	0.015	gm/bhp-hr
PM2.5	0.015	gm/bhp-hr
SOx	0.005	gm/bhp-hr
VOC	0.007	gm/bhp-hr

CONDITIONS:

1. This equipment shall be installed, operated and maintained in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles in a manner consistent with good air pollution control practice for

Fee Schedule: 1 (b) | Rating: 72 bhp | SIC: 9661 | SCC: 20200102 | Location/Coordinates: +35.42450, -116.89032

This permit does not authorize the emission of air contaminants in excess of those allowed by law, including Division 26 of the Health and Safety Code of the State of California and the Rules and Regulations of the District. This permit cannot be construed as permission to violate existing laws, ordinances, statutes or regulations of this or other governmental agencies. This permit must be renewed by the expiration date above. If billing for renewal fee required by Rule 301(c) is not received by expiration date above, please contact the District.

NASA/Goldstone
93 Goldstone Rd.
Fort Irwin, CA 92310

By: **COPY**
Brad Poiriez
Air Pollution Control Officer

Permit: B012692 Issue Date: DRAFT

minimizing emissions. Unless otherwise noted, this equipment shall also be operated in accordance with all data and specifications submitted with the application for this permit.
[District Rule 1302(C)(2)(a)]

2. This diesel ICE and its associated equipment cannot be operated at the same engine-print (spot) for more than 365 consecutive days. This equipment must be moved within this facility or moved to another facility annually. The amount of time that the equipment is kept in the storage location does not count towards the residence requirement so long as the equipment is not set up in an operational configuration.
[Title 17 CCR 93116.2(a)(29)]

3. This unit shall only be fired on ultra-low sulfur diesel fuel whose sulfur concentration is less than or equal to 0.0015% (15 ppm) on a weight per weight basis per CARB Diesel or equivalent requirements; or alternative diesel fuel, or CARB diesel fuel utilizing fuel additives, that has been verified through the Verification Procedure for In-Use Strategies to Control Emissions from Diesel Engines.
[Title 17 CCR 93116.3(a)]

4. A non-resettable four-digit (9,999) hour timer shall be installed and maintained on this unit to indicate elapsed engine operating time.
[District Rule 1302(C)(2)(a)]

5. Facility-wide emissions shall not exceed 80 tons per year of NOx, 24 tons per year of VOC, and 18 tons per year of PM10. Facility-wide emissions shall be calculated and recorded, in tons, on a calendar month basis and totaled for each consecutive twelve-month basis. For emergency engines, only emissions generated during testing and maintenance shall apply toward the facility-wide emission limits. These records shall be maintained as current for a minimum of five (5) years, and made available upon District, State and/or Federal request.
[District Rule 221(B)]

6. The owner/operator shall maintain an operations log for this unit, current and on-site (or at a central location), for a minimum of five (5) years, and this log shall be provided to District, State and Federal personnel upon request. The log shall include, at a minimum, the information specified below:
a. Date of each use and duration of each use (in hours);
b. Reason for use (regular prime use, emergency, testing & maintenance, etc.);
c. Calendar year operation in terms of fuel consumption (in gallons) and total hours; and,
d. Fuel sulfur concentration (may use the supplier's certification of sulfur content if it is maintained as part of this log).
[District Rule 1302(C)(2)(a)]

7. This portable, diesel-fired engine is certified to Tier 4 final emission standards and is therefore exempted from the requirements of section 93116.4 of Title 17 CCR 93116. To establish this exemption the Responsible Official (owner/operator) must provide the Certification Statement to the District and CARB when the engine initially satisfies the requirements of section 93116.4(a). This certification statement must list the following for each engine:
a. The District permit number; and,
b. The serial number.

Compliance Statements should be sent to the District via mail or electronically to reporting@mdaqmd.ca.gov

Compliance Statements should be mailed to CARB at:
ARB/PERP
P.O. Box 2038
Sacramento, CA 95812
[Title 17 CCR 93116.4(a)and(e)]

8. This unit is subject to the requirements of Title 17 CCR 93116, the Airborne Toxic Control Measure for Diesel Particulate Matter from Portable Engines Rated at 50 Horsepower and Greater.

[Title 17 CCR 93116]

9. A facility wide Comprehensive Emission Inventory Report (CEIR) for all emitted criteria and toxic air pollutants must be submitted to the District, in a format approved by the District, upon District request.
[District Rule 107(b), H&S Code 39607 & 44341-44342, and 40 CFR 51, Subpart A]

MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT
14306 Park Avenue, Victorville, CA 92392-2310
760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

AUTHORITY TO CONSTRUCT

B012693

If construction is not completed by the expiration date of this permit, it may be renewed for one additional year upon payment of applicable fees. Any additional extension will require the written approval of the Air Pollution Control Officer. This Authority to Construct may serve as a temporary Permit to Operate provided the APCO is given prior notice of intent to operate and the Permit to Operate is not specifically denied.

EXPIRES LAST DAY OF: SEPTEMBER 2019

OWNER OR OPERATOR (Co.#133)

NASA/Goldstone
93 Goldstone Rd.
Fort Irwin, CA 92310

EQUIPMENT LOCATION (Fac.#611)

NASA/Goldstone Deep Space Communications Complex
Goldstone Lake
Fort Irwin, CA 92311

Description:
DIESEL IC ENGINE, PORTABLE, WELDER consisting of: Year of Manufacture 2015, Tier 4, USEPA Family Name FDZXL02.9020, stack height 6.3' and a stack diameter of 1.75".

One Deutz, Diesel fired internal combustion engine Model No. TD2.9L4 and Serial No. 11848053, Direct Injected, Turbo Charged, Electronic Control Module, producing 72 bhp with 3 cylinders at 2200 rpm while consuming a maximum of 4 gal/hr. This equipment powers a Miller Welder Model No. 907062-07-01 and Serial No. LF244855, rated at 600 ampere.

EMISSIONS RATES

Emission Type	Est. Max Load	Unit
CO	0.022	gm/bhp-hr
NOx	2.76	gm/bhp-hr
PM10	0.015	gm/bhp-hr
PM2.5	0.015	gm/bhp-hr
SOx	0.005	gm/bhp-hr
VOC	0.007	gm/bhp-hr

CONDITIONS:

1. This equipment shall be installed, operated and maintained in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles in a manner consistent with good air pollution control practice for

Fee Schedule: 1 (b) | Rating: 72 bhp | SIC: 9661 | SCC: 20200102 | Location/Coordinates: +35.42450, -116.89032

This permit does not authorize the emission of air contaminants in excess of those allowed by law, including Division 26 of the Health and Safety Code of the State of California and the Rules and Regulations of the District. This permit cannot be construed as permission to violate existing laws, ordinances, statutes or regulations of this or other governmental agencies. This permit must be renewed by the expiration date above. If billing for renewal fee required by Rule 301(c) is not received by expiration date above, please contact the District.

NASA/Goldstone
93 Goldstone Rd.
Fort Irwin, CA 92310

By: **COPY**
Brad Poiriez
Air Pollution Control Officer

Permit: B012693 Issue Date: DRAFT

minimizing emissions. Unless otherwise noted, this equipment shall also be operated in accordance with all data and specifications submitted with the application for this permit.
[District Rule 1302(C)(2)(a)]

2. This diesel ICE and its associated equipment cannot be operated at the same engine-print (spot) for more than 365 consecutive days. This equipment must be moved within this facility or moved to another facility annually. The amount of time that the equipment is kept in the storage location does not count towards the residence requirement so long as the equipment is not set up in an operational configuration.
[Title 17 CCR 93116.2(a)(29)]

3. This unit shall only be fired on ultra-low sulfur diesel fuel whose sulfur concentration is less than or equal to 0.0015% (15 ppm) on a weight per weight basis per CARB Diesel or equivalent requirements; or alternative diesel fuel, or CARB diesel fuel utilizing fuel additives, that has been verified through the Verification Procedure for In-Use Strategies to Control Emissions from Diesel Engines.
[Title 17 CCR 93116.3(a)]

4. A non-resettable four-digit (9,999) hour timer shall be installed and maintained on this unit to indicate elapsed engine operating time.
District Rule 1302(C)(2)(a)]

5. Facility-wide emissions shall not exceed 80 tons per year of NOx, 24 tons per year of VOC, and 18 tons per year of PM10. Facility-wide emissions shall be calculated and recorded, in tons, on a calendar month basis and totaled for each consecutive twelve-month basis. For emergency engines, only emissions generated during testing and maintenance shall apply toward the facility-wide emission limits. These records shall be maintained as current for a minimum of five (5) years, and made available upon District, State and/or Federal request.
[District Rule 221(B)]

6. The owner/operator shall maintain an operations log for this unit, current and on-site (or at a central location), for a minimum of five (5) years, and this log shall be provided to District, State and Federal personnel upon request. The log shall include, at a minimum, the information specified below:
a. Date of each use and duration of each use (in hours);
b. Reason for use (regular prime use, emergency, testing & maintenance, etc.);
c. Calendar year operation in terms of fuel consumption (in gallons) and total hours; and,
d. Fuel sulfur concentration (may use the supplier's certification of sulfur content if it is maintained as part of this log).
[Title 17 CCR 93116.4(c)(2)(C)]

7. This portable, diesel-fired engine is certified to Tier 4 final emission standards and is therefore exempted from the requirements of section 93116.4 of Title 17 CCR 93116. To establish this exemption the Responsible Official (owner/operator) must provide the Certification Statement to the District and CARB when the engine initially satisfies the requirements of section 93116.4(a). This certification statement must list the following for each engine:
a. The District permit number; and,
b. The serial number.

Compliance Statements should be sent to the District via mail or electronically to reporting@mdaqmd.ca.gov

Compliance Statements should be mailed to CARB at:
ARB/PERP
P.O. Box 2038
Sacramento, CA 95812
[Title 17 CCR 93116.4(a)and(e)]

8. This unit is subject to the requirements of Title 17 CCR 93116, the Airborne Toxic Control Measure for Diesel Particulate Matter from Portable Engines Rated at 50 Horsepower and Greater.

[Title 17 CCR 93116]

9. A facility wide Comprehensive Emission Inventory Report (CEIR) for all emitted criteria and toxic air pollutants must be submitted to the District, in a format approved by the District, upon District request.
[District Rule 107(b), H&S Code 39607 & 44341-44342, and 40 CFR 51, Subpart A]

MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT
14306 Park Avenue, Victorville, CA 92392-2310
760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

AUTHORITY TO CONSTRUCT

B012695

If construction is not completed by the expiration date of this permit, it may be renewed for one additional year upon payment of applicable fees. Any additional extension will require the written approval of the Air Pollution Control Officer. This Authority to Construct may serve as a temporary Permit to Operate provided the APCO is given prior notice of intent to operate and the Permit to Operate is not specifically denied.

EXPIRES LAST DAY OF: SEPTEMBER 2019

OWNER OR OPERATOR (Co.#133)

NASA/Goldstone
93 Goldstone Rd.
Fort Irwin, CA 92310

EQUIPMENT LOCATION (Fac.#611)

NASA/Goldstone Deep Space Communications Complex
Goldstone Lake
Fort Irwin, CA 92311

Description:
PROPANE IC ENGINE, PORTABLE GENERATOR consisting of: Year of Manufacture 2016, USEPA Family Name GPSIB8.80NGP-012, stack height 6', and stack diameter 0.25".

One Power Solution International, Inc., Propane fired internal combustion engine Model No. Industrial 8.8L and Serial No. SGM32HG87, Four-Stroke Rich Burn, producing 185 bhp with 8 cylinders at 1800 rpm while consuming a maximum of 0.02 lbs/hr. This equipment powers a Kohler Generator Model No. 125REZGT and Serial No. GM99497-GA1, rated at 185 kW(e).

EMISSIONS RATES

Emission Type	Est. Max Load	Unit
CO	0.176	gm/bhp-hr
NOx	0.032	gm/bhp-hr
PM10	0.010	lbs/MMBtu
PM2.5	0.010	lbs/MMBtu
SOx	0.001	lbs/MMBtu
VOC	0.004	gm/bhp-hr

CONDITIONS:

1. This equipment shall be installed, operated and maintained in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles in a manner consistent with good air pollution control practice for

Fee Schedule: 1 (b) | Rating: 185 bhp | SIC: 9661 | SCC: 20201001 | Location/Coordinates: +35.30046, -116.80306

This permit does not authorize the emission of air contaminants in excess of those allowed by law, including Division 26 of the Health and Safety Code of the State of California and the Rules and Regulations of the District. This permit cannot be construed as permission to violate existing laws, ordinances, statutes or regulations of this or other governmental agencies. This permit must be renewed by the expiration date above. If billing for renewal fee required by Rule 301(c) is not received by expiration date above, please contact the District.

NASA/Goldstone
93 Goldstone Rd.
Fort Irwin, CA 92310

By: **COPY**
Brad Poiriez
Air Pollution Control Officer

Permit: B012695 Issue Date: DRAFT

minimizing emissions. Unless otherwise noted, this equipment shall also be operated in accordance with all data and specifications submitted with the application for this permit.
[District Rule 1302(C)(2)(a)]

2. This engine cannot remain at a location for more than twelve (12) consecutive months. A location is any single site at a building, structure, facility, or installation. Any engine (or engines) that replaces an engine at a location and that is intended to perform the same or similar function as the engine replaced will be included in calculating the consecutive time period.
[40 CFR 1068.30 "nonroad engine" (2)(iii)]

If the owner/operator intends to utilize this engine as a stationary engine, a permit modification must be submitted to the District prior to stationary operation, and the engine is subject to all stationary engine regulations.
[District Rule 1302(C)(2)(a)]

3. This unit shall only be fired on Propane or LPG.
[District Rule 431]

4. A non-resettable four-digit (9,999) hour timer shall be installed and maintained on this unit to indicate elapsed engine operating time.
[District Rule 1302(C)(2)(a)]

5. Facility-wide emissions shall not exceed 80 tons per year of NOx, 24 tons per year of VOC, and 18 tons per year of PM10. Facility-wide emissions shall be calculated and recorded, in tons, on a calendar month basis and totaled for each consecutive twelve-month basis. For emergency engines, only emissions generated during testing and maintenance shall apply toward the facility-wide emission limits. These records shall be maintained as current for a minimum of five (5) years, and made available upon District, State and/or Federal request.
[District Rule 221(B)]

6. The owner/operator shall maintain an operations log for this equipment, current and on-site (or at a central location), for a minimum of five (5) years, and this log shall be provided to District, State and/or Federal personnel, upon request. The log shall include, at a minimum, the information specified below:
a. Date and location of each use; and,
b. Duration of each use (in hours) and the type of use (regular prime use, emergency, testing & maintenance, etc.); and,
c. Calendar year operation in terms of fuel consumption (in gallons or equivalent) and total hours.
[Rule 1203(D)(1)(d)(ii)]

7. A facility wide Comprehensive Emission Inventory (CEI) for all emitted criteria and toxic air pollutants must be submitted to the District, in a format approved by the District, upon District request.
[District Rule 107(b), H&S Code 39607 & 44341-44342, and 40 CFR 51, Subpart A]

MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT
14306 Park Avenue, Victorville, CA 92392-2310
760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

AUTHORITY TO CONSTRUCT

E000272

If construction is not completed by the expiration date of this permit, it may be renewed for one additional year upon payment of applicable fees. Any additional extension will require the written approval of the Air Pollution Control Officer. This Authority to Construct may serve as a temporary Permit to Operate provided the APCO is given prior notice of intent to operate and the Permit to Operate is not specifically denied.

EXPIRES LAST DAY OF: SEPTEMBER 2019

OWNER OR OPERATOR (Co.#133)

NASA/Goldstone
93 Goldstone Rd.
Fort Irwin, CA 92310

EQUIPMENT LOCATION (Fac.#611)

NASA/Goldstone Deep Space Communications Complex
Goldstone Lake
Fort Irwin, CA 92311

Description:
DIESEL IC ENGINE, EMERGENCY GENERATOR (UNIT #2C: Building G-81) - MARS SITE consisting of: Year of Manufacturer 1967, uncertified, existing ICE with a stack height of 27.6', stack diameter of 12", and an exhaust flow rate of 1155 cubic feet per minute at 738 degrees Fahrenheit.

One Caterpillar, Diesel fired internal combustion engine Model No. 398 and Serial No. 66B1555, After Cooled, Direct Injected, Turbo Charged, producing 875 bhp with 12 cylinders at 1200 rpm while consuming a maximum of 48 gal/hr. This equipment powers a Ideal Electric Generator Model No. SAB and Serial No. 260370, rated at 600 kW(e).

CONDITIONS:

1. This existing, diesel engine, and any associated air pollution control equipment, shall be installed, operated, and maintained in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles, which produce the minimum emissions of contaminants. Unless otherwise noted, this equipment shall also be operated in accordance with all data and specifications submitted with the application for this permit.
[40 CFR 63.6605(a) and (b) and 63.6625(e)]

2. A non-resettable four-digit (9,999) hour timer shall be installed and maintained on this equipment to indicate elapsed engine operating time.
[17 CCR 93115.10(d) and 40 CFR 63.6625(f)]

Fee Schedule: 7 (g)	Rating: 875 device	SIC: 9661	SCC: 20100102	Location/Coordinates: +35.42509, -116.89062

This permit does not authorize the emission of air contaminants in excess of those allowed by law, including Division 26 of the Health and Safety Code of the State of California and the Rules and Regulations of the District. This permit cannot be construed as permission to violate existing laws, ordinances, statutes or regulations of this or other governmental agencies. This permit must be renewed by the expiration date above. If billing for renewal fee required by Rule 301(c) is not received by expiration date above, please contact the District.

NASA/Goldstone
93 Goldstone Rd.
Fort Irwin, CA 92310

By: **COPY**

Brad Poiriez
Air Pollution Control Officer

3. This equipment shall only be fired on diesel fuel that meets the requirements of CARB Diesel Fuel as defined in 17 CCR 93115.4(a)(8), or an alternative fuel that meets the requirements of 17 CCR 93115.5(a)(2-6), pursuant to the Air Toxic Control Measure for Stationary Compression Ignition Engines.
[17 CCR 93115.5(a)]

4. This equipment shall be limited to use for emergency power, defined as in response to a fire or when commercially available power has been interrupted or may be interrupted or disrupted by weather. In addition, this unit shall be operated no more than twenty (20) hours per year for testing and maintenance.
[17 CCR 93115.6(b)(3) and 40 CFR 63.6640(f)(ii)]

5. Facility-wide emissions shall not exceed 80 tons per year of NOx, 24 tons per year of VOC, and 18 tons per year of PM10. Facility-wide emissions shall be calculated and recorded, in tons, on a calendar month basis and totaled for each consecutive twelve-month basis. For emergency engines, only emissions generated during testing and maintenance shall apply toward the facility-wide emission limits. These records shall be maintained as current for a minimum of five (5) years, and made available upon District, State and/or Federal request.
[District Rule 221(B)]

6. Emergency use includes providing electrical power or mechanical work during day-of-rocket launch and day of space plane vehicle re-entry/landing system checks and tracking performed (in parallel with grid power) by the United States Department of Defense at Command Transmitter sites (also known as "CT" sites) that occur within the 24-hour time period associated with the scheduled time of the launch or re-entry/landing.
[17 CCR 93115.4(a)(30)(G)]

7. The owner/operator shall maintain an operations log for this equipment current and on-site (or at a central location) for a minimum of five (5) years, and this log shall be provided to District, State and/or Federal personnel, upon request. The log shall include, at a minimum, the information specified below:
a. Date of each use and hours of operation with documentation of how many hours are spent for emergency operation, including what classified the operation as emergency (i.e. commercial power unavailable, weather-threatening power availability, or command transmitting as allowed per condition 6), and how many hours are spent for non-emergency operation, including what classified the operation as non-emergency. [17 CCR 93115.10(f) and 40 CFR 63.6655(f)]; and,
b. Monthly and calendar year operation in terms of total hours, both emergency and non-emergency use, classified as described in 'a.' above [17 CCR 93115.10(f)]; and,
c. Monthly fuel use [17 CCR 93115.10(f)]; and,
d. Documentation of certified fuel use, as required by condition 3 (may use the supplier's certification of sulfur content if it is maintained as part of this log); and,
e. Maintenance performed on this equipment, inclusive of the management practice requirements of condition 8 below; and,
f. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment [40 CFR 63.6640(b) and 63.6655(a)(2)]; and,
g. Records of all required maintenance performed on the air pollution control and monitoring equipment [40 CFR 63.6655(a)(4)]; and,
h. Records of actions taken during periods of malfunction to minimize emissions in accordance with condition 1, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation [40 CFR63.6655(a)(5)].

8. This engine is subject to the requirements of 40 CFR 63, Subpart ZZZZ, and pursuant to this federal regulation, this engine is required to meet the following compliance requirements by May 3, 2013:

The owner/operator of this equipment shall demonstrate continuous compliance by committing to a maintenance schedule inclusive of the management practice requirements listed below:
a. Change oil and oil filter every 500 hours of operation or annually, whichever comes first (source has the option to utilize an oil analysis program pursuant to 40 CFR 63.6625(i) in order to extend the specified oil change requirement.);
b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and,
c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
[40 CFR 63.6603(a) and 63.6640(a)]

9. If this emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements required by condition 8, or shutting down the engine would pose an unacceptable risk, the management practice can be delayed until the emergency is over, or the risk has been abated. The management practice should be performed as soon as practicable after the emergency/risk has ended. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.
[40 CFR 63.6603(a)]

10. The owner/operator must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup apply.
[40 CFR 63.6625(h)]

11. This equipment may operate in response to notification of impending rotating outage if the area utility has ordered rotating outages in the area where the engine is located or expects to order such outages at a particular time, the engine is located in the area subject to the rotating outage, the engine is operated no more than 30 minutes prior to the forecasted outage, and the engine is shut down immediately after the utility advises that the outage is no longer imminent or in effect.
[17 CCR 93115.6(b)(1) and 40 CFR 63.6640(f)(iii)]

12. This equipment shall not be used to provide power during a voluntary agreed to power outage and/or power reduction initiated under an Interruptible Service Contract (ISC); Demand Response Program (DRP); Load Reduction Program (LRP) and/or similar arrangement(s) with the electrical power supplier.
[17 CCR 93115.6(c)(2)(C)]

13. This equipment does not require a regularly scheduled emission compliance test. However, emission compliance testing may be required at the discretion of the District.

14. A facility wide Comprehensive Emission Inventory (CEI) for all emitted criteria and toxic air pollutants must be submitted to the District, in a format approved by the District, upon District request.
[District Rule 107(b), H&S Code 39607 & 44341-44342, and 40 CFR 51, Subpart A]

MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT
14306 Park Avenue, Victorville, CA 92392-2310
760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

AUTHORITY TO CONSTRUCT

E000273

If construction is not completed by the expiration date of this permit, it may be renewed for one additional year upon payment of applicable fees. Any additional extension will require the written approval of the Air Pollution Control Officer. This Authority to Construct may serve as a temporary Permit to Operate provided the APCO is given prior notice of intent to operate and the Permit to Operate is not specifically denied.

EXPIRES LAST DAY OF: SEPTEMBER 2019

OWNER OR OPERATOR (Co.#133)

NASA/Goldstone
93 Goldstone Rd.
Fort Irwin, CA 92310

EQUIPMENT LOCATION (Fac.#611)

NASA/Goldstone Deep Space Communications Complex
Goldstone Lake
Fort Irwin, CA 92311

Description:
DIESEL IC ENGINE, EMERGENCY GENERATOR (UNIT #1C: Building G-81) - MARS SITE consisting of: Year of Manufacturer 1967, uncertified, existing ICE with a stack height of 27.6', stack diameter of 12", and an exhaust flow rate of 1155 cubic feet per minute at 738 degrees Fahrenheit.

One Caterpillar, Diesel fired internal combustion engine Model No. 398 and Serial No. 66B1556, After Cooled, Direct Injected, Turbo Charged, producing 875 bhp with 12 cylinders at 1200 rpm while consuming a maximum of 48 gal/hr. This equipment powers a Ideal Electric Generator Model No. SAB and Serial No. 262701, rated at 600 kW(e).

CONDITIONS:

1. This existing, diesel engine, and any associated air pollution control equipment, shall be installed, operated, and maintained in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles, which produce the minimum emissions of contaminants. Unless otherwise noted, this equipment shall also be operated in accordance with all data and specifications submitted with the application for this permit.
[40 CFR 63.6605(a) and (b) and 63.6625(e)]

2. A non-resettable four-digit (9,999) hour timer shall be installed and maintained on this equipment to indicate elapsed engine operating time.
[17 CCR 93115.10(d) and 40 CFR 63.6625(f)]

Fee Schedule: 7 (g)	Rating: 875 device	SIC: 9661	SCC: 20100102	Location/Coordinates: +35.42509, -116.89055

This permit does not authorize the emission of air contaminants in excess of those allowed by law, including Division 26 of the Health and Safety Code of the State of California and the Rules and Regulations of the District. This permit cannot be construed as permission to violate existing laws, ordinances, statutes or regulations of this or other governmental agencies. This permit must be renewed by the expiration date above. If billing for renewal fee required by Rule 301(c) is not received by expiration date above, please contact the District.

NASA/Goldstone
93 Goldstone Rd.
Fort Irwin, CA 92310

By: **COPY**

Brad Poiriez
Air Pollution Control Officer

3. This equipment shall only be fired on diesel fuel that meets the requirements of CARB Diesel Fuel as defined in 17 CCR 93115.4(a)(8), or an alternative fuel that meets the requirements of 17 CCR 93115.5(a)(2-6), pursuant to the Air Toxic Control Measure for Stationary Compression Ignition Engines.
[17 CCR 93115.5(a)]

4. This equipment shall be limited to use for emergency power, defined as in response to a fire or when commercially available power has been interrupted or may be interrupted or disrupted by weather. In addition, this unit shall be operated no more than twenty (20) hours per year for testing and maintenance.
[17 CCR 93115.6(b)(3) and 40 CFR 63.6640(f)(ii)]

5. Facility-wide emissions shall not exceed 80 tons per year of NOx, 24 tons per year of VOC, and 18 tons per year of PM10. Facility-wide emissions shall be calculated and recorded, in tons, on a calendar month basis and totaled for each consecutive twelve-month basis. For emergency engines, only emissions generated during testing and maintenance shall apply toward the facility-wide emission limits. These records shall be maintained as current for a minimum of five (5) years, and made available upon District, State and/or Federal request.
[District Rule 221(B)]

6. Emergency use includes providing electrical power or mechanical work during day-of-rocket launch and day of space plane vehicle re-entry/landing system checks and tracking performed (in parallel with grid power) by the United States Department of Defense at Command Transmitter sites (also known as "CT" sites) that occur within the 24-hour time period associated with the scheduled time of the launch or re-entry/landing.
[17 CCR 93115.4(a)(30)(G)]

7. The owner/operator shall maintain an operations log for this equipment current and on-site (or at a central location) for a minimum of five (5) years, and this log shall be provided to District, State and/or Federal personnel, upon request. The log shall include, at a minimum, the information specified below:
a. Date of each use and hours of operation with documentation of how many hours are spent for emergency operation, including what classified the operation as emergency (i.e. commercial power unavailable, weather-threatening power availability, or command transmitting as allowed per condition 6), and how many hours are spent for non-emergency operation, including what classified the operation as non-emergency. [17 CCR 93115.10(f) and 40 CFR 63.6655(f)]; and,
b. Monthly and calendar year operation in terms of total hours, both emergency and non-emergency use, classified as described in 'a.' above [17 CCR 93115.10(f)]; and,
c. Monthly fuel use [17 CCR 93115.10(f)]; and,
d. Documentation of certified fuel use, as required by condition 3 (may use the supplier's certification of sulfur content if it is maintained as part of this log); and,
e. Maintenance performed on this equipment, inclusive of the management practice requirements of condition 8 below; and,
f. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment [40 CFR 63.6640(b) and 63.6655(a)(2)]; and,
g. Records of all required maintenance performed on the air pollution control and monitoring equipment [40 CFR 63.6655(a)(4)]; and,
h. Records of actions taken during periods of malfunction to minimize emissions in accordance with condition 1, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation [40 CFR63.6655(a)(5)].

8. This engine is subject to the requirements of 40 CFR 63, Subpart ZZZZ, and pursuant to this federal regulation, this engine is required to meet the following compliance requirements by May 3, 2013:

The owner/operator of this equipment shall demonstrate continuous compliance by committing to a maintenance schedule inclusive of the management practice requirements listed below:
a. Change oil and oil filter every 500 hours of operation or annually, whichever comes first (source has the option to utilize an oil analysis program pursuant to 40 CFR 63.6625(i) in order to extend the specified oil change requirement.);
b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and,
c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
[40 CFR 63.6603(a) and 63.6640(a)]

9. If this emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements required by condition 8, or shutting down the engine would pose an unacceptable risk, the management practice can be delayed until the emergency is over, or the risk has been abated. The management practice should be performed as soon as practicable after the emergency/risk has ended. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.
[40 CFR 63.6603(a)]

10. The owner/operator must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup apply.
[40 CFR 63.6625(h)]

11. This equipment may operate in response to notification of impending rotating outage if the area utility has ordered rotating outages in the area where the engine is located or expects to order such outages at a particular time, the engine is located in the area subject to the rotating outage, the engine is operated no more than 30 minutes prior to the forecasted outage, and the engine is shut down immediately after the utility advises that the outage is no longer imminent or in effect.
[17 CCR 93115.6(b)(1) and 40 CFR 63.6640(f)(iii)]

12. This equipment shall not be used to provide power during a voluntary agreed to power outage and/or power reduction initiated under an Interruptible Service Contract (ISC); Demand Response Program (DRP); Load Reduction Program (LRP) and/or similar arrangement(s) with the electrical power supplier.
[17 CCR 93115.6(c)(2)(C)]

13. This equipment does not require a regularly scheduled emission compliance test. However, emission compliance testing may be required at the discretion of the District.

14. A facility wide Comprehensive Emission Inventory (CEI) for all emitted criteria and toxic air pollutants must be submitted to the District, in a format approved by the District, upon District request.
[District Rule 107(b), H&S Code 39607 & 44341-44342, and 40 CFR 51, Subpart A]

MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT
14306 Park Avenue, Victorville, CA 92392-2310
760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

AUTHORITY TO CONSTRUCT

E000274

If construction is not completed by the expiration date of this permit, it may be renewed for one additional year upon payment of applicable fees. Any additional extension will require the written approval of the Air Pollution Control Officer. This Authority to Construct may serve as a temporary Permit to Operate provided the APCO is given prior notice of intent to operate and the Permit to Operate is not specifically denied.

EXPIRES LAST DAY OF: SEPTEMBER 2019

OWNER OR OPERATOR (Co.#133)

NASA/Goldstone
93 Goldstone Rd.
Fort Irwin, CA 92310

EQUIPMENT LOCATION (Fac.#611)

NASA/Goldstone Deep Space Communications Complex
Goldstone Lake
Fort Irwin, CA 92311

Description:
DIESEL IC ENGINE, EMERGENCY GENERATOR (UNIT #2B: Building G-81) - MARS SITE consisting of: Year of Manufacturer 1973, uncertified, existing ICE with a stack height of 27.6', stack diameter of 12", and an exhaust flow rate of 1690 cubic feet per minute at 833.5 degrees Fahrenheit.

One Caterpillar, Diesel fired internal combustion engine Model No. 399 and Serial No. 35B835, After Cooled, Direct Injected, Turbo Charged, producing 1280 bhp with 16 cylinders at 1200 rpm while consuming a maximum of 68 gal/hr. This equipment powers a Kato Engineering Generator Model No. 750SS9D and Serial No. 68431-2, rated at 850 kW(e).

CONDITIONS:

1. This existing, diesel engine, and any associated air pollution control equipment, shall be installed, operated, and maintained in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles, which produce the minimum emissions of contaminants. Unless otherwise noted, this equipment shall also be operated in accordance with all data and specifications submitted with the application for this permit.
[40 CFR 63.6605(a) and (b) and 63.6625(e)]

2. A non-resettable four-digit (9,999) hour timer shall be installed and maintained on this equipment to indicate elapsed engine operating time.
[17 CCR 93115.10(d) and 40 CFR 63.6625(f)]

Fee Schedule: 7 (g)	Rating: 1280 device	SIC: 9661	SCC: 20100102	Location/Coordinates: +35.42509, -116.89039

This permit does not authorize the emission of air contaminants in excess of those allowed by law, including Division 26 of the Health and Safety Code of the State of California and the Rules and Regulations of the District. This permit cannot be construed as permission to violate existing laws, ordinances, statutes or regulations of this or other governmental agencies. This permit must be renewed by the expiration date above. If billing for renewal fee required by Rule 301(c) is not received by expiration date above, please contact the District.

NASA/Goldstone
93 Goldstone Rd.
Fort Irwin, CA 92310

By: **COPY**
Brad Poiriez
Air Pollution Control Officer

3. This equipment shall only be fired on diesel fuel that meets the requirements of CARB Diesel Fuel as defined in 17 CCR 93115.4(a)(8), or an alternative fuel that meets the requirements of 17 CCR 93115.5(a)(2-6), pursuant to the Air Toxic Control Measure for Stationary Compression Ignition Engines.
[17 CCR 93115.5(a)]

4. This equipment shall be limited to use for emergency power, defined as in response to a fire or when commercially available power has been interrupted or may be interrupted or disrupted by weather. In addition, this unit shall be operated no more than twenty (20) hours per year for testing and maintenance.
[17 CCR 93115.6(b)(3) and 40 CFR 63.6640(f)(ii)]

5. Facility-wide emissions shall not exceed 80 tons per year of NOx, 24 tons per year of VOC, and 18 tons per year of PM10. Facility-wide emissions shall be calculated and recorded, in tons, on a calendar month basis and totaled for each consecutive twelve-month basis. For emergency engines, only emissions generated during testing and maintenance shall apply toward the facility-wide emission limits. These records shall be maintained as current for a minimum of five (5) years, and made available upon District, State and/or Federal request.
[District Rule 221(B)]

6. Emergency use includes providing electrical power or mechanical work during day-of-rocket launch and day of space plane vehicle re-entry/landing system checks and tracking performed (in parallel with grid power) by the United States Department of Defense at Command Transmitter sites (also known as "CT" sites) that occur within the 24-hour time period associated with the scheduled time of the launch or re-entry/landing.
[17 CCR 93115.4(a)(30)(G)]

7. The owner/operator shall maintain an operations log for this equipment current and on-site (or at a central location) for a minimum of five (5) years, and this log shall be provided to District, State and/or Federal personnel, upon request. The log shall include, at a minimum, the information specified below:
a. Date of each use and hours of operation with documentation of how many hours are spent for emergency operation, including what classified the operation as emergency (i.e. commercial power unavailable, weather-threatening power availability, or command transmitting as allowed per condition 6), and how many hours are spent for non-emergency operation, including what classified the operation as non-emergency. [17 CCR 93115.10(f) and 40 CFR 63.6655(f)]; and,
b. Monthly and calendar year operation in terms of total hours, both emergency and non-emergency use, classified as described in 'a.' above [17 CCR 93115.10(f)]; and,
c. Monthly fuel use [17 CCR 93115.10(f)]; and,
d. Documentation of certified fuel use, as required by condition 3 (may use the supplier's certification of sulfur content if it is maintained as part of this log); and,
e. Maintenance performed on this equipment, inclusive of the management practice requirements of condition 8 below; and,
f. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment [40 CFR 63.6640(b) and 63.6655(a)(2)]; and,
g. Records of all required maintenance performed on the air pollution control and monitoring equipment [40 CFR 63.6655(a)(4)]; and,
h. Records of actions taken during periods of malfunction to minimize emissions in accordance with condition 1, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation [40 CFR63.6655(a)(5)].

8. This engine is subject to the requirements of 40 CFR 63, Subpart ZZZZ, and pursuant to this federal regulation, this engine is required to meet the following compliance requirements by May 3, 2013:

The owner/operator of this equipment shall demonstrate continuous compliance by committing to a maintenance schedule inclusive of the management practice requirements listed below:
a. Change oil and oil filter every 500 hours of operation or annually, whichever comes first (source has the option to utilize an oil analysis program pursuant to 40 CFR 63.6625(i) in order to extend the specified oil change requirement.);
b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and,
c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
[40 CFR 63.6603(a) and 63.6640(a)]

9. If this emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements required by condition 8, or shutting down the engine would pose an unacceptable risk, the management practice can be delayed until the emergency is over, or the risk has been abated. The management practice should be performed as soon as practicable after the emergency/risk has ended. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.
[40 CFR 63.6603(a)]

10. The owner/operator must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup apply.
[40 CFR 63.6625(h)]

11. This equipment may operate in response to notification of impending rotating outage if the area utility has ordered rotating outages in the area where the engine is located or expects to order such outages at a particular time, the engine is located in the area subject to the rotating outage, the engine is operated no more than 30 minutes prior to the forecasted outage, and the engine is shut down immediately after the utility advises that the outage is no longer imminent or in effect.
[17 CCR 93115.6(b)(1) and 40 CFR 63.6640(f)(iii)]

12. This equipment shall not be used to provide power during a voluntary agreed to power outage and/or power reduction initiated under an Interruptible Service Contract (ISC); Demand Response Program (DRP); Load Reduction Program (LRP) and/or similar arrangement(s) with the electrical power supplier.
[17 CCR 93115.6(c)(2)(C)]

13. This equipment does not require a regularly scheduled emission compliance test. However, emission compliance testing may be required at the discretion of the District.

14. A facility wide Comprehensive Emission Inventory (CEI) for all emitted criteria and toxic air pollutants must be submitted to the District, in a format approved by the District, upon District request.
[District Rule 107(b), H&S Code 39607 & 44341-44342, and 40 CFR 51, Subpart A]

MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT
14306 Park Avenue, Victorville, CA 92392-2310
760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

AUTHORITY TO CONSTRUCT

E000275

If construction is not completed by the expiration date of this permit, it may be renewed for one additional year upon payment of applicable fees. Any additional extension will require the written approval of the Air Pollution Control Officer. This Authority to Construct may serve as a temporary Permit to Operate provided the APCO is given prior notice of intent to operate and the Permit to Operate is not specifically denied.

EXPIRES LAST DAY OF: SEPTEMBER 2019

OWNER OR OPERATOR (Co.#133)

NASA/Goldstone
93 Goldstone Rd.
Fort Irwin, CA 92310

EQUIPMENT LOCATION (Fac.#611)

NASA/Goldstone Deep Space Communications Complex
Goldstone Lake
Fort Irwin, CA 92311

Description:
DIESEL IC ENGINE, EMERGENCY GENERATOR (UNIT #3B: Building G-81) - MARS SITE consisting of: Year of Manufacturer 1973, uncertified, existing ICE with a stack height of 27.6', stack diameter of 12", and an exhaust flow rate of 1690 cubic feet per minute at 833.5 degrees Fahrenheit.

One Caterpillar, Diesel fired internal combustion engine Model No. 399 and Serial No. 35B838, After Cooled, Direct Injected, Turbo Charged, producing 1280 bhp with 16 cylinders at 1200 rpm while consuming a maximum of 68 gal/hr. This equipment powers a Kato Engineering Generator Model No. 750SS9D and Serial No. 68431-1, rated at 850 kW(e).

CONDITIONS:

1. This existing, diesel engine, and any associated air pollution control equipment, shall be installed, operated, and maintained in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles, which produce the minimum emissions of contaminants. Unless otherwise noted, this equipment shall also be operated in accordance with all data and specifications submitted with the application for this permit.
[40 CFR 63.6605(a) and (b) and 63.6625(e)]

2. A non-resettable four-digit (9,999) hour timer shall be installed and maintained on this equipment to indicate elapsed engine operating time.
[17 CCR 93115.10(d) and 40 CFR 63.6625(f)]

Fee Schedule: 7 (g) | Rating: 1280 device | SIC: 9661 | SCC: 20100102 | Location/Coordinates: +35.42509, -116.89044

This permit does not authorize the emission of air contaminants in excess of those allowed by law, including Division 26 of the Health and Safety Code of the State of California and the Rules and Regulations of the District. This permit cannot be construed as permission to violate existing laws, ordinances, statutes or regulations of this or other governmental agencies. This permit must be renewed by the expiration date above. If billing for renewal fee required by Rule 301(c) is not received by expiration date above, please contact the District.

NASA/Goldstone
93 Goldstone Rd.
Fort Irwin, CA 92310

By: **COPY**
Brad Poiriez
Air Pollution Control Officer

Permit: E000275 Issue Date: DRAFT

3. This equipment shall only be fired on diesel fuel that meets the requirements of CARB Diesel Fuel as defined in 17 CCR 93115.4(a)(8), or an alternative fuel that meets the requirements of 17 CCR 93115.5(a)(2-6), pursuant to the Air Toxic Control Measure for Stationary Compression Ignition Engines.
[17 CCR 93115.5(a)]

4. This equipment shall be limited to use for emergency power, defined as in response to a fire or when commercially available power has been interrupted or may be interrupted or disrupted by weather. In addition, this unit shall be operated no more than twenty (20) hours per year for testing and maintenance.
[17 CCR 93115.6(b)(3) and 40 CFR 63.6640(f)(ii)]

5. Facility-wide emissions shall not exceed 80 tons per year of NOx, 24 tons per year of VOC, and 18 tons per year of PM10. Facility-wide emissions shall be calculated and recorded, in tons, on a calendar month basis and totaled for each consecutive twelve-month basis. For emergency engines, only emissions generated during testing and maintenance shall apply toward the facility-wide emission limits. These records shall be maintained as current for a minimum of five (5) years, and made available upon District, State and/or Federal request.
[District Rule 221(B)]

6. Emergency use includes providing electrical power or mechanical work during day-of-rocket launch and day of space plane vehicle re-entry/landing system checks and tracking performed (in parallel with grid power) by the United States Department of Defense at Command Transmitter sites (also known as "CT" sites) that occur within the 24-hour time period associated with the scheduled time of the launch or re-entry/landing. [17 CCR 93115.4(a)(30)(G)]

7. The owner/operator shall maintain an operations log for this equipment current and on-site (or at a central location) for a minimum of five (5) years, and this log shall be provided to District, State and/or Federal personnel, upon request. The log shall include, at a minimum, the information specified below:
a. Date of each use and hours of operation with documentation of how many hours are spent for emergency operation, including what classified the operation as emergency (i.e. commercial power unavailable, weather-threatening power availability, or command transmitting as allowed per condition 6), and how many hours are spent for non-emergency operation, including what classified the operation as non-emergency. [17 CCR 93115.10(f) and 40 CFR 63.6655(f)]; and,
b. Monthly and calendar year operation in terms of total hours, both emergency and non-emergency use, classified as described in 'a.' above [17 CCR 93115.10(f)]; and,
c. Monthly fuel use [17 CCR 93115.10(f)]; and,
d. Documentation of certified fuel use, as required by condition 3 (may use the supplier's certification of sulfur content if it is maintained as part of this log); and,
e. Maintenance performed on this equipment, inclusive of the management practice requirements of condition 8 below; and,
f. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment [40 CFR 63.6640(b) and 63.6655(a)(2)]; and,
g. Records of all required maintenance performed on the air pollution control and monitoring equipment [40 CFR 63.6655(a)(4)]; and,
h. Records of actions taken during periods of malfunction to minimize emissions in accordance with condition 1, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation [40 CFR63.6655(a)(5)].

8. This engine is subject to the requirements of 40 CFR 63, Subpart ZZZZ, and pursuant to this federal regulation, this engine is required to meet the following compliance requirements by May 3, 2013:

The owner/operator of this equipment shall demonstrate continuous compliance by committing to a maintenance schedule inclusive of the management practice requirements listed below:
a. Change oil and oil filter every 500 hours of operation or annually, whichever comes first (source has the option to utilize an oil analysis program pursuant to 40 CFR 63.6625(i) in order to extend the specified oil change requirement.);
b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and,
c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
[40 CFR 63.6603(a) and 63.6640(a)]

9. If this emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements required by condition 8, or shutting down the engine would pose an unacceptable risk, the management practice can be delayed until the emergency is over, or the risk has been abated. The management practice should be performed as soon as practicable after the emergency/risk has ended. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.
[40 CFR 63.6603(a)]

10. The owner/operator must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup apply.
[40 CFR 63.6625(h)]

11. This equipment may operate in response to notification of impending rotating outage if the area utility has ordered rotating outages in the area where the engine is located or expects to order such outages at a particular time, the engine is located in the area subject to the rotating outage, the engine is operated no more than 30 minutes prior to the forecasted outage, and the engine is shut down immediately after the utility advises that the outage is no longer imminent or in effect.
[17 CCR 93115.6(b)(1) and 40 CFR 63.6640(f)(iii)]

12. This equipment shall not be used to provide power during a voluntary agreed to power outage and/or power reduction initiated under an Interruptible Service Contract (ISC); Demand Response Program (DRP); Load Reduction Program (LRP) and/or similar arrangement(s) with the electrical power supplier.
[17 CCR 93115.6(c)(2)(C)]

13. This equipment does not require a regularly scheduled emission compliance test. However, emission compliance testing may be required at the discretion of the District.

14. A facility wide Comprehensive Emission Inventory (CEI) for all emitted criteria and toxic air pollutants must be submitted to the District, in a format approved by the District, upon District request.
[District Rule 107(b), H&S Code 39607 & 44341-44342, and 40 CFR 51, Subpart A]

MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT
14306 Park Avenue, Victorville, CA 92392-2310
760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

AUTHORITY TO CONSTRUCT

E000276

If construction is not completed by the expiration date of this permit, it may be renewed for one additional year upon payment of applicable fees. Any additional extension will require the written approval of the Air Pollution Control Officer. This Authority to Construct may serve as a temporary Permit to Operate provided the APCO is given prior notice of intent to operate and the Permit to Operate is not specifically denied.

EXPIRES LAST DAY OF: SEPTEMBER 2019

OWNER OR OPERATOR (Co.#133)

NASA/Goldstone
93 Goldstone Rd.
Fort Irwin, CA 92310

EQUIPMENT LOCATION (Fac.#611)

NASA/Goldstone Deep Space Communications Complex
Goldstone Lake
Fort Irwin, CA 92311

Description:
DIESEL IC ENGINE, EMERGENCY GENERATOR (UNIT #1B: Building G-81) - MARS SITE consisting of: Year of Manufacturer 1973, uncertified, existing ICE with a stack height of 27.6', 833.5 degrees Fahrenheit.

One Caterpillar, Diesel fired internal combustion engine Model No. 399 and Serial No. 35B837, After Cooled, Direct Injected, Turbo Charged, producing 1280 bhp with 16 cylinders at 1200 rpm while consuming a maximum of 68 gal/hr. This equipment powers a Kato Engineering Generator Model No. 750SS9D and Serial No. 68431-3, rated at 850 kW(e).

CONDITIONS:

1. This existing, diesel engine, and any associated air pollution control equipment, shall be installed, operated, and maintained in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles, which produce the minimum emissions of contaminants. Unless otherwise noted, this equipment shall also be operated in accordance with all data and specifications submitted with the application for this permit.
[40 CFR 63.6605(a) and (b) and 63.6625(e)]

2. A non-resettable four-digit (9,999) hour timer shall be installed and maintained on this equipment to indicate elapsed engine operating time.
[17 CCR 93115.10(d) and 40 CFR 63.6625(f)]

Fee Schedule: 7 (g) | Rating: 1280 device | SIC: 9661 | SCC: 20100102 | Location/Coordinates: +35.42509, -116.89034

This permit does not authorize the emission of air contaminants in excess of those allowed by law, including Division 26 of the Health and Safety Code of the State of California and the Rules and Regulations of the District. This permit cannot be construed as permission to violate existing laws, ordinances, statutes or regulations of this or other governmental agencies. This permit must be renewed by the expiration date above. If billing for renewal fee required by Rule 301(c) is not received by expiration date above, please contact the District.

NASA/Goldstone
93 Goldstone Rd.
Fort Irwin, CA 92310

By: **COPY**
Brad Poiriez
Air Pollution Control Officer

Permit: E000276 Issue Date: DRAFT

3. This equipment shall only be fired on diesel fuel that meets the requirements of CARB Diesel Fuel as defined in 17 CCR 93115.4(a)(8), or an alternative fuel that meets the requirements of 17 CCR 93115.5(a)(2-6), pursuant to the Air Toxic Control Measure for Stationary Compression Ignition Engines.
[17 CCR 93115.5(a)]

4. This equipment shall be limited to use for emergency power, defined as in response to a fire or when commercially available power has been interrupted or may be interrupted or disrupted by weather. In addition, this unit shall be operated no more than twenty (20) hours per year for testing and maintenance.
[17 CCR 93115.6(b)(3) and 40 CFR 63.6640(f)(ii)]

5. Facility-wide emissions shall not exceed 80 tons per year of NOx, 24 tons per year of VOC, and 18 tons per year of PM10. Facility-wide emissions shall be calculated and recorded, in tons, on a calendar month basis and totaled for each consecutive twelve-month basis. For emergency engines, only emissions generated during testing and maintenance shall apply toward the facility-wide emission limits. These records shall be maintained as current for a minimum of five (5) years, and made available upon District, State and/or Federal request.
[District Rule 221(B)]

6. Emergency use includes providing electrical power or mechanical work during day-of-rocket launch and day of space plane vehicle re-entry/landing system checks and tracking performed (in parallel with grid power) by the United States Department of Defense at Command Transmitter sites (also known as "CT" sites) that occur within the 24-hour time period associated with the scheduled time of the launch or re-entry/landing. [17 CCR 93115.4(a)(30)(G)]

7. The owner/operator shall maintain an operations log for this equipment current and on-site (or at a central location) for a minimum of five (5) years, and this log shall be provided to District, State and/or Federal personnel, upon request. The log shall include, at a minimum, the information specified below:
a. Date of each use and hours of operation with documentation of how many hours are spent for emergency operation, including what classified the operation as emergency (i.e. commercial power unavailable, weather-threatening power availability, or command transmitting as allowed per condition 6), and how many hours are spent for non-emergency operation, including what classified the operation as non-emergency. [17 CCR 93115.10(f) and 40 CFR 63.6655(f)]; and,
b. Monthly and calendar year operation in terms of total hours, both emergency and non-emergency use, classified as described in 'a.' above [17 CCR 93115.10(f)]; and,
c. Monthly fuel use [17 CCR 93115.10(f)]; and,
d. Documentation of certified fuel use, as required by condition 3 (may use the supplier's certification of sulfur content if it is maintained as part of this log); and,
e. Maintenance performed on this equipment, inclusive of the management practice requirements of condition 8 below; and,
f. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment [40 CFR 63.6640(b) and 63.6655(a)(2)]; and,
g. Records of all required maintenance performed on the air pollution control and monitoring equipment [40 CFR 63.6655(a)(4)]; and,
h. Records of actions taken during periods of malfunction to minimize emissions in accordance with condition 1, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation [40 CFR63.6655(a)(5)].

8. This engine is subject to the requirements of 40 CFR 63, Subpart ZZZZ, and pursuant to this federal regulation, this engine is required to meet the following compliance requirements by May 3, 2013:

The owner/operator of this equipment shall demonstrate continuous compliance by committing to a maintenance schedule inclusive of the management practice requirements listed below:
a. Change oil and oil filter every 500 hours of operation or annually, whichever comes first (source has the option to utilize an oil analysis program pursuant to 40 CFR 63.6625(i) in order to extend the specified oil change requirement.);
b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and,
c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
[40 CFR 63.6603(a) and 63.6640(a)]

9. If this emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements required by condition 8, or shutting down the engine would pose an unacceptable risk, the management practice can be delayed until the emergency is over, or the risk has been abated. The management practice should be performed as soon as practicable after the emergency/risk has ended. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.
[40 CFR 63.6603(a)]

10. The owner/operator must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup apply.
[40 CFR 63.6625(h)]

11. This equipment may operate in response to notification of impending rotating outage if the area utility has ordered rotating outages in the area where the engine is located or expects to order such outages at a particular time, the engine is located in the area subject to the rotating outage, the engine is operated no more than 30 minutes prior to the forecasted outage, and the engine is shut down immediately after the utility advises that the outage is no longer imminent or in effect.
[17 CCR 93115.6(b)(1) and 40 CFR 63.6640(f)(iii)]

12. This equipment shall not be used to provide power during a voluntary agreed to power outage and/or power reduction initiated under an Interruptible Service Contract (ISC); Demand Response Program (DRP); Load Reduction Program (LRP) and/or similar arrangement(s) with the electrical power supplier.
[17 CCR 93115.6(c)(2)(C)]

13. This equipment does not require a regularly scheduled emission compliance test. However, emission compliance testing may be required at the discretion of the District.

14. A facility wide Comprehensive Emission Inventory (CEI) for all emitted criteria and toxic air pollutants must be submitted to the District, in a format approved by the District, upon District request.
[District Rule 107(b), H&S Code 39607 & 44341-44342, and 40 CFR 51, Subpart A]

MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT
14306 Park Avenue, Victorville, CA 92392-2310
760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

AUTHORITY TO CONSTRUCT

E000277

If construction is not completed by the expiration date of this permit, it may be renewed for one additional year upon payment of applicable fees. Any additional extension will require the written approval of the Air Pollution Control Officer. This Authority to Construct may serve as a temporary Permit to Operate provided the APCO is given prior notice of intent to operate and the Permit to Operate is not specifically denied.

EXPIRES LAST DAY OF: SEPTEMBER 2019

OWNER OR OPERATOR (Co.#133)

NASA/Goldstone
93 Goldstone Rd.
Fort Irwin, CA 92310

EQUIPMENT LOCATION (Fac.#611)

NASA/Goldstone Deep Space Communications Complex
Goldstone Lake
Fort Irwin, CA 92311

Description:
DIESEL IC ENGINE, EMERGENCY GENERATOR (UNIT #4B: Building G-81) - MARS SITE consisting of: Year of Manufacturer 1973, uncertified, existing ICE with a stack height of 27.6', stack diameter of 12", and an exhaust flow rate of 1690 cubic feet per minute at 833.5 degrees Fahrenheit.

One Caterpillar, Diesel fired internal combustion engine Model No. 399 and Serial No. 35B834, After Cooled, Direct Injected, Turbo Charged, producing 1280 bhp with 16 cylinders at 1200 rpm while consuming a maximum of 68 gal/hr. This equipment powers a Kato Engineering Generator Model No. 750SS9D and Serial No. 70295, rated at 850 kW(e).

CONDITIONS:

1. This existing, diesel engine, and any associated air pollution control equipment, shall be installed, operated, and maintained in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles, which produce the minimum emissions of contaminants. Unless otherwise noted, this equipment shall also be operated in accordance with all data and specifications submitted with the application for this permit.
[40 CFR 63.6605(a) and (b) and 63.6625(e)]

2. A non-resettable four-digit (9,999) hour timer shall be installed and maintained on this equipment to indicate elapsed engine operating time.
[17 CCR 93115.10(d) and 40 CFR 63.6625(f)]

Fee Schedule: 7 (g)	Rating: 1280 device	SIC: 9661	SCC: 20100102	Location/Coordinates: +35.42509, -116.89050

This permit does not authorize the emission of air contaminants in excess of those allowed by law, including Division 26 of the Health and Safety Code of the State of California and the Rules and Regulations of the District. This permit cannot be construed as permission to violate existing laws, ordinances, statutes or regulations of this or other governmental agencies. This permit must be renewed by the expiration date above. If billing for renewal fee required by Rule 301(c) is not received by expiration date above, please contact the District.

NASA/Goldstone
93 Goldstone Rd.
Fort Irwin, CA 92310

By: **COPY**

Brad Poiriez
Air Pollution Control Officer

3. This equipment shall only be fired on diesel fuel that meets the requirements of CARB Diesel Fuel as defined in 17 CCR 93115.4(a)(8), or an alternative fuel that meets the requirements of 17 CCR 93115.5(a)(2-6), pursuant to the Air Toxic Control Measure for Stationary Compression Ignition Engines.
[17 CCR 93115.5(a)]

4. This equipment shall be limited to use for emergency power, defined as in response to a fire or when commercially available power has been interrupted or may be interrupted or disrupted by weather. In addition, this unit shall be operated no more than twenty (20) hours per year for testing and maintenance.
[17 CCR 93115.6(b)(3) and 40 CFR 63.6640(f)(ii)]

5. Facility-wide emissions shall not exceed 80 tons per year of NOx, 24 tons per year of VOC, and 18 tons per year of PM10. Facility-wide emissions shall be calculated and recorded, in tons, on a calendar month basis and totaled for each consecutive twelve-month basis. For emergency engines, only emissions generated during testing and maintenance shall apply toward the facility-wide emission limits. These records shall be maintained as current for a minimum of five (5) years, and made available upon District, State and/or Federal request.
[District Rule 221(B)]

6. Emergency use includes providing electrical power or mechanical work during day-of-rocket launch and day of space plane vehicle re-entry/landing system checks and tracking performed (in parallel with grid power) by the United States Department of Defense at Command Transmitter sites (also known as "CT" sites) that occur within the 24-hour time period associated with the scheduled time of the launch or re-entry/landing.
[17 CCR 93115.4(a)(30)(G)]

7. The owner/operator shall maintain an operations log for this equipment current and on-site (or at a central location) for a minimum of five (5) years, and this log shall be provided to District, State and/or Federal personnel, upon request. The log shall include, at a minimum, the information specified below:
a. Date of each use and hours of operation with documentation of how many hours are spent for emergency operation, including what classified the operation as emergency (i.e. commercial power unavailable, weather-threatening power availability, or command transmitting as allowed per condition 6), and how many hours are spent for non-emergency operation, including what classified the operation as non-emergency. [17 CCR 93115.10(f) and 40 CFR 63.6655(f)]; and,
b. Monthly and calendar year operation in terms of total hours, both emergency and non-emergency use, classified as described in 'a.' above [17 CCR 93115.10(f)]; and,
c. Monthly fuel use [17 CCR 93115.10(f)]; and,
d. Documentation of certified fuel use, as required by condition 3 (may use the supplier's certification of sulfur content if it is maintained as part of this log); and,
e. Maintenance performed on this equipment, inclusive of the management practice requirements of condition 8 below; and,
f. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment [40 CFR 63.6640(b) and 63.6655(a)(2)]; and,
g. Records of all required maintenance performed on the air pollution control and monitoring equipment [40 CFR 63.6655(a)(4)]; and,
h. Records of actions taken during periods of malfunction to minimize emissions in accordance with condition 1, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation [40 CFR63.6655(a)(5)].

8. This engine is subject to the requirements of 40 CFR 63, Subpart ZZZZ, and pursuant to this federal regulation, this engine is required to meet the following compliance requirements by May 3, 2013:

The owner/operator of this equipment shall demonstrate continuous compliance by committing to a maintenance schedule inclusive of the management practice requirements listed below:
a. Change oil and oil filter every 500 hours of operation or annually, whichever comes first (source has the option to utilize an oil analysis program pursuant to 40 CFR 63.6625(i) in order to extend the specified oil change requirement.);
b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and,
c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
[40 CFR 63.6603(a) and 63.6640(a)]

9. If this emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements required by condition 8, or shutting down the engine would pose an unacceptable risk, the management practice can be delayed until the emergency is over, or the risk has been abated. The management practice should be performed as soon as practicable after the emergency/risk has ended. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.
[40 CFR 63.6603(a)]

10. The owner/operator must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup apply.
[40 CFR 63.6625(h)]

11. This equipment may operate in response to notification of impending rotating outage if the area utility has ordered rotating outages in the area where the engine is located or expects to order such outages at a particular time, the engine is located in the area subject to the rotating outage, the engine is operated no more than 30 minutes prior to the forecasted outage, and the engine is shut down immediately after the utility advises that the outage is no longer imminent or in effect.
[17 CCR 93115.6(b)(1) and 40 CFR 63.6640(f)(iii)]

12. This equipment shall not be used to provide power during a voluntary agreed to power outage and/or power reduction initiated under an Interruptible Service Contract (ISC); Demand Response Program (DRP); Load Reduction Program (LRP) and/or similar arrangement(s) with the electrical power supplier.
[17 CCR 93115.6(c)(2)(C)]

13. This equipment does not require a regularly scheduled emission compliance test. However, emission compliance testing may be required at the discretion of the District.

14. A facility wide Comprehensive Emission Inventory (CEI) for all emitted criteria and toxic air pollutants must be submitted to the District, in a format approved by the District, upon District request.
[District Rule 107(b), H&S Code 39607 & 44341-44342, and 40 CFR 51, Subpart A]

MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT
14306 Park Avenue, Victorville, CA 92392-2310
760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

AUTHORITY TO CONSTRUCT

E000278

If construction is not completed by the expiration date of this permit, it may be renewed for one additional year upon payment of applicable fees. Any additional extension will require the written approval of the Air Pollution Control Officer. This Authority to Construct may serve as a temporary Permit to Operate provided the APCO is given prior notice of intent to operate and the Permit to Operate is not specifically denied.

EXPIRES LAST DAY OF: SEPTEMBER 2019

OWNER OR OPERATOR (Co.#133)

NASA/Goldstone
93 Goldstone Rd.
Fort Irwin, CA 92310

EQUIPMENT LOCATION (Fac.#611)

NASA/Goldstone Deep Space Communications Complex
Goldstone Lake
Fort Irwin, CA 92311

Description:
DIESEL IC ENGINE, EMERGENCY GENERATOR (UNIT #4A: Building G-81) - MARS SITE consisting of: Year of Manufacturer 1967, uncertified, existing ICE with a stack height of 21', stack diameter of 12", and an exhaust flow rate of 1155 cubic feet per minute at 738 degrees Fahrenheit.

One Caterpillar, Diesel fired internal combustion engine Model No. 398 and Serial No. 66B2912, After Cooled, Direct Injected, Turbo Charged, producing 875 bhp with 12 cylinders at 1200 rpm while consuming a maximum of 48 gal/hr. This equipment powers a Ideal Electric Generator Model No. SAB and Serial No. 262707, rated at 600 kW(e).

CONDITIONS:

1. This existing, diesel engine, and any associated air pollution control equipment, shall be installed, operated, and maintained in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles, which produce the minimum emissions of contaminants. Unless otherwise noted, this equipment shall also be operated in accordance with all data and specifications submitted with the application for this permit.
[40 CFR 63.6605(a) and (b) and 63.6625(e)]

2. A non-resettable four-digit (9,999) hour timer shall be installed and maintained on this equipment to indicate elapsed engine operating time.
[17 CCR 93115.10(d) and 40 CFR 63.6625(f)]

Fee Schedule: 7 (g) | Rating: 875 device | SIC: 9661 | SCC: 20100102 | Location/Coordinates: +35.42509, -116.89026

This permit does not authorize the emission of air contaminants in excess of those allowed by law, including Division 26 of the Health and Safety Code of the State of California and the Rules and Regulations of the District. This permit cannot be construed as permission to violate existing laws, ordinances, statutes or regulations of this or other governmental agencies. This permit must be renewed by the expiration date above. If billing for renewal fee required by Rule 301(c) is not received by expiration date above, please contact the District.

NASA/Goldstone
93 Goldstone Rd.
Fort Irwin, CA 92310

By: **COPY**
Brad Poiriez
Air Pollution Control Officer

Permit: E000278 Issue Date: DRAFT

3. This equipment shall only be fired on diesel fuel that meets the requirements of CARB Diesel Fuel as defined in 17 CCR 93115.4(a)(8), or an alternative fuel that meets the requirements of 17 CCR 93115.5(a)(2-6), pursuant to the Air Toxic Control Measure for Stationary Compression Ignition Engines.
[17 CCR 93115.5 (a)]

4. This equipment shall be limited to use for emergency power, defined as in response to a fire or when commercially available power has been interrupted or may be interrupted or disrupted by weather. In addition, this unit shall be operated no more than twenty (20) hours per year for testing and maintenance.
[17 CCR 93115.6(b)(3) and 40 CFR 63.6640(f)(ii)]

5. Facility-wide emissions shall not exceed 80 tons per year of NOx, 24 tons per year of VOC, and 18 tons per year of PM10. Facility-wide emissions shall be calculated and recorded, in tons, on a calendar month basis and totaled for each consecutive twelve-month basis. For emergency engines, only emissions generated during testing and maintenance shall apply toward the facility-wide emission limits. These records shall be maintained as current for a minimum of five (5) years, and made available upon District, State and/or Federal request.
[District Rule 221(B)]

6. Emergency use includes providing electrical power or mechanical work during day-of-rocket launch and day of space plane vehicle re-entry/landing system checks and tracking performed (in parallel with grid power) by the United States Department of Defense at Command Transmitter sites (also known as "CT" sites) that occur within the 24-hour time period associated with the scheduled time of the launch or re-entry/landing.
[17 CCR 93115.4(a)(30)(G)]

7. The owner/operator shall maintain an operations log for this equipment current and on-site (or at a central location) for a minimum of five (5) years, and this log shall be provided to District, State and/or Federal personnel, upon request. The log shall include, at a minimum, the information specified below:
a. Date of each use and hours of operation with documentation of how many hours are spent for emergency operation, including what classified the operation as emergency (i.e. commercial power unavailable, weather-threatening power availability, or command transmitting as allowed per condition 6), and how many hours are spent for non-emergency operation, including what classified the operation as non-emergency. [17 CCR 93115.10(f) and 40 CFR 63.6655(f)]; and,
b. Monthly and calendar year operation in terms of total hours, both emergency and non-emergency use, classified as described in 'a.' above [17 CCR 93115.10(f)]; and,
c. Monthly fuel use [17 CCR 93115.10(f)]; and,
d. Documentation of certified fuel use, as required by condition 3 (may use the supplier's certification of sulfur content if it is maintained as part of this log); and,
e. Maintenance performed on this equipment, inclusive of the management practice requirements of condition 8 below; and,
f. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment [40 CFR 63.6640(b) and 63.6655(a)(2)]; and,
g. Records of all required maintenance performed on the air pollution control and monitoring equipment [40 CFR 63.6655(a)(4)]; and,
h. Records of actions taken during periods of malfunction to minimize emissions in accordance with condition 1, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation [40 CFR63.6655(a)(5)].

8. This engine is subject to the requirements of 40 CFR 63, Subpart ZZZZ, and pursuant to this federal regulation, this engine is required to meet the following compliance requirements by May 3, 2013:

The owner/operator of this equipment shall demonstrate continuous compliance by committing to a maintenance schedule inclusive of the management practice requirements listed below:
a. Change oil and oil filter every 500 hours of operation or annually, whichever comes first (source has the option to utilize an oil analysis program pursuant to 40 CFR 63.6625(i) in order to extend the specified oil change requirement.);
b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and,
c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
[40 CFR 63.6603(a) and 63.6640(a)]

9. If this emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements required by condition 8, or shutting down the engine would pose an unacceptable risk, the management practice can be delayed until the emergency is over, or the risk has been abated. The management practice should be performed as soon as practicable after the emergency/risk has ended. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.
[40 CFR 63.6603(a)]

10. The owner/operator must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup apply.
[40 CFR 63.6625(h)]

11. This equipment may operate in response to notification of impending rotating outage if the area utility has ordered rotating outages in the area where the engine is located or expects to order such outages at a particular time, the engine is located in the area subject to the rotating outage, the engine is operated no more than 30 minutes prior to the forecasted outage, and the engine is shut down immediately after the utility advises that the outage is no longer imminent or in effect.
[17 CCR 93115.6(b)(1) and 40 CFR 63.6640(f)(iii)]

12. This equipment shall not be used to provide power during a voluntary agreed to power outage and/or power reduction initiated under an Interruptible Service Contract (ISC); Demand Response Program (DRP); Load Reduction Program (LRP) and/or similar arrangement(s) with the electrical power supplier.
[17 CCR 93115.6(c)(2)(C)]#

13. This equipment does not require a regularly scheduled emission compliance test. However, emission compliance testing may be required at the discretion of the District.

14. A facility wide Comprehensive Emission Inventory (CEI) for all emitted criteria and toxic air pollutants must be submitted to the District, in a format approved by the District, upon District request.
[District Rule 107(b), H&S Code 39607 & 44341-44342, and 40 CFR 51, Subpart A]

MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT
14306 Park Avenue, Victorville, CA 92392-2310
760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

AUTHORITY TO CONSTRUCT

E000279

If construction is not completed by the expiration date of this permit, it may be renewed for one additional year upon payment of applicable fees. Any additional extension will require the written approval of the Air Pollution Control Officer. This Authority to Construct may serve as a temporary Permit to Operate provided the APCO is given prior notice of intent to operate and the Permit to Operate is not specifically denied.

EXPIRES LAST DAY OF: SEPTEMBER 2019

OWNER OR OPERATOR (Co.#133)

NASA/Goldstone
93 Goldstone Rd.
Fort Irwin, CA 92310

EQUIPMENT LOCATION (Fac.#611)

NASA/Goldstone Deep Space Communications Complex
Goldstone Lake
Fort Irwin, CA 92311

Description:
DIESEL IC ENGINE, EMERGENCY GENERATOR (UNIT #3A: Building G-81) - MARS SITE consisting of: Year of Manufacturer 1965, uncertified, existing ICE with a stack height of 17.9', stack diameter of 12", and an exhaust flow rate of 1155 cubic feet per minute at 738 degrees Fahrenheit.

One Caterpillar, Diesel fired internal combustion engine Model No. 398 and Serial No. 66B733, After Cooled, Direct Injected, Turbo Charged, producing 875 bhp with 12 cylinders at 1200 rpm while consuming a maximum of 48 gal/hr. This equipment powers a Ideal Electric Generator Model No. SAB and Serial No. 249958, rated at 600 kW(e).

CONDITIONS:

1. This existing, diesel engine, and any associated air pollution control equipment, shall be installed, operated, and maintained in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles, which produce the minimum emissions of contaminants. Unless otherwise noted, this equipment shall also be operated in accordance with all data and specifications submitted with the application for this permit.
[40 CFR 63.6605(a) and (b) and 63.6625(e)]

2. A non-resettable four-digit (9,999) hour timer shall be installed and maintained on this equipment to indicate elapsed engine operating time.
[17 CCR 93115.10(d) and 40 CFR 63.6625(f)]

Fee Schedule: 7 (g)	Rating: 875 device	SIC: 9661	SCC: 20100102	Location/Coordinates: +35.42509, -116.89014

This permit does not authorize the emission of air contaminants in excess of those allowed by law, including Division 26 of the Health and Safety Code of the State of California and the Rules and Regulations of the District. This permit cannot be construed as permission to violate existing laws, ordinances, statutes or regulations of this or other governmental agencies. This permit must be renewed by the expiration date above. If billing for renewal fee required by Rule 301(c) is not received by expiration date above, please contact the District.

NASA/Goldstone
93 Goldstone Rd.
Fort Irwin, CA 92310

By: **COPY**

Brad Poiriez
Air Pollution Control Officer

3. This equipment shall only be fired on diesel fuel that meets the requirements of CARB Diesel Fuel as defined in 17 CCR 93115.4(a)(8), or an alternative fuel that meets the requirements of 17 CCR 93115.5(a)(2-6), pursuant to the Air Toxic Control Measure for Stationary Compression Ignition Engines.
[17 CCR 93115.5(a)]

4. This equipment shall be limited to use for emergency power, defined as in response to a fire or when commercially available power has been interrupted or may be interrupted or disrupted by weather. In addition, this unit shall be operated no more than twenty (20) hours per year for testing and maintenance.
[17 CCR 93115.6(b)(3) and 40 CFR 63.6640(f)(ii)]

5. Facility-wide emissions shall not exceed 80 tons per year of NOx, 24 tons per year of VOC, and 18 tons per year of PM10. Facility-wide emissions shall be calculated and recorded, in tons, on a calendar month basis and totaled for each consecutive twelve-month basis. For emergency engines, only emissions generated during testing and maintenance shall apply toward the facility-wide emission limits. These records shall be maintained as current for a minimum of five (5) years, and made available upon District, State and/or Federal request.
[District Rule 221(b)]

6. Emergency use includes providing electrical power or mechanical work during day-of-rocket launch and day of space plane vehicle re-entry/landing system checks and tracking performed (in parallel with grid power) by the United States Department of Defense at Command Transmitter sites (also known as "CT" sites) that occur within the 24-hour time period associated with the scheduled time of the launch or re-entry/landing.
[17 CCR 93115.4(a)(30)(G)]

7. The owner/operator shall maintain an operations log for this equipment current and on-site (or at a central location) for a minimum of five (5) years, and this log shall be provided to District, State and/or Federal personnel, upon request. The log shall include, at a minimum, the information specified below:
a. Date of each use and hours of operation with documentation of how many hours are spent for emergency operation, including what classified the operation as emergency (i.e. commercial power unavailable, weather-threatening power availability, or command transmitting as allowed per condition 6), and how many hours are spent for non-emergency operation, including what classified the operation as non-emergency. [17 CCR 93115.10(f) and 40 CFR 63.6655(f)]; and,
b. Monthly and calendar year operation in terms of total hours, both emergency and non-emergency use, classified as described in 'a.' above [17 CCR 93115.10(f)]; and,
c. Monthly fuel use [17 CCR 93115.10(f)]; and,
d. Documentation of certified fuel use, as required by condition 3 (may use the supplier's certification of sulfur content if it is maintained as part of this log); and,
e. Maintenance performed on this equipment, inclusive of the management practice requirements of condition 8 below; and,
f. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment [40 CFR 63.6640(b) and 63.6655(a)(2)]; and,
g. Records of all required maintenance performed on the air pollution control and monitoring equipment [40 CFR 63.6655(a)(4)]; and,
h. Records of actions taken during periods of malfunction to minimize emissions in accordance with condition 1, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation [40 CFR63.6655(a)(5)].

8. This engine is subject to the requirements of 40 CFR 63, Subpart ZZZZ, and pursuant to this federal regulation, this engine is required to meet the following compliance requirements by May 3, 2013:

The owner/operator of this equipment shall demonstrate continuous compliance by committing to a maintenance schedule inclusive of the management practice requirements listed below:
a. Change oil and oil filter every 500 hours of operation or annually, whichever comes first (source has the option to utilize an oil analysis program pursuant to 40 CFR 63.6625(i) in order to extend the specified oil change requirement.);
b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and,
c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
[40 CFR 63.6603(a) and 63.6640(a)]

9. If this emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements required by condition 8, or shutting down the engine would pose an unacceptable risk, the management practice can be delayed until the emergency is over, or the risk has been abated. The management practice should be performed as soon as practicable after the emergency/risk has ended. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.
[40 CFR 63.6603(a)]

10. The owner/operator must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup apply.
[40 CFR 63.6625(h)]

11. This equipment may operate in response to notification of impending rotating outage if the area utility has ordered rotating outages in the area where the engine is located or expects to order such outages at a particular time, the engine is located in the area subject to the rotating outage, the engine is operated no more than 30 minutes prior to the forecasted outage, and the engine is shut down immediately after the utility advises that the outage is no longer imminent or in effect.
[17 CCR 93115.6(b)(1) and 40 CFR 63.6640(f)(iii)]

12. This equipment shall not be used to provide power during a voluntary agreed to power outage and/or power reduction initiated under an Interruptible Service Contract (ISC); Demand Response Program (DRP); Load Reduction Program (LRP) and/or similar arrangement(s) with the electrical power supplier.
[17 CCR 93115.6(c)(2)(C)]

13. This equipment does not require a regularly scheduled emission compliance test. However, emission compliance testing may be required at the discretion of the District.

14. A facility wide Comprehensive Emission Inventory (CEI) for all emitted criteria and toxic air pollutants must be submitted to the District, in a format approved by the District, upon District request.
[District Rule 107(b), H&S Code 39607 & 44341-44342, and 40 CFR 51, Subpart A]

MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT
14306 Park Avenue, Victorville, CA 92392-2310
760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

AUTHORITY TO CONSTRUCT

E000280

If construction is not completed by the expiration date of this permit, it may be renewed for one additional year upon payment of applicable fees. Any additional extension will require the written approval of the Air Pollution Control Officer. This Authority to Construct may serve as a temporary Permit to Operate provided the APCO is given prior notice of intent to operate and the Permit to Operate is not specifically denied.

EXPIRES LAST DAY OF: SEPTEMBER 2019

OWNER OR OPERATOR (Co.#133)

NASA/Goldstone
93 Goldstone Rd.
Fort Irwin, CA 92310

EQUIPMENT LOCATION (Fac.#611)

NASA/Goldstone Deep Space Communications Complex
Goldstone Lake
Fort Irwin, CA 92311

Description:
DIESEL IC ENGINE, EMERGENCY GENERATOR (UNIT #1A: Building G-81) - MARS SITE consisting of: Year of Manufacturer 1964, uncertified, existing ICE with a stack height of 27.9', stack diameter of 12", and an exhaust flow rate of 1155 cubic feet per minute at 738 degrees Fahrenheit.

One Caterpillar, Diesel fired internal combustion engine Model No. 398 and Serial No. 66B2911, After Cooled, Direct Injected, Turbo Charged, producing 875 bhp with 12 cylinders at 1200 rpm while consuming a maximum of 48 gal/hr. This equipment powers a Kato Engineering Generator Model No. A2421600001 and Serial No. 97979, rated at 600 kW(e).

CONDITIONS:

1. This existing, diesel engine, and any associated air pollution control equipment, shall be installed, operated, and maintained in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles, which produce the minimum emissions of contaminants. Unless otherwise noted, this equipment shall also be operated in accordance with all data and specifications submitted with the application for this permit.
[40 CFR 63.6605(a) and (b) and 63.6625(e)]

2. A non-resettable four-digit (9,999) hour timer shall be installed and maintained on this equipment to indicate elapsed engine operating time.
[17 CCR 93115.10(d) and 40 CFR 63.6625(f)]

Fee Schedule: 7 (g)	Rating: 875 device	SIC: 9661	SCC: 20100102	Location/Coordinates: +35.42509, -116.89022

This permit does not authorize the emission of air contaminants in excess of those allowed by law, including Division 26 of the Health and Safety Code of the State of California and the Rules and Regulations of the District. This permit cannot be construed as permission to violate existing laws, ordinances, statutes or regulations of this or other governmental agencies. This permit must be renewed by the expiration date above. If billing for renewal fee required by Rule 301(c) is not received by expiration date above, please contact the District.

NASA/Goldstone
93 Goldstone Rd.
Fort Irwin, CA 92310

By: **COPY**
Brad Poiriez
Air Pollution Control Officer

3. This equipment shall only be fired on diesel fuel that meets the requirements of CARB Diesel Fuel as defined in 17 CCR 93115.4(a)(8), or an alternative fuel that meets the requirements of 17 CCR 93115.5(a)(2-6), pursuant to the Air Toxic Control Measure for Stationary Compression Ignition Engines.
[17 CCR 93115.5(a)]

4. This equipment shall be limited to use for emergency power, defined as in response to a fire or when commercially available power has been interrupted or may be interrupted or disrupted by weather. In addition, this unit shall be operated no more than twenty (20) hours per year for testing and maintenance.
[17 CCR 93115.6(b)(3) and 40 CFR 63.6640(f)(ii)]

5. Facility-wide emissions shall not exceed 80 tons per year of NOx, 24 tons per year of VOC, and 18 tons per year of PM10. Facility-wide emissions shall be calculated and recorded, in tons, on a calendar month basis and totaled for each consecutive twelve-month basis. For emergency engines, only emissions generated during testing and maintenance shall apply toward the facility-wide emission limits. These records shall be maintained as current for a minimum of five (5) years, and made available upon District, State and/or Federal request.
[District Rule 221(B)]

6. Emergency use includes providing electrical power or mechanical work during day-of-rocket launch and day of space plane vehicle re-entry/landing system checks and tracking performed (in parallel with grid power) by the United States Department of Defense at Command Transmitter sites (also known as "CT" sites) that occur within the 24-hour time period associated with the scheduled time of the launch or re-entry/landing.
[17 CCR 93115.4(a)(30)(G)]

7. The owner/operator shall maintain an operations log for this equipment current and on-site (or at a central location) for a minimum of five (5) years, and this log shall be provided to District, State and/or Federal personnel, upon request. The log shall include, at a minimum, the information specified below:
a. Date of each use and hours of operation with documentation of how many hours are spent for emergency operation, including what classified the operation as emergency (i.e. commercial power unavailable, weather-threatening power availability, or command transmitting as allowed per condition 6), and how many hours are spent for non-emergency operation, including what classified the operation as non-emergency. [17 CCR 93115.10(f) and 40 CFR 63.6655(f)]; and,
b. Monthly and calendar year operation in terms of total hours, both emergency and non-emergency use, classified as described in 'a.' above [17 CCR 93115.10(f)]; and,
c. Monthly fuel use [17 CCR 93115.10(f)]; and,
d. Documentation of certified fuel use, as required by condition 3 (may use the supplier's certification of sulfur content if it is maintained as part of this log); and,
e. Maintenance performed on this equipment, inclusive of the management practice requirements of condition 8 below; and,
f. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment [40 CFR 63.6640(b) and 63.6655(a)(2)]; and,
g. Records of all required maintenance performed on the air pollution control and monitoring equipment [40 CFR 63.6655(a)(4)]; and,
h. Records of actions taken during periods of malfunction to minimize emissions in accordance with condition 1, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation [40 CFR63.6655(a)(5)].

8. This engine is subject to the requirements of 40 CFR 63, Subpart ZZZZ, and pursuant to this federal regulation, this engine is required to meet the following compliance requirements by May 3, 2013:

The owner/operator of this equipment shall demonstrate continuous compliance by committing to a maintenance schedule inclusive of the management practice requirements listed below:
a. Change oil and oil filter every 500 hours of operation or annually, whichever comes first (source has the option to utilize an oil analysis program pursuant to 40 CFR 63.6625(i) in order to extend the specified oil change requirement.);
b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and,
c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
[40 CFR 63.6603(a) and 63.6640(a)]

9. If this emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements required by condition 8, or shutting down the engine would pose an unacceptable risk, the management practice can be delayed until the emergency is over, or the risk has been abated. The management practice should be performed as soon as practicable after the emergency/risk has ended. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.
[40 CFR 63.6603(a)]

10. The owner/operator must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup apply.
[40 CFR 63.6625(h)]

11. This equipment may operate in response to notification of impending rotating outage if the area utility has ordered rotating outages in the area where the engine is located or expects to order such outages at a particular time, the engine is located in the area subject to the rotating outage, the engine is operated no more than 30 minutes prior to the forecasted outage, and the engine is shut down immediately after the utility advises that the outage is no longer imminent or in effect.
[17 CCR 93115.6(b)(1) and 40 CFR 63.6640(f)(iii)]

12. This equipment shall not be used to provide power during a voluntary agreed to power outage and/or power reduction initiated under an Interruptible Service Contract (ISC); Demand Response Program (DRP); Load Reduction Program (LRP) and/or similar arrangement(s) with the electrical power supplier.
[17 CCR 93115.6(c)(2)(C)]

13. This equipment does not require a regularly scheduled emission compliance test. However, emission compliance testing may be required at the discretion of the District.

14. A facility wide Comprehensive Emission Inventory (CEI) for all emitted criteria and toxic air pollutants must be submitted to the District, in a format approved by the District, upon District request.
[District Rule 107(b), H&S Code 39607 & 44341-44342, and 40 CFR 51, Subpart A]

MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT
14306 Park Avenue, Victorville, CA 92392-2310
760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

AUTHORITY TO CONSTRUCT

E000281

If construction is not completed by the expiration date of this permit, it may be renewed for one additional year upon payment of applicable fees. Any additional extension will require the written approval of the Air Pollution Control Officer. This Authority to Construct may serve as a temporary Permit to Operate provided the APCO is given prior notice of intent to operate and the Permit to Operate is not specifically denied.

EXPIRES LAST DAY OF: SEPTEMBER 2019

OWNER OR OPERATOR (Co.#133)

NASA/Goldstone
93 Goldstone Rd.
Fort Irwin, CA 92310

EQUIPMENT LOCATION (Fac.#611)

NASA/Goldstone Deep Space Communications Complex
Goldstone Lake
Fort Irwin, CA 92311

Description:
DIESEL IC ENGINE, EMERGENCY GENERATOR (UNIT #2A: Building G-81) - MARS SITE consisting of: Year of Manufacturer 1965, uncertified, existing ICE with a stack height of 17.9', stack diameter of 12", and an exhaust flow rate of 1155 cubic feet per minute at 738 degrees Fahrenheit.

One Caterpillar, Diesel fired internal combustion engine Model No. 398 and Serial No. 66B2909, After Cooled, Direct Injected, Turbo Charged, producing 875 bhp with 12 cylinders at 1200 rpm while consuming a maximum of 48 gal/hr. This equipment powers a Kato Engineering Generator Model No. A2421600002 and Serial No. 11729, rated at 600 kW(e).

CONDITIONS:

1. This existing, diesel engine, and any associated air pollution control equipment, shall be installed, operated, and maintained in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles, which produce the minimum emissions of contaminants. Unless otherwise noted, this equipment shall also be operated in accordance with all data and specifications submitted with the application for this permit.
[40 CFR 63.6605(a) and (b) and 63.6625(e)]

2. A non-resettable four-digit (9,999) hour timer shall be installed and maintained on this equipment to indicate elapsed engine operating time.
[17 CCR 93115.10(d) and 40 CFR 63.6625(f)]

Fee Schedule: 7 (g)	Rating: 875 device	SIC: 9661	SCC: 20100102	Location/Coordinates: +35.42509, -116.89018

This permit does not authorize the emission of air contaminants in excess of those allowed by law, including Division 26 of the Health and Safety Code of the State of California and the Rules and Regulations of the District. This permit cannot be construed as permission to violate existing laws, ordinances, statutes or regulations of this or other governmental agencies. This permit must be renewed by the expiration date above. If billing for renewal fee required by Rule 301(c) is not received by expiration date above, please contact the District.

NASA/Goldstone
93 Goldstone Rd.
Fort Irwin, CA 92310

By: **COPY**
Brad Poiriez
Air Pollution Control Officer

3. This equipment shall only be fired on diesel fuel that meets the requirements of CARB Diesel Fuel as defined in 17 CCR 93115.4(a)(8), or an alternative fuel that meets the requirements of 17 CCR 93115.5(a)(2-6), pursuant to the Air Toxic Control Measure for Stationary Compression Ignition Engines.
[17 CCR 93115.5(a) and 40 CFR 63.6604]

4. This equipment shall be limited to use for emergency power, defined as in response to a fire or when commercially available power has been interrupted or may be interrupted or disrupted by weather. In addition, this unit shall be operated no more than twenty (20) hours per year for testing and maintenance.
[17 CCR 93115.6(b)(3) and 40 CFR 63.6640(f)(ii)]

5. Facility-wide emissions shall not exceed 80 tons per year of NOx, 24 tons per year of VOC, and 18 tons per year of PM10. Facility-wide emissions shall be calculated and recorded, in tons, on a calendar month basis and totaled for each consecutive twelve-month basis. For emergency engines, only emissions generated during testing and maintenance shall apply toward the facility-wide emission limits. These records shall be maintained as current for a minimum of five (5) years, and made available upon District, State and/or Federal request.
[District Rule 221(B)]

6. Emergency use includes providing electrical power or mechanical work during day-of-rocket launch and day of space plane vehicle re-entry/landing system checks and tracking performed (in parallel with grid power) by the United States Department of Defense at Command Transmitter sites (also known as "CT" sites) that occur within the 24-hour time period associated with the scheduled time of the launch or re-entry/landing.
[17 CCR 93115.4(a)(30)(G)]

7. The owner/operator shall maintain an operations log for this equipment current and on-site (or at a central location) for a minimum of five (5) years, and this log shall be provided to District, State and/or Federal personnel, upon request. The log shall include, at a minimum, the information specified below:
a. Date of each use and hours of operation with documentation of how many hours are spent for emergency operation, including what classified the operation as emergency (i.e. commercial power unavailable, weather-threatening power availability, or command transmitting as allowed per condition 6), and how many hours are spent for non-emergency operation, including what classified the operation as non-emergency. [17 CCR 93115.10(f) and 40 CFR 63.6655(f)]; and,
b. Monthly and calendar year operation in terms of total hours, both emergency and non-emergency use, classified as described in 'a.' above [17 CCR 93115.10(f)]; and,
c. Monthly fuel use [17 CCR 93115.10(f)]; and,
d. Documentation of certified fuel use, as required by condition 3 (may use the supplier's certification of sulfur content if it is maintained as part of this log); and,
e. Maintenance performed on this equipment, inclusive of the management practice requirements of condition 8 below; and,
f. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment [40 CFR 63.6640(b) and 63.6655(a)(2)]; and,
g. Records of all required maintenance performed on the air pollution control and monitoring equipment [40 CFR 63.6655(a)(4)]; and,
h. Records of actions taken during periods of malfunction to minimize emissions in accordance with condition 1, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation [40 CFR63.6655(a)(5)].

8. This engine is subject to the requirements of 40 CFR 63, Subpart ZZZZ, and pursuant to this federal regulation, this engine is required to meet the following compliance requirements by May 3, 2013:

The owner/operator of this equipment shall demonstrate continuous compliance by committing to a maintenance schedule inclusive of the management practice requirements listed below:
a. Change oil and oil filter every 500 hours of operation or annually, whichever comes first (source has the option to utilize an oil analysis program pursuant to 40 CFR 63.6625(i) in order to extend the specified oil change requirement.);
b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and,
c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
[40 CFR 63.6603(a) and 63.6640(a)]

9. If this emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements required by condition 8, or shutting down the engine would pose an unacceptable risk, the management practice can be delayed until the emergency is over, or the risk has been abated. The management practice should be performed as soon as practicable after the emergency/risk has ended. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.
[40 CFR 63.6603(a)]

10. The owner/operator must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup apply.
[40 CFR 63.6625(h)]

11. This equipment may operate in response to notification of impending rotating outage if the area utility has ordered rotating outages in the area where the engine is located or expects to order such outages at a particular time, the engine is located in the area subject to the rotating outage, the engine is operated no more than 30 minutes prior to the forecasted outage, and the engine is shut down immediately after the utility advises that the outage is no longer imminent or in effect.
[17 CCR 93115.6(b)(1) and 40 CFR 63.6640(f)(iii)]

12. This equipment shall not be used to provide power during a voluntary agreed to power outage and/or power reduction initiated under an Interruptible Service Contract (ISC); Demand Response Program (DRP); Load Reduction Program (LRP) and/or similar arrangement(s) with the electrical power supplier.
[17 CCR 93115.6(c)(2)(C)]

13. This equipment does not require a regularly scheduled emission compliance test. However, emission compliance testing may be required at the discretion of the District.

14. A facility wide Comprehensive Emission Inventory (CEI) for all emitted criteria and toxic air pollutants must be submitted to the District, in a format approved by the District, upon District request.
[District Rule 107(b), H&S Code 39607 & 44341-44342, and 40 CFR 51, Subpart A]

MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT
14306 Park Avenue, Victorville, CA 92392-2310
760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

AUTHORITY TO CONSTRUCT

E003381

If construction is not completed by the expiration date of this permit, it may be renewed for one additional year upon payment of applicable fees. Any additional extension will require the written approval of the Air Pollution Control Officer. This Authority to Construct may serve as a temporary Permit to Operate provided the APCO is given prior notice of intent to operate and the Permit to Operate is not specifically denied.

EXPIRES LAST DAY OF: SEPTEMBER 2019

OWNER OR OPERATOR (Co.#133)

NASA/Goldstone
93 Goldstone Rd.
Fort Irwin, CA 92310

EQUIPMENT LOCATION (Fac.#611)

NASA/Goldstone Deep Space Communications Complex
Goldstone Lake
Fort Irwin, CA 92311

Description:
DIESEL IC ENGINE, EMERGENCY FIRE PUMP - APOLLO SITE consisting of: Year of Manufacturer 2000, stack height of 10' and a stack diameter of 4".

One Detroit Diesel, Diesel fired internal combustion engine Model No. VMFPT6HT L1211H and Serial No. 91B-1059, producing 140 bhp with 6 cylinders at 0 rpm while consuming a maximum of 6 gal/hr. This equipment powers a Peerless Fire Pump Model No. 5AEF11H and Serial No. 545326, rated at 1000 gpm.

CONDITIONS:

1. This existing, diesel engine, and any associated air pollution control equipment, shall be installed, operated, and maintained in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles, which produce the minimum emissions of contaminants. Unless otherwise noted, this equipment shall also be operated in accordance with all data and specifications submitted with the application for this permit.
[40 CFR 63.6605(a) and (b) and 63.6625(e)]

2. A non-resettable four-digit (9,999) hour timer shall be installed and maintained on this equipment to indicate elapsed engine operating time.
[17 CCR 93115.10(d) and 40 CFR 63.6625(f)]

Fee Schedule: 7 (i)	Rating: 1 device	SIC: 9661	SCC: 20200102	Location/Coordinates: +35.34096, -116.87343

This permit does not authorize the emission of air contaminants in excess of those allowed by law, including Division 26 of the Health and Safety Code of the State of California and the Rules and Regulations of the District. This permit cannot be construed as permission to violate existing laws, ordinances, statutes or regulations of this or other governmental agencies. This permit must be renewed by the expiration date above. If billing for renewal fee required by Rule 301(c) is not received by expiration date above, please contact the District.

NASA/Goldstone
93 Goldstone Rd.
Fort Irwin, CA 92310

By: **COPY**

Brad Poiriez
Air Pollution Control Officer

3. This equipment shall only be fired on diesel fuel that meets the requirements of CARB Diesel Fuel as defined in 17 CCR 93115.4(a)(8), or an alternative fuel that meets the requirements of 17 CCR 93115.5(a)(2-6), pursuant to the Air Toxic Control Measure for Stationary Compression Ignition Engines.
[17 CCR 93115.5(a)]

4. This equipment shall not operate more than twenty (20) hours per year for testing and maintenance.
[17 CCR 93115.6(b)(3) and 40 CFR 63.6640(f)(ii)]

5. The hour limit indicated in condition 4, above, does not apply to in-use emergency fire pump assemblies that are driven directly by stationary diesel-fueled CI engines and only operated the number of hours necessary to comply with the testing requirements of National Fire Protection Association (NFPA) 25 "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems," 2002 edition, which is incorporated herein by reference.
[17 CCR 93115.3(n)]

6. Facility-wide emissions shall not exceed 80 tons per year of NOx, 24 tons per year of VOC, and 18 tons per year of PM10. Facility-wide emissions shall be calculated and recorded, in tons, on a calendar month basis and totaled for each consecutive twelve-month basis. For emergency engines, only emissions generated during testing and maintenance shall apply toward the facility-wide emission limits. These records shall be maintained as current for a minimum of five (5) years, and made available upon District, State and/or Federal request.
[District Rule 221(B)]

7. The owner/operator shall maintain an operations log for this equipment current and on-site (or at a central location) for a minimum of five (5) years, and this log shall be provided to District, State and/or Federal personnel, upon request. The log shall include, at a minimum, the information specified below:
a. Date of each use and hours of operation with documentation of how many hours are spent for emergency operation, including what classified the operation as emergency, and how many hours are spent for non-emergency operation, including what classified the operation as non-emergency (i.e. testing, maintenance, NFPA testing, etc). [17 CCR 93115.10(f) and 40 CFR 63.6655(f)]; and,
b. Monthly and calendar year operation in terms of total hours, both emergency and non-emergency use, classified as described in 'a.' above [17 CCR 93115.10(f)]; and,
c. Monthly fuel use [17 CCR 93115.10(f)]; and,
d. Documentation of certified fuel use, as required by condition 3 (may use the supplier's certification of sulfur content if it is maintained as part of this log); and,
e. Maintenance performed on this equipment, inclusive of the management practice requirements of condition 8 below; and,
f. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment [40 CFR 63.6640(b) and 63.6655(a)(2)]; and,
g. Records of all required maintenance performed on the air pollution control and monitoring equipment [40 CFR 63.6655(a)(4)]; and,
h. Records of actions taken during periods of malfunction to minimize emissions in accordance with condition 1, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation [40 CFR63.6655(a)(5)].

8. This engine is subject to the requirements of 40 CFR 63, Subpart ZZZZ, and pursuant to this federal regulation, this engine is required to meet the following compliance requirements by May 3, 2013:

The owner/operator of this equipment shall demonstrate continuous compliance by committing to a maintenance schedule inclusive of the management practice requirements listed below:
a. Change oil and oil filter every 500 hours of operation or annually, whichever comes first (source has the option to utilize an oil analysis program pursuant to 40 CFR 63.6625(i) in order to extend the specified oil change requirement.);
b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and,
c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
[40 CFR 63.6603(a) and 63.6640(a)]

9. If this emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform

the management practice requirements required by condition 8, or shutting down the engine would pose an unacceptable risk, the management practice can be delayed until the emergency is over, or the risk has been abated. The management practice should be performed as soon as practicable after the emergency/risk has ended. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.
[40 CFR 63.6603(a)]

10. The owner/operator must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup apply.
[40 CFR 63.6625(h)]

11. This equipment does not require a regularly scheduled emission compliance test. However, emission compliance testing may be required at the discretion of the District.
[District Rule 204]

12. A facility wide Comprehensive Emission Inventory (CEI) for all emitted criteria and toxic air pollutants must be submitted to the District, in a format approved by the District, upon District request.
[District Rule 107(b), H&S Code 39607 & 44341-44342, and 40 CFR 51, Subpart A]

MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT
14306 Park Avenue, Victorville, CA 92392-2310
760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

AUTHORITY TO CONSTRUCT

E003382

If construction is not completed by the expiration date of this permit, it may be renewed for one additional year upon payment of applicable fees. Any additional extension will require the written approval of the Air Pollution Control Officer. This Authority to Construct may serve as a temporary Permit to Operate provided the APCO is given prior notice of intent to operate and the Permit to Operate is not specifically denied.

EXPIRES LAST DAY OF: SEPTEMBER 2019

OWNER OR OPERATOR (Co.#133)

NASA/Goldstone
93 Goldstone Rd.
Fort Irwin, CA 92310

EQUIPMENT LOCATION (Fac.#611)

NASA/Goldstone Deep Space Communications Complex
Goldstone Lake
Fort Irwin, CA 92311

Description:
DIESEL IC ENGINE, EMERGENCY GENERATOR - ECHO SITE consisting of: Year of Manufacturer 1991, uncertified, existing ICE with a stack height of 8', stack diameter of 5".

One Cummins, Diesel fired internal combustion engine Model No. NT-855-64 and Serial No. 11638482, producing 375 bhp with 6 cylinders at 1800 rpm while consuming a maximum of 9 gal/hr. This equipment powers a Onan Generator Model No. 230DFB0D and Serial No. 0910430314, rated at 230 kW(e).

CONDITIONS:

1. This existing, diesel engine, and any associated air pollution control equipment, shall be installed, operated, and maintained in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles, which produce the minimum emissions of contaminants. Unless otherwise noted, this equipment shall also be operated in accordance with all data and specifications submitted with the application for this permit.
[40 CFR 63.6605(a) and (b) and 63.6625(e)]

2. A non-resettable four-digit (9,999) hour timer shall be installed and maintained on this equipment to indicate elapsed engine operating time.
[17 CCR 93115.10(d) and 40 CFR 63.6625(f)]

Fee Schedule: 7 (g) | Rating: 1 device | SIC: 9661 | SCC: 20100102 | Location/Coordinates: +35.30037, -116.80416

This permit does not authorize the emission of air contaminants in excess of those allowed by law, including Division 26 of the Health and Safety Code of the State of California and the Rules and Regulations of the District. This permit cannot be construed as permission to violate existing laws, ordinances, statutes or regulations of this or other governmental agencies. This permit must be renewed by the expiration date above. If billing for renewal fee required by Rule 301(c) is not received by expiration date above, please contact the District.

NASA/Goldstone
93 Goldstone Rd.
Fort Irwin, CA 92310

By: **COPY**
Brad Poiriez
Air Pollution Control Officer

Permit: E003382 Issue Date: DRAFT

3. This equipment shall only be fired on diesel fuel that meets the requirements of CARB Diesel Fuel as defined in 17 CCR 93115.4(a)(8), or an alternative fuel that meets the requirements of 17 CCR 93115.5(a)(2-6), pursuant to the Air Toxic Control Measure for Stationary Compression Ignition Engines.
[17 CCR 93115.5(a)]

4. This equipment shall be limited to use for emergency power, defined as in response to a fire or when commercially available power has been interrupted. In addition, this unit shall be operated no more than twenty (20) hours per year for testing and maintenance.
[17 CCR 93115.6(b)(3) and 40 CFR 63.6640(f)(ii)]

5. Facility-wide emissions shall not exceed 80 tons per year of NOx, 24 tons per year of VOC, and 18 tons per year of PM10. Facility-wide emissions shall be calculated and recorded, in tons, on a calendar month basis and totaled for each consecutive twelve-month basis. For emergency engines, only emissions generated during testing and maintenance shall apply toward the facility-wide emission limits. These records shall be maintained as current for a minimum of five (5) years, and made available upon District, State and/or Federal request.
[District Rule 221(B)]

6. The owner/operator shall maintain an operations log for this equipment current and on-site (or at a central location) for a minimum of five (5) years, and this log shall be provided to District, State and/or Federal personnel, upon request. The log shall include, at a minimum, the information specified below:
a. Date of each use and hours of operation with documentation of how many hours are spent for emergency operation, including what classified the operation as emergency, and how many hours are spent for non-emergency operation, including what classified the operation as non-emergency. [17 CCR 93115.10(f) and 40 CFR 63.6655(f)]; and,
b. Monthly and calendar year operation in terms of total hours, both emergency and non-emergency use, classified as described in 'a.' above [17 CCR 93115.10(f)]; and,
c. Monthly fuel use [17 CCR 93115.10(f)]; and,
d. Documentation of certified fuel use, as required by condition 3 (may use the supplier's certification of sulfur content if it is maintained as part of this log); and,
e. Maintenance performed on this equipment, inclusive of the management practice requirements of condition 7 below; and,
f. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment [40 CFR 63.6640(b) and 63.6655(a)(2)]; and,
g. Records of all required maintenance performed on the air pollution control and monitoring equipment [40 CFR 63.6655(a)(4)]; and,
h. Records of actions taken during periods of malfunction to minimize emissions in accordance with condition 1, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation [40 CFR63.6655(a)(5)].

7. This engine is subject to the requirements of 40 CFR 63, Subpart ZZZZ, and pursuant to this federal regulation, this engine is required to meet the following compliance requirements by May 3, 2013:

The owner/operator of this equipment shall demonstrate continuous compliance by committing to a maintenance schedule inclusive of the management practice requirements listed below:
a. Change oil and oil filter every 500 hours of operation or annually, whichever comes first (source has the option to utilize an oil analysis program pursuant to 40 CFR 63.6625(i) in order to extend the specified oil change requirement.);
b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and,
c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
[40 CFR 63.6603(a) and 63.6640(a)]

8. If this emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements required by condition 8, or shutting down the engine would pose an unacceptable risk, the management practice can be delayed until the emergency is over, or the risk has been abated. The management practice should be performed as soon as practicable after the emergency/risk has ended. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.

[40 CFR 63.6603(a)]

9. The owner/operator must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup apply.
[40 CFR 63.6625(h)]

10. This equipment may operate in response to notification of impending rotating outage if the area utility has ordered rotating outages in the area where the engine is located or expects to order such outages at a particular time, the engine is located in the area subject to the rotating outage, the engine is operated no more than 30 minutes prior to the forecasted outage, and the engine is shut down immediately after the utility advises that the outage is no longer imminent or in effect.
[17 CCR 93115.6(b)(1) and 40 CFR 63.6640(f)(iii)]

11. This equipment shall not be used to provide power during a voluntary agreed to power outage and/or power reduction initiated under an Interruptible Service Contract (ISC); Demand Response Program (DRP); Load Reduction Program (LRP) and/or similar arrangement(s) with the electrical power supplier.
[17 CCR 93115.6(c)(2)(C)]

12. This equipment does not require a regularly scheduled emission compliance test. However, emission compliance testing may be required at the discretion of the District.
[District Rule 204]

13. A facility wide Comprehensive Emission Inventory (CEI) for all emitted criteria and toxic air pollutants must be submitted to the District, in a format approved by the District, upon District request.
[District Rule 107(b), H&S Code 39607 & 44341-44342, and 40 CFR 51, Subpart A]

MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT
14306 Park Avenue, Victorville, CA 92392-2310
760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

AUTHORITY TO CONSTRUCT

E005133

If construction is not completed by the expiration date of this permit, it may be renewed for one additional year upon payment of applicable fees. Any additional extension will require the written approval of the Air Pollution Control Officer. This Authority to Construct may serve as a temporary Permit to Operate provided the APCO is given prior notice of intent to operate and the Permit to Operate is not specifically denied.

EXPIRES LAST DAY OF: SEPTEMBER 2019

OWNER OR OPERATOR (Co.#133)

NASA/Goldstone
93 Goldstone Rd.
Fort Irwin, CA 92310

EQUIPMENT LOCATION (Fac.#611)

NASA/Goldstone Deep Space Communications Complex
Goldstone Lake
Fort Irwin, CA 92311

Description:
DIESEL IC ENGINE, EMERGENCY GENERATOR - APOLLO SITE consisting of: Year of Manufacturer 1997, uncertified, existing ICE with a stack height of 10' and a stack diameter of 5".

One Cummins, Diesel fired internal combustion engine Model No. LTA10G1 and Serial No. 34886879, After Cooled, Direct Injected, Inter Cooled, Turbo Charged, producing 380 bhp with 6 cylinders at 1800 rpm while consuming a maximum of 15.6 gal/hr. This equipment powers a Onan Generator Model No. 230DFAB and Serial No. K970658009, rated at 230 kW(e).

EMISSIONS RATES

Emission Type	Est. Max Load	Unit
CO	1.16	gm/bhp-hr
NOx	8.40	gm/bhp-hr
PM10	0.50	gm/bhp-hr
SOx	0.57	gm/bhp-hr
VOC	0.43	gm/bhp-hr

CONDITIONS:

1. This existing, diesel engine, and any associated air pollution control equipment, shall be installed, operated, and maintained in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles, which produce the minimum emissions of contaminants. Unless otherwise noted, this equipment shall also be operated in accordance with all data

Fee Schedule: 7 (g) | Rating: 1 device | SIC: 9661 | SCC: 20100102 | Location/Coordinates: +35.34081, -116.87399

This permit does not authorize the emission of air contaminants in excess of those allowed by law, including Division 26 of the Health and Safety Code of the State of California and the Rules and Regulations of the District. This permit cannot be construed as permission to violate existing laws, ordinances, statutes or regulations of this or other governmental agencies. This permit must be renewed by the expiration date above. If billing for renewal fee required by Rule 301(c) is not received by expiration date above, please contact the District.

NASA/Goldstone
93 Goldstone Rd.
Fort Irwin, CA 92310

By: COPY
Brad Poiriez
Air Pollution Control Officer

Permit: E005133 Issue Date: DRAFT

and specifications submitted with the application for this permit.
[40 CFR 63.6605(a) and (b) and 63.6625(e)]

2. A non-resettable four-digit (9,999) hour timer shall be installed and maintained on this equipment to indicate elapsed engine operating time.
[17 CCR 93115.10(d) and 40 CFR 63.6625(f)]

3. This equipment shall only be fired on diesel fuel that meets the requirements of CARB Diesel Fuel as defined in 17 CCR 93115.4(a)(8), or an alternative fuel that meets the requirements of 17 CCR 93115.5(a)(2-6), pursuant to the Air Toxic Control Measure for Stationary Compression Ignition Engines.
[17 CCR 93115.5(a)]

4. This equipment shall be limited to use for emergency power, defined as in response to a fire or when commercially available power has been interrupted. In addition, this unit shall be operated no more than twenty (20) hours per year for testing and maintenance.
[17 CCR 93115.6(b)(3) and 40 CFR 63.6640(f)(ii)]

5. Facility-wide emissions shall not exceed 80 tons per year of NOx, 24 tons per year of VOC, and 18 tons per year of PM10. Facility-wide emissions shall be calculated and recorded, in tons, on a calendar month basis and totaled for each consecutive twelve-month basis. For emergency engines, only emissions generated during testing and maintenance shall apply toward the facility-wide emission limits. These records shall be maintained as current for a minimum of five (5) years, and made available upon District, State and/or Federal request.
[District Rule 221(B)]

6. The owner/operator shall maintain an operations log for this equipment current and on-site (or at a central location) for a minimum of five (5) years, and this log shall be provided to District, State and/or Federal personnel, upon request. The log shall include, at a minimum, the information specified below:
a. Date of each use and hours of operation with documentation of how many hours are spent for emergency operation, including what classified the operation as emergency, and how many hours are spent for non-emergency operation, including what classified the operation as non-emergency. [17 CCR 93115.10(f) and 40 CFR 63.6655(f)]; and,
b. Monthly and calendar year operation in terms of total hours, both emergency and non-emergency use, classified as described in 'a.' above [17 CCR 93115.10(f)]; and,
c. Monthly fuel use [17 CCR 93115.10(f)]; and,
d. Documentation of certified fuel use, as required by condition 3 (may use the supplier's certification of sulfur content if it is maintained as part of this log); and,
e. Maintenance performed on this equipment, inclusive of the management practice requirements of condition 7 below; and,
f. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment [40 CFR 63.6640(b) and 63.6655(a)(2)]; and,
g. Records of all required maintenance performed on the air pollution control and monitoring equipment [40 CFR 63.6655(a)(4)]; and,
h. Records of actions taken during periods of malfunction to minimize emissions in accordance with condition 1, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation [40 CFR63.6655(a)(5)].

7. This engine is subject to the requirements of 40 CFR 63, Subpart ZZZZ, and pursuant to this federal regulation, this engine is required to meet the following compliance requirements by May 3, 2013:

The owner/operator of this equipment shall demonstrate continuous compliance by committing to a maintenance schedule inclusive of the management practice requirements listed below:
a. Change oil and oil filter every 500 hours of operation or annually, whichever comes first (source has the option to utilize an oil analysis program pursuant to 40 CFR 63.6625(i) in order to extend the specified oil change requirement.);
b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and,
c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

[40 CFR 63.6603(a) and 63.6640(a)]

8. If this emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements required by condition 7, or shutting down the engine would pose an unacceptable risk, the management practice can be delayed until the emergency is over, or the risk has been abated. The management practice should be performed as soon as practicable after the emergency/risk has ended. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.
[40 CFR 63.6603(a)]

9. The owner/operator must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup apply.
[40 CFR 63.6625(h)]

10. This equipment may operate in response to notification of impending rotating outage if the area utility has ordered rotating outages in the area where the engine is located or expects to order such outages at a particular time, the engine is located in the area subject to the rotating outage, the engine is operated no more than 30 minutes prior to the forecasted outage, and the engine is shut down immediately after the utility advises that the outage is no longer imminent or in effect.
[17 CCR 93115.6(b)(1) and 40 CFR 63.6640(f)(iii)]

11. This equipment shall not be used to provide power during a voluntary agreed to power outage and/or power reduction initiated under an Interruptible Service Contract (ISC); Demand Response Program (DRP); Load Reduction Program (LRP) and/or similar arrangement(s) with the electrical power supplier.
[17 CCR 93115.6(c)(2)(C)]

12. This equipment does not require a regularly scheduled emission compliance test. However, emission compliance testing may be required at the discretion of the District.
[District Rule 204]

13. A facility wide Comprehensive Emission Inventory (CEI) for all emitted criteria and toxic air pollutants must be submitted to the District, in a format approved by the District, upon District request.
[District Rule 107(b), H&S Code 39607 & 44341-44342, and 40 CFR 51, Subpart A]

MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT
14306 Park Avenue, Victorville, CA 92392-2310
760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

AUTHORITY TO CONSTRUCT

E009239

If construction is not completed by the expiration date of this permit, it may be renewed for one additional year upon payment of applicable fees. Any additional extension will require the written approval of the Air Pollution Control Officer. This Authority to Construct may serve as a temporary Permit to Operate provided the APCO is given prior notice of intent to operate and the Permit to Operate is not specifically denied.

EXPIRES LAST DAY OF: SEPTEMBER 2019

OWNER OR OPERATOR (Co.#133)

NASA/Goldstone
93 Goldstone Rd.
Fort Irwin, CA 92310

EQUIPMENT LOCATION (Fac.#611)

NASA/Goldstone Deep Space Communications Complex
Goldstone Lake
Fort Irwin, CA 92311

Description:
DIESEL IC ENGINE, EMERGENCY FIRE PUMP - VENUS SITE consisting of: Year of Manufacturer 1989, stack height of 8' and a stack diameter of 3".

One Detroit Diesel, Diesel fired internal combustion engine Model No. DDFP03ANHLH7086 and Serial No. 3A102239, Other, producing 99 bhp with 3 cylinders at 1760 rpm while consuming a maximum of 4 gal/hr. This equipment powers a Allis Chalmers Fire Pump Model No. KSIF and Serial No. 981-94161-05-01, rated at 750 gpm.

EMISSIONS RATES

Emission Type	Est. Max Load	Unit
CO	5.0	gm/bhp-hr
NOx	10.0	gm/bhp-hr
PM10	1.0	gm/bhp-hr
VOC	5.0	gm/bhp-hr

CONDITIONS:

1. This existing, diesel engine, and any associated air pollution control equipment, shall be installed, operated, and maintained in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles, which produce the minimum emissions of contaminants. Unless otherwise noted, this equipment shall also be operated in accordance with all data and specifications submitted with the application for this permit.

Fee Schedule: 7 (g) | Rating: 1 device | SIC: 9661 | SCC: 20200102 | Location/Coordinates: +35.24722, -116.79115

This permit does not authorize the emission of air contaminants in excess of those allowed by law, including Division 26 of the Health and Safety Code of the State of California and the Rules and Regulations of the District. This permit cannot be construed as permission to violate existing laws, ordinances, statutes or regulations of this or other governmental agencies. This permit must be renewed by the expiration date above. If billing for renewal fee required by Rule 301(c) is not received by expiration date above, please contact the District.

NASA/Goldstone
93 Goldstone Rd.
Fort Irwin, CA 92310

By: **COPY**
Brad Poiriez
Air Pollution Control Officer

Permit: E009239 Issue Date: DRAFT

[40 CFR 63.6605(a) and (b) and 63.6625(e)]

2. A non-resettable four-digit (9,999) hour timer shall be installed and maintained on this equipment to indicate elapsed engine operating time.
[17 CCR 93115.10(d) and 40 CFR 63.6625(f)]

3. This equipment shall only be fired on diesel fuel that meets the requirements of CARB Diesel Fuel as defined in 17 CCR 93115.4(a)(8), or an alternative fuel that meets the requirements of 17 CCR 93115.5(a)(2-6), pursuant to the Air Toxic Control Measure for Stationary Compression Ignition Engines.
[17 CCR 93115.5(a)]

4. This equipment shall not operate more than twenty (20) hours per year for testing and maintenance.
[17 CCR 93115.6(b)(3) and 40 CFR 63.6640(f)(ii)]

5. The hour limit indicated in condition 4, above, does not apply to in-use emergency fire pump assemblies that are driven directly by stationary diesel-fueled CI engines and only operated the number of hours necessary to comply with the testing requirements of National Fire Protection Association (NFPA) 25 "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems," 2002 edition, which is incorporated herein by reference.
[17 CCR 93115.3(n)]

6. Facility-wide emissions shall not exceed 80 tons per year of NOx, 24 tons per year of VOC, and 18 tons per year of PM10. Facility-wide emissions shall be calculated and recorded, in tons, on a calendar month basis and totaled for each consecutive twelve-month basis. For emergency engines, only emissions generated during testing and maintenance shall apply toward the facility-wide emission limits. These records shall be maintained as current for a minimum of five (5) years, and made available upon District, State and/or Federal request.
[District Rule 221(B)]

7. The owner/operator shall maintain an operations log for this equipment current and on-site (or at a central location) for a minimum of five (5) years, and this log shall be provided to District, State and/or Federal personnel, upon request. The log shall include, at a minimum, the information specified below:
a. Date of each use and hours of operation with documentation of how many hours are spent for emergency operation, including what classified the operation as emergency, and how many hours are spent for non-emergency operation, including what classified the operation as non-emergency (i.e. testing, maintenance, NFPA testing, etc). [17 CCR 93115.10(f) and 40 CFR 63.6655(f)]; and,
b. Monthly and calendar year operation in terms of total hours, both emergency and non-emergency use, classified as described in 'a.' above [17 CCR 93115.10(f)]; and,
c. Monthly fuel use [17 CCR 93115.10(f)]; and,
d. Documentation of certified fuel use, as required by condition 3 (may use the supplier's certification of sulfur content if it is maintained as part of this log); and,
e. Maintenance performed on this equipment, inclusive of the management practice requirements of condition 8 below; and,
f. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment [40 CFR 63.6640(b) and 63.6655(a)(2)]; and,
g. Records of all required maintenance performed on the air pollution control and monitoring equipment [40 CFR 63.6655(a)(4)]; and,
h. Records of actions taken during periods of malfunction to minimize emissions in accordance with condition 1, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation [40 CFR63.6655(a)(5)].

8. This engine is subject to the requirements of 40 CFR 63, Subpart ZZZZ, and pursuant to this federal regulation, this engine is required to meet the following compliance requirements by May 3, 2013:
The owner/operator of this equipment shall demonstrate continuous compliance by committing to a maintenance schedule inclusive of the management practice requirements listed below:
a. Change oil and oil filter every 500 hours of operation or annually, whichever comes first (source has the option to utilize an oil

analysis program pursuant to 40 CFR 63.6625(i) in order to extend the specified oil change requirement.);
b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and,
c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
[40 CFR 63.6603(a) and 63.6640(a)]

9. If this emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements required by condition 8, or shutting down the engine would pose an unacceptable risk, the management practice can be delayed until the emergency is over, or the risk has been abated. The management practice should be performed as soon as practicable after the emergency/risk has ended. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.
[40 CFR 63.6603(a)]

10. The owner/operator must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup apply.
[40 CFR 63.6625(h)]

11. This equipment does not require a regularly scheduled emission compliance test. However, emission compliance testing may be required at the discretion of the District.
[District Rule 204]

12. A facility wide Comprehensive Emission Inventory (CEI) for all emitted criteria and toxic air pollutants must be submitted to the District, in a format approved by the District, upon District request.
[District Rule 107(b), H&S Code 39607 & 44341-44342, and 40 CFR 51, Subpart A]

MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT
14306 Park Avenue, Victorville, CA 92392-2310
760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

AUTHORITY TO CONSTRUCT

E009240

If construction is not completed by the expiration date of this permit, it may be renewed for one additional year upon payment of applicable fees. Any additional extension will require the written approval of the Air Pollution Control Officer. This Authority to Construct may serve as a temporary Permit to Operate provided the APCO is given prior notice of intent to operate and the Permit to Operate is not specifically denied.

EXPIRES LAST DAY OF: SEPTEMBER 2019

OWNER OR OPERATOR (Co.#133)

NASA/Goldstone
93 Goldstone Rd.
Fort Irwin, CA 92310

EQUIPMENT LOCATION (Fac.#611)

NASA/Goldstone Deep Space Communications Complex
Goldstone Lake
Fort Irwin, CA 92311

Description:
DIESEL IC ENGINE, EMERGENCY FIRE PUMP - ECHO SITE consisting of: Year of Manufacturer 1989, stack height of 7' and a stack diameter of 3".

One Detroit Diesel, Diesel fired internal combustion engine Model No. DDFP03ANHLH7086 and Serial No. 3A102268, Other, producing 99 bhp with 3 cylinders at 1760 rpm while consuming a maximum of 6 gal/hr. This equipment powers a Allis Chalmers Fire Pump Model No. KSIF and Serial No. 981-94161-01-01, rated at 1000 gpm.

EMISSIONS RATES

Emission Type	Est. Max Load	Unit
CO	5.0	gm/bhp-hr
NOx	10.0	gm/bhp-hr
PM10	1.0	gm/bhp-hr
VOC	5.0	gm/bhp-hr

CONDITIONS:

1. This existing, diesel engine, and any associated air pollution control equipment, shall be installed, operated, and maintained in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles, which produce the minimum emissions of contaminants. Unless otherwise noted, this equipment shall also be operated in accordance with all data and specifications submitted with the application for this permit.

Fee Schedule: 7 (h) | Rating: 1 device | SIC: 9661 | SCC: 20200102 | Location/Coordinates: +35.30143, -116.80554

This permit does not authorize the emission of air contaminants in excess of those allowed by law, including Division 26 of the Health and Safety Code of the State of California and the Rules and Regulations of the District. This permit cannot be construed as permission to violate existing laws, ordinances, statutes or regulations of this or other governmental agencies. This permit must be renewed by the expiration date above. If billing for renewal fee required by Rule 301(c) is not received by expiration date above, please contact the District.

NASA/Goldstone
93 Goldstone Rd.
Fort Irwin, CA 92310

By: **COPY**

Brad Poiriez
Air Pollution Control Officer

Permit: E009240 Issue Date: DRAFT

[40 CFR 63.6605(a) and (b) and 63.6625(e)]

2. A non-resettable four-digit (9,999) hour timer shall be installed and maintained on this equipment to indicate elapsed engine operating time.
[17 CCR 93115.10(d) and 40 CFR 63.6625(f)]

3. This equipment shall only be fired on diesel fuel that meets the requirements of CARB Diesel Fuel as defined in 17 CCR 93115.4(a)(8), or an alternative fuel that meets the requirements of 17 CCR 93115.5(a)(2-6), pursuant to the Air Toxic Control Measure for Stationary Compression Ignition Engines.
[17 CCR 93115.5(a)]

4. This equipment shall not operate more than twenty (20) hours per year for testing and maintenance.
[17 CCR 93115.6(b)(3) and 40 CFR 63.6640(f)(ii)]

5. The hour limit indicated in condition 4, above, does not apply to in-use emergency fire pump assemblies that are driven directly by stationary diesel-fueled CI engines and only operated the number of hours necessary to comply with the testing requirements of National Fire Protection Association (NFPA) 25 "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems," 2002 edition, which is incorporated herein by reference.
[17 CCR 93115.3(n)]

6. Facility-wide emissions shall not exceed 80 tons per year of NOx, 24 tons per year of VOC, and 18 tons per year of PM10. Facility-wide emissions shall be calculated and recorded, in tons, on a calendar month basis and totaled for each consecutive twelve-month basis. For emergency engines, only emissions generated during testing and maintenance shall apply toward the facility-wide emission limits. These records shall be maintained as current for a minimum of five (5) years, and made available upon District, State and/or Federal request.
[District Rule 221(B)]

7. The owner/operator shall maintain an operations log for this equipment current and on-site (or at a central location) for a minimum of five (5) years, and this log shall be provided to District, State and/or Federal personnel, upon request. The log shall include, at a minimum, the information specified below:
a. Date of each use and hours of operation with documentation of how many hours are spent for emergency operation, including what classified the operation as emergency, and how many hours are spent for non-emergency operation, including what classified the operation as non-emergency (i.e. testing, maintenance, NFPA testing, etc). [17 CCR 93115.10(f) and 40 CFR 63.6655(f)]; and,
b. Monthly and calendar year operation in terms of total hours, both emergency and non-emergency use, classified as described in 'a.' above [17 CCR 93115.10(f)]; and,
c. Monthly fuel use [17 CCR 93115.10(f)]; and,
d. Documentation of certified fuel use, as required by condition 3 (may use the supplier's certification of sulfur content if it is maintained as part of this log); and,
e. Maintenance performed on this equipment, inclusive of the management practice requirements of condition 8 below; and,
f. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment [40 CFR 63.6640(b) and 63.6655(a)(2)]; and,
g. Records of all required maintenance performed on the air pollution control and monitoring equipment [40 CFR 63.6655(a)(4)]; and,
h. Records of actions taken during periods of malfunction to minimize emissions in accordance with condition 1, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation [40 CFR63.6655(a)(5)].

8. This engine is subject to the requirements of 40 CFR 63, Subpart ZZZZ, and pursuant to this federal regulation, this engine is required to meet the following compliance requirements by May 3, 2013:
The owner/operator of this equipment shall demonstrate continuous compliance by committing to a maintenance schedule inclusive of the management practice requirements listed below:
a. Change oil and oil filter every 500 hours of operation or annually, whichever comes first (source has the option to utilize an oil

analysis program pursuant to 40 CFR 63.6625(i) in order to extend the specified oil change requirement.);
b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and,
c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
[40 CFR 63.6603(a) and 63.6640(a)]

9. If this emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements required by condition 8, or shutting down the engine would pose an unacceptable risk, the management practice can be delayed until the emergency is over, or the risk has been abated. The management practice should be performed as soon as practicable after the emergency/risk has ended. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.
[40 CFR 63.6603(a)]

10. The owner/operator must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup apply.
[40 CFR 63.6625(h)]

11. This equipment does not require a regularly scheduled emission compliance test. However, emission compliance testing may be required at the discretion of the District.
[District Rule 204]

12. A facility wide Comprehensive Emission Inventory (CEI) for all emitted criteria and toxic air pollutants must be submitted to the District, in a format approved by the District, upon District request.
[District Rule 107(b), H&S Code 39607 & 44341-44342, and 40 CFR 51, Subpart A]

MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT
14306 Park Avenue, Victorville, CA 92392-2310
760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

AUTHORITY TO CONSTRUCT

E009241

If construction is not completed by the expiration date of this permit, it may be renewed for one additional year upon payment of applicable fees. Any additional extension will require the written approval of the Air Pollution Control Officer. This Authority to Construct may serve as a temporary Permit to Operate provided the APCO is given prior notice of intent to operate and the Permit to Operate is not specifically denied.

EXPIRES LAST DAY OF: SEPTEMBER 2019

OWNER OR OPERATOR (Co.#133)

NASA/Goldstone
93 Goldstone Rd.
Fort Irwin, CA 92310

EQUIPMENT LOCATION (Fac.#611)

NASA/Goldstone Deep Space Communications Complex
Goldstone Lake
Fort Irwin, CA 92311

Description:
DIESEL IC ENGINE, EMERGENCY FIRE PUMP - MARS SITE consisting of: Year of Manufacturer 1989, stack height of 15' and a stack diameter of 4".

One Detroit Diesel, Diesel fired internal combustion engine Model No. 10447110 and Serial No. 4A0254393, Turbo Charged, producing 117 bhp with 6 cylinders at 1760 rpm while consuming a maximum of 7 gal/hr. This equipment powers a Fairbanks Morse Fire Pump Model No. TBD and Serial No. K3H1012566, rated at 1770 rpm.

EMISSIONS RATES

Emission Type	Est. Max Load	Unit
CO	5.0	gm/bhp-hr
NOx	10.0	gm/bhp-hr
PM10	1.0	gm/bhp-hr
VOC	5.0	gm/bhp-hr

CONDITIONS:

1. This existing, diesel engine, and any associated air pollution control equipment, shall be installed, operated, and maintained in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles, which produce the minimum emissions of contaminants. Unless otherwise noted, this equipment shall also be operated in accordance with all data and specifications submitted with the application for this permit.

Fee Schedule: 7 (g) | Rating: 1 device | SIC: 9661 | SCC: 20200102 | Location/Coordinates: +35.42625, -116.88575

This permit does not authorize the emission of air contaminants in excess of those allowed by law, including Division 26 of the Health and Safety Code of the State of California and the Rules and Regulations of the District. This permit cannot be construed as permission to violate existing laws, ordinances, statutes or regulations of this or other governmental agencies. This permit must be renewed by the expiration date above. If billing for renewal fee required by Rule 301(c) is not received by expiration date above, please contact the District.

NASA/Goldstone
93 Goldstone Rd.
Fort Irwin, CA 92310

By: **COPY**

Brad Poiriez
Air Pollution Control Officer

Permit: E009241 Issue Date: DRAFT

[40 CFR 63.6605(a) and (b) and 63.6625(e)]

2. A non-resettable four-digit (9,999) hour timer shall be installed and maintained on this equipment to indicate elapsed engine operating time.
[17 CCR 93115.10(d) and 40 CFR 63.6625(f)]

3. This equipment shall only be fired on diesel fuel that meets the requirements of CARB Diesel Fuel as defined in 17 CCR 93115.4(a)(8), or an alternative fuel that meets the requirements of 17 CCR 93115.5(a)(2-6), pursuant to the Air Toxic Control Measure for Stationary Compression Ignition Engines.
[17 CCR 93115.5(a)]

4. This equipment shall not operate more than twenty (20) hours per year for testing and maintenance.
[17 CCR 93115.6(b)(3) and 40 CFR 63.6640(f)(ii)]

5. The hour limit indicated in condition 4, above, does not apply to in-use emergency fire pump assemblies that are driven directly by stationary diesel-fueled CI engines and only operated the number of hours necessary to comply with the testing requirements of National Fire Protection Association (NFPA) 25 "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems," 2002 edition, which is incorporated herein by reference.
[17 CCR 93115.3(n)]

6. Facility-wide emissions shall not exceed 80 tons per year of NOx, 24 tons per year of VOC, and 18 tons per year of PM10. Facility-wide emissions shall be calculated and recorded, in tons, on a calendar month basis and totaled for each consecutive twelve-month basis. For emergency engines, only emissions generated during testing and maintenance shall apply toward the facility-wide emission limits. These records shall be maintained as current for a minimum of five (5) years, and made available upon District, State and/or Federal request.
[District Rule 221(B)]

7. The owner/operator shall maintain an operations log for this equipment current and on-site (or at a central location) for a minimum of five (5) years, and this log shall be provided to District, State and/or Federal personnel, upon request. The log shall include, at a minimum, the information specified below:
a. Date of each use and hours of operation with documentation of how many hours are spent for emergency operation, including what classified the operation as emergency, and how many hours are spent for non-emergency operation, including what classified the operation as non-emergency (i.e. testing, maintenance, NFPA testing, etc). [17 CCR 93115.10(f) and 40 CFR 63.6655(f)]; and,
b. Monthly and calendar year operation in terms of total hours, both emergency and non-emergency use, classified as described in 'a.' above [17 CCR 93115.10(f)]; and,
c. Monthly fuel use [17 CCR 93115.10(f)]; and,
d. Documentation of certified fuel use, as required by condition 3 (may use the supplier's certification of sulfur content if it is maintained as part of this log); and,
e. Maintenance performed on this equipment, inclusive of the management practice requirements of condition 8 below; and,
f. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment [40 CFR 63.6640(b) and 63.6655(a)(2)]; and,
g. Records of all required maintenance performed on the air pollution control and monitoring equipment [40 CFR 63.6655(a)(4)]; and,
h. Records of actions taken during periods of malfunction to minimize emissions in accordance with condition 1, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation [40 CFR63.6655(a)(5)].

8. This engine is subject to the requirements of 40 CFR 63, Subpart ZZZZ, and pursuant to this federal regulation, this engine is required to meet the following compliance requirements by May 3, 2013:
The owner/operator of this equipment shall demonstrate continuous compliance by committing to a maintenance schedule inclusive of the management practice requirements listed below:
a. Change oil and oil filter every 500 hours of operation or annually, whichever comes first (source has the option to utilize an oil

analysis program pursuant to 40 CFR 63.6625(i) in order to extend the specified oil change requirement.);
b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and,
c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
[40 CFR 63.6603(a) and 63.6640(a)]

9. If this emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements required by condition 8, or shutting down the engine would pose an unacceptable risk, the management practice can be delayed until the emergency is over, or the risk has been abated. The management practice should be performed as soon as practicable after the emergency/risk has ended. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.
[40 CFR 63.6603(a)]

10. The owner/operator must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup apply.
[40 CFR 63.6625(h)]

11. This equipment does not require a regularly scheduled emission compliance test. However, emission compliance testing may be required at the discretion of the District.
[District Rule 204]

12. A facility wide Comprehensive Emission Inventory (CEI) for all emitted criteria and toxic air pollutants must be submitted to the District, in a format approved by the District, upon District request.
[District Rule 107(b), H&S Code 39607 & 44341-44342, and 40 CFR 51, Subpart A]

MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT
14306 Park Avenue, Victorville, CA 92392-2310
760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

AUTHORITY TO CONSTRUCT

N001477

If construction is not completed by the expiration date of this permit, it may be renewed for one additional year upon payment of applicable fees. Any additional extension will require the written approval of the Air Pollution Control Officer. This Authority to Construct may serve as a temporary Permit to Operate provided the APCO is given prior notice of intent to operate and the Permit to Operate is not specifically denied.

EXPIRES LAST DAY OF: SEPTEMBER 2019

OWNER OR OPERATOR (Co.#133)

NASA/Goldstone
93 Goldstone Rd.
Fort Irwin, CA 92310

EQUIPMENT LOCATION (Fac.#611)

NASA/Goldstone Deep Space Communications Complex
Goldstone Lake
Fort Irwin, CA 92311

Description:
GASOLINE DISPENSING FACILITY (NON-RETAIL) - ECHO SITE consisting of: A Phil-Tite phase I EVR system and a Healy Assist System with a Healy Clean Air Separator phase II EVR system.

FUEL TANKS

Tank No.	Material Stored	Volume (US Gallons)	Above/Underground
1	87U	10,000	Underground
2	Diesel	10,000	Underground

DISPENSING EQUIPMENT

Fuel Type	Quantity
87U	2
Diesel	1

VAPOR CONTROL EQUIPMENT

Type	Equipment Name	Compliance
PI	P-T	VR-101
PII	AS CAS	VR-201

Fee Schedule: 5 (b) Rating: 10000 gallons SIC: 9661 SCC: 40600603 Location/Coordinates: +35.30066, -116.80493

This permit does not authorize the emission of air contaminants in excess of those allowed by law, including Division 26 of the Health and Safety Code of the State of California and the Rules and Regulations of the District. This permit cannot be construed as permission to violate existing laws, ordinances, statutes or regulations of this or other governmental agencies. This permit must be renewed by the expiration date above. If billing for renewal fee required by Rule 301(c) is not received by expiration date above, please contact the District.

NASA/Goldstone
93 Goldstone Rd.
Fort Irwin, CA 92310

By: **COPY**
Brad Poiriez
Air Pollution Control Officer

Permit: N001477 Issue Date: DRAFT

CONDITIONS:

1. The owner/operator shall conspicuously post, in the gasoline dispensing area, the operating instructions and the district's toll-free telephone number for complaints (1-800-635-4617).
[District Rule 461 - Gasoline Transfer and Dispensing]

2. The owner/operator shall maintain a log of all inspections, repairs, maintenance, and throughput on equipment. Such logs or records shall be maintained at the facility for at least five (5) years and shall be available to the District upon request.
[District Rule 461 - Gasoline Transfer and Dispensing]

3. Any modifications or changes to the piping, control fittings, or configurations of the vapor recovery system require prior approval from the District.

ATC Only: The District must be notified when installation of all piping and control fittings is completed. Vapor control piping and fittings must remain exposed until the District has inspected the installation or given approval to complete backfill. Notification may be made via phone, or via email request to reporting@mdaqmd.ca.gov
[District Regulation XIII - NSR]

4. The Enhanced Vapor Recovery (EVR), Phase I and II Vapor Recovery System must be tested in accordance with the requirements of CARB Executive Orders, VR-101 and Order VR-201, no later than 60 days after initial startup, and at least once every twelve (12) months using the latest adopted version of the required test procedures.

The District must be notified a minimum of 10 days prior to performing the required tests with the final results submitted to the District within 30 days of completion of the tests. Testing notifications and testing results may be sent to VaporRecoveryTesting@mdaqmd.ca.gov

[District Rule 461 - Gasoline Transfer and Dispensing, Executive Orders VR-101 and 201]

5. The annual throughput of gasoline shall not exceed 600,000 gallons per year. Throughput records shall be kept on site and available to District personnel upon request, and annual throughput for the previous calendar year shall be provided to the District not later than the end of February of each year. Before this annual throughput can be increased the facility is required to submit to the District an application to modify the permit which may require a Health Risk Assessment (HRA). In addition, public notice and/or a commenting period may be required.
[District Rule 1320 - NSR for Toxic Air Contaminants; District Rule 107(b); H&S Code 39607 & 44341-44342; and 40 CFR 51, Subpart A]

6. Enhanced Vapor Recovery (EVR), 2-Point Phase I Vapor Control Equipment must be installed and maintained in compliance with CARB Executive Order VR-101. The owner or operator shall perform the required maintenance as specified in ARB-Approved Installation and Maintenance Manual for the Phase I Vapor Recovery System, including PV maintenance, as applicable.
[District Rule 461 - Gasoline Transfer and Dispensing, Executive Order VR-101, 40 CFR 63, Subpart CCCCCC]

7. Enhanced Vapor Recovery (EVR), Phase II Vapor Control Equipment must be installed and maintained in compliance with CARB Executive Order VR-201. The owner or operator shall install, operate and maintain the Phase II Vapor Recovery System as specified in the ARB-approved Installation, Operation and Maintenance Manual for the Phase II Vapor Recovery System.
[District Rule 461 - Gasoline Transfer and Dispensing, Executive Order VR-201, 40 CFR 63, Subpart CCCCCC]

8. Facility-wide emissions shall not exceed 80 tons per year of NOx, 24 tons per year of VOC, and 18 tons per year of PM10. Facility-wide emissions shall be calculated and recorded, in tons, on a calendar month basis and totaled for each consecutive twelve-month basis. For emergency engines, only emissions generated during testing and maintenance shall apply toward the facility-wide emission limits. These records shall be maintained as current for a minimum of five (5) years, and made available upon District, State and/or Federal request.

[District Rule 221(B)]

9. A facility wide Comprehensive Emission Inventory (CEI) for all emitted criteria and toxic air pollutants must be submitted to the District, in a format approved by the District, upon District request.
[District Rule 107(b), H&S Code 39607 & 44341-44342, and 40 CFR 51, Subpart A]

MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT
14306 Park Avenue, Victorville, CA 92392-2310
760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

AUTHORITY TO CONSTRUCT

P012830

If construction is not completed by the expiration date of this permit, it may be renewed for one additional year upon payment of applicable fees. Any additional extension will require the written approval of the Air Pollution Control Officer. This Authority to Construct may serve as a temporary Permit to Operate provided the APCO is given prior notice of intent to operate and the Permit to Operate is not specifically denied.

EXPIRES LAST DAY OF: SEPTEMBER 2019

OWNER OR OPERATOR (Co.#133)

NASA/Goldstone
93 Goldstone Rd.
Fort Irwin, CA 92310

EQUIPMENT LOCATION (Fac.#611)

NASA/Goldstone Deep Space Communications Complex
Goldstone Lake
Fort Irwin, CA 92311

Description:
PORTABLE SPRAY GUN (#3) consisting of: a Binks MACH 1 HVLP spray gun.

CONDITIONS:

1. This equipment shall be operated and maintained in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles which produce the minimum emissions of contaminants. Unless otherwise noted, this equipment shall also be operated in accordance with all data and specifications submitted with the application for this permit. [District Rule 1302(C)(2)(a)]

2. All Coatings (including diluents, activators, thinners, etc.) Solvents, Application Methods, Surface Preparation & Cleaning Operations, and Record Keeping, shall comply with District Rules 442, 1113, 1114, and 1115, as applicable. These rules pertain to Usage of Solvents, Architectural Coatings, Wood Products Coating Operations, and Metal Parts & Products Coating Operations, respectively.Any use of a Coating or Solvent that is not compliant with a District Rule must have written approval from the District prior to use.
[District Rule 1302(C)(2)(a)]

3. The owner/operator must use one of the following application methods when applying coatings:
a. High Volume Low Pressure (HVLP) Spray equipment, operated in accordance with the manufacturer's recommendations; or
b. Hand Application Methods.

Fee Schedule: 7 (C)	Rating: 1 device	SIC: 9661	SCC: 30900198	Location/Coordinates: +35.42479, -116.89100

This permit does not authorize the emission of air contaminants in excess of those allowed by law, including Division 26 of the Health and Safety Code of the State of California and the Rules and Regulations of the District. This permit cannot be construed as permission to violate existing laws, ordinances, statutes or regulations of this or other governmental agencies. This permit must be renewed by the expiration date above. If billing for renewal fee required by Rule 301(c) is not received by expiration date above, please contact the District.

NASA/Goldstone
93 Goldstone Rd.
Fort Irwin, CA 92310

By: **COPY**

Brad Poiriez
Air Pollution Control Officer

Any alternate Coating applications must be demonstrated to the satisfaction of the District and receive written approval from the District prior to use.
[District Rules 1114, 1115 and 1302(C)(2)(a)]

4. The owner/operator shall maintain an operations log for this equipment, current and on-site (or at a central location), for a minimum of five (5) years, and this log shall be provided to District, State and/or Federal personnel, upon request. The log shall include, at a minimum, the information specified below:
a. Equipment by permit number, or name of operation for unpermitted equipment, that uses material containing VOC.
b. Type of material (Coating, Activator, Thinner, Solvent, etc.) and its applicable VOC limit in pounds per gallon (or grams per liter) by District Rule or Rules.
c. Manufacturer of each material, manufacturer product name, and/or code number.
d. Quantity of each material used (Coating, Activator, Thinner, Solvent, etc.) and its VOC content and mix ratio, if applicable. (Note: Units most be consistent. If quantity used is in gallons (or liters), the VOC must be in pounds per gallon (or grams per liter). Units used in item 'b.' and 'd.' must be the same).
e. Copies of the Environmental Data Sheet and/or Material Safety Data Sheet (MSDS) for each material used (Coating, Activator, Thinner, Solvent, etc.). These data sheets must indicate the toxic compounds in each material and the percentage weight of each toxic compound in order to demonstrate compliance with toxic emission reporting required by condition 10. Toxic compounds are those Hazardous Air Pollutants found in Section 112(b)(1) of the Federal Clean Air Act or at web site: http://www.epa.gov/ttn/atw/188polls.html
[District Rules 1114, 1115 and 1302(C)(2)(a)]

5. Facility-wide emissions shall not exceed 80 tons per year of NOx, 24 tons per year of VOC, and 18 tons per year of PM10. Facility-wide emissions shall be calculated and recorded, in tons, on a calendar month basis and totaled for each consecutive twelve-month basis. For emergency engines, only emissions generated during testing and maintenance shall apply toward the facility-wide emission limits. These records shall be maintained as current for a minimum of five (5) years, and made available upon District, State and/or Federal request.
[District Rule 221(B)]

6. All containers of VOC-containing materials must be closed when not in use, including containers used to apply the contents of VOC-containing materials to a surface directly from the container by pouring, siphoning, brushing, rolling, padding, ragging or other means, must be closed when not in use. These containers include, but are not limited to, drums, buckets, cans, pails, trays or other application containers.
[District Rule 1113(C)(6) and 1302(C)(2)(a)]

7. Any coating that is formulated for use as an Industrial Maintenance Coating pursuant to District Rule 1113 must display on the label or lid of the container in which the Coating is sold or distributed one or more of the descriptions listed:
a. "For industrial use only".
b. "For professional use only".
c. "Not for Residential use" or "Not intended for Residential use".
[District Rule 1113(e)]

8. This equipment cannot be used to coat Motor Vehicles or Mobile Equipment and/or use coatings manufactured for such coatings.

Motor Vehicles passenger cars, truck cabs and chassis, vans, motorcycles, and buses.

Mobile Equipment means any equipment that is designed to be physically capable of being driven or drawn upon rails or a roadway, except for motor vehicles, and components for and from such equipment. Examples of Mobile Equipment include mobile cranes; bulldozers; concrete mixers; tractors; plows; pesticide sprayers; street cleaners; golf carts; hauling equipment used inside and around an airport, dock, depot, and industrial and commercial plants; trains; railcars; truck trailers; implements of husbandry; aircraft ground support equipment; all terrain vehicles; self-propelled wheelchairs, invalid tricycles, and invalid quadricycles.
[District Rule 1302(C)(2)(a) and 17 CCR 93112]

9. The National Emission Standards for Hazardous Air Pollutants for Paint Stripping and Miscellaneous Surface Coating Operations (40 CFR 63, Subpart HHHHHH) does not apply to this facility as section 63.11169(d)(1) specifically exempts surface coating or paint stripping performed on site at installations owned or operated by the National Aeronautics and Space Administration.
[40 CFR 63, Subpart HHHHHH]

10. A facility wide Comprehensive Emission Inventory (CEI) for all emitted criteria and toxic air pollutants must be submitted to the District, in a format approved by the District, upon District request.
[District Rule 107(b), H&S Code 39607 & 44341-44342, and 40 CFR 51, Subpart A]

MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT
14306 Park Avenue, Victorville, CA 92392-2310
760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

AUTHORITY TO CONSTRUCT

P012831

If construction is not completed by the expiration date of this permit, it may be renewed for one additional year upon payment of applicable fees. Any additional extension will require the written approval of the Air Pollution Control Officer. This Authority to Construct may serve as a temporary Permit to Operate provided the APCO is given prior notice of intent to operate and the Permit to Operate is not specifically denied.

EXPIRES LAST DAY OF: SEPTEMBER 2019

OWNER OR OPERATOR (Co.#133)

NASA/Goldstone
93 Goldstone Rd.
Fort Irwin, CA 92310

EQUIPMENT LOCATION (Fac.#611)

NASA/Goldstone Deep Space Communications Complex
Goldstone Lake
Fort Irwin, CA 92311

Description:
PORTABLE SPRAY GUN (#2) consisting of: a Binks MACH 1 HVLP spray gun.

CONDITIONS:

1. This equipment shall be operated and maintained in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles which produce the minimum emissions of contaminants. Unless otherwise noted, this equipment shall also be operated in accordance with all data and specifications submitted with the application for this permit. [District Rule 1302(C)(2)(a)]

2. All Coatings (including diluents, activators, thinners, etc.) Solvents, Application Methods, Surface Preparation & Cleaning Operations, and Record Keeping, shall comply with District Rules 442, 1113, 1114, and 1115, as applicable. These rules pertain to Usage of Solvents, Architectural Coatings, Wood Products Coating Operations, and Metal Parts & Products Coating Operations, respectively.
[District Rule 1302(C)(2)(a)]

3. The owner/operator must use one of the following application methods when applying coatings:
a. High Volume Low Pressure (HVLP) Spray equipment, operated in accordance with the manufacturer's recommendations; or
b. Hand Application Methods.

Fee Schedule: 7 (C)	Rating: 1 device	SIC: 9661	SCC: 30900198	Location/Coordinates: +35.42479, -116.89100

This permit does not authorize the emission of air contaminants in excess of those allowed by law, including Division 26 of the Health and Safety Code of the State of California and the Rules and Regulations of the District. This permit cannot be construed as permission to violate existing laws, ordinances, statutes or regulations of this or other governmental agencies. This permit must be renewed by the expiration date above. If billing for renewal fee required by Rule 301(c) is not received by expiration date above, please contact the District.

NASA/Goldstone
93 Goldstone Rd.
Fort Irwin, CA 92310

By: **COPY**

Brad Poiriez
Air Pollution Control Officer

Permit: P012831 Issue Date: DRAFT

Any alternate Coating applications must be demonstrated to the satisfaction of the District and receive written approval from the District prior to use.
[District Rules 1114, 1115 and 1302(C)(2)(a)]

4. The owner/operator shall maintain an operations log for this equipment, current and on-site (or at a central location), for a minimum of five (5) years, and this log shall be provided to District, State and/or Federal personnel, upon request. The log shall include, at a minimum, the information specified below:
a. Equipment by permit number, or name of operation for unpermitted equipment, that uses material containing VOC.
b. Type of material (Coating, Activator, Thinner, Solvent, etc.) and its applicable VOC limit in pounds per gallon (or grams per liter) by District Rule or Rules.
c. Manufacturer of each material, manufacturer product name, and/or code number.
d. Quantity of each material used (Coating, Activator, Thinner, Solvent, etc.) and its VOC content and mix ratio, if applicable. (Note: Units most be consistent. If quantity used is in gallons (or liters), the VOC must be in pounds per gallon (or grams per liter). Units used in item 'b.' and 'd.' must be the same).
e. Copies of the Environmental Data Sheet and/or Material Safety Data Sheet (MSDS) for each material used (Coating, Activator, Thinner, Solvent, etc.). These data sheets must indicate the toxic compounds in each material and the percentage weight of each toxic compound in order to demonstrate compliance with toxic emission reporting required by condition 10. Toxic compounds are those Hazardous Air Pollutants found in Section 112(b)(1) of the Federal Clean Air Act or at web site: http://www.epa.gov/ttn/atw/188polls.html
[District Rules 1114, 1115 and 1302(C)(2)(a)]

5. Facility-wide emissions shall not exceed 80 tons per year of NOx, 24 tons per year of VOC, and 18 tons per year of PM10. Facility-wide emissions shall be calculated and recorded, in tons, on a calendar month basis and totaled for each consecutive twelve-month basis. For emergency engines, only emissions generated during testing and maintenance shall apply toward the facility-wide emission limits. These records shall be maintained as current for a minimum of five (5) years, and made available upon District, State and/or Federal request.
[District Rule 221(B)]

6. All containers of VOC-containing materials must be closed when not in use, including containers used to apply the contents of VOC-containing materials to a surface directly from the container by pouring, siphoning, brushing, rolling, padding, ragging or other means, must be closed when not in use. These containers include, but are not limited to, drums, buckets, cans, pails, trays or other application containers.
[District Rule 1113(C)(6) and 1302(C)(2)(a)]

7. Any coating that is formulated for use as an Industrial Maintenance Coating pursuant to District Rule 1113 must display on the label or lid of the container in which the Coating is sold or distributed one or more of the descriptions listed:
a. "For industrial use only".
b. "For professional use only".
c. "Not for Residential use" or "Not intended for Residential use".
[District Rule 1113(e)]

8. This equipment cannot be used to coat Motor Vehicles or Mobile Equipment and/or use coatings manufactured for such coatings.

Motor Vehicles passenger cars, truck cabs and chassis, vans, motorcycles, and buses.

Mobile Equipment means any equipment that is designed to be physically capable of being driven or drawn upon rails or a roadway, except for motor vehicles, and components for and from such equipment. Examples of Mobile Equipment include mobile cranes; bulldozers; concrete mixers; tractors; plows; pesticide sprayers; street cleaners; golf carts; hauling equipment used inside and around an airport, dock, depot, and industrial and commercial plants; trains; railcars; truck trailers; implements of husbandry; aircraft ground support equipment; all terrain vehicles; self-propelled wheelchairs, invalid tricycles, and invalid quadricycles.
[District Rule 1302(C)(2)(a) and 17 CCR 93112]

9. The National Emission Standards for Hazardous Air Pollutants for Paint Stripping and Miscellaneous Surface Coating Operations (40 CFR 63, Subpart HHHHHH) does not apply to this facility as section 63.11169(d)(1) specifically exempts surface coating or paint stripping performed on site at installations owned or operated by the National Aeronautics and Space Administration.
[40 CFR 63, Subpart HHHHHH]

10. A facility wide Comprehensive Emission Inventory (CEI) for all emitted criteria and toxic air pollutants must be submitted to the District, in a format approved by the District, upon District request.
[District Rule 107(b), H&S Code 39607 & 44341-44342, and 40 CFR 51, Subpart A]

MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT
14306 Park Avenue, Victorville, CA 92392-2310
760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

AUTHORITY TO CONSTRUCT

P012832

If construction is not completed by the expiration date of this permit, it may be renewed for one additional year upon payment of applicable fees. Any additional extension will require the written approval of the Air Pollution Control Officer. This Authority to Construct may serve as a temporary Permit to Operate provided the APCO is given prior notice of intent to operate and the Permit to Operate is not specifically denied.

EXPIRES LAST DAY OF: SEPTEMBER 2019

OWNER OR OPERATOR (Co.#133)

NASA/Goldstone
93 Goldstone Rd.
Fort Irwin, CA 92310

EQUIPMENT LOCATION (Fac.#611)

NASA/Goldstone Deep Space Communications Complex
Goldstone Lake
Fort Irwin, CA 92311

Description:
PORTABLE SPRAY GUN (#1) consisting of: a Binks Mach 1 HVLP spray gun.

CONDITIONS:

1. This equipment shall be operated and maintained in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles which produce the minimum emissions of contaminants. Unless otherwise noted, this equipment shall also be operated in accordance with all data and specifications submitted with the application for this permit. [District Rule 1302(C)(2)(a)]

2. All Coatings (including diluents, activators, thinners, etc.) Solvents, Application Methods, Surface Preparation & Cleaning Operations, and Record Keeping, shall comply with District Rules 442, 1113, 1114, and 1115, as applicable. These rules pertain to Usage of Solvents, Architectural Coatings, Wood Products Coating Operations, and Metal Parts & Products Coating Operations, respectively. Any use of a Coating or Solvent that is not compliant with a District Rule must have written approval from the District prior to use.
[District Rule 1302(C)(2)(a)]

3. The owner/operator must use one of the following application methods when applying coatings:
a. High Volume Low Pressure (HVLP) Spray equipment, operated in accordance with the manufacturer's recommendations; or
b. Hand Application Methods.

Fee Schedule: 7 (C)	Rating: 1 device	SIC: 9661	SCC: 30900198	Location/Coordinates: +35.42479, -116.89100

This permit does not authorize the emission of air contaminants in excess of those allowed by law, including Division 26 of the Health and Safety Code of the State of California and the Rules and Regulations of the District. This permit cannot be construed as permission to violate existing laws, ordinances, statutes or regulations of this or other governmental agencies. This permit must be renewed by the expiration date above. If billing for renewal fee required by Rule 301(c) is not received by expiration date above, please contact the District.

NASA/Goldstone
93 Goldstone Rd.
Fort Irwin, CA 92310

By: **COPY**

Brad Poiriez
Air Pollution Control Officer

Any alternate Coating applications must be demonstrated to the satisfaction of the District and receive written approval from the District prior to use.
[District Rules 1114, 1115 and 1302(C)(2)(a)]

4. The owner/operator shall maintain an operations log for this equipment, current and on-site (or at a central location), for a minimum of five (5) years, and this log shall be provided to District, State and/or Federal personnel, upon request. The log shall include, at a minimum, the information specified below:
a. Equipment by permit number, or name of operation for unpermitted equipment, that uses material containing VOC.
b. Type of material (Coating, Activator, Thinner, Solvent, etc.) and its applicable VOC limit in pounds per gallon (or grams per liter) by District Rule or Rules.
c. Manufacturer of each material, manufacturer product name, and/or code number.
d. Quantity of each material used (Coating, Activator, Thinner, Solvent, etc.) and its VOC content and mix ratio, if applicable. (Note: Units most be consistent. If quantity used is in gallons (or liters), the VOC must be in pounds per gallon (or grams per liter). Units used in item 'b.' and 'd.' must be the same).
e. Copies of the Environmental Data Sheet and/or Material Safety Data Sheet (MSDS) for each material used (Coating, Activator, Thinner, Solvent, etc.). These data sheets must indicate the toxic compounds in each material and the percentage weight of each toxic compound in order to demonstrate compliance with toxic emission reporting required by condition 10. Toxic compounds are those Hazardous Air Pollutants found in Section 112(b)(1) of the Federal Clean Air Act or at web site: http://www.epa.gov/ttn/atw/188polls.html
[District Rules 1114, 1115 and 1302(C)(2)(a)]

5. Facility-wide emissions shall not exceed 80 tons per year of NOx, 24 tons per year of VOC, and 18 tons per year of PM10. Facility-wide emissions shall be calculated and recorded, in tons, on a calendar month basis and totaled for each consecutive twelve-month basis. For emergency engines, only emissions generated during testing and maintenance shall apply toward the facility-wide emission limits. These records shall be maintained as current for a minimum of five (5) years, and made available upon District, State and/or Federal request.
[District Rule 221(B)]

6. All containers of VOC-containing materials must be closed when not in use, including containers used to apply the contents of VOC-containing materials to a surface directly from the container by pouring, siphoning, brushing, rolling, padding, ragging or other means, must be closed when not in use. These containers include, but are not limited to, drums, buckets, cans, pails, trays or other application containers.
[District Rule 1113(C)(6) and 1302(C)(2)(a)]

7. Any coating that is formulated for use as an Industrial Maintenance Coating pursuant to District Rule 1113 must display on the label or lid of the container in which the Coating is sold or distributed one or more of the descriptions listed:
a. "For industrial use only".
b. "For professional use only".
c. "Not for Residential use" or "Not intended for Residential use".
[District Rule 1113(e)]

8. This equipment cannot be used to coat Motor Vehicles or Mobile Equipment and/or use coatings manufactured for such coatings.

Motor Vehicles passenger cars, truck cabs and chassis, vans, motorcycles, and buses.

Mobile Equipment means any equipment that is designed to be physically capable of being driven or drawn upon rails or a roadway, except for motor vehicles, and components for and from such equipment. Examples of Mobile Equipment include mobile cranes; bulldozers; concrete mixers; tractors; plows; pesticide sprayers; street cleaners; golf carts; hauling equipment used inside and around an airport, dock, depot, and industrial and commercial plants; trains; railcars; truck trailers; implements of husbandry; aircraft ground support equipment; all terrain vehicles; self-propelled wheelchairs, invalid tricycles, and invalid quadricycles.
[District Rule 1302(C)(2)(a) and 17 CCR 93112]

9. The National Emission Standards for Hazardous Air Pollutants for Paint Stripping and Miscellaneous Surface Coating Operations (40 CFR 63, Subpart HHHHHH) does not apply to this facility as section 63.11169(d)(1) specifically exempts surface coating or paint stripping performed on site at installations owned or operated by the National Aeronautics and Space Administration.
[40 CFR 63, Subpart HHHHHH]

10. A facility wide Comprehensive Emission Inventory (CEI) for all emitted criteria and toxic air pollutants must be submitted to the District, in a format approved by the District, upon District request.
[District Rule 107(b), H&S Code 39607 & 44341-44342, and 40 CFR 51, Subpart A]

MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT
14306 Park Avenue, Victorville, CA 92392-2310
760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

AUTHORITY TO CONSTRUCT

P012833

If construction is not completed by the expiration date of this permit, it may be renewed for one additional year upon payment of applicable fees. Any additional extension will require the written approval of the Air Pollution Control Officer. This Authority to Construct may serve as a temporary Permit to Operate provided the APCO is given prior notice of intent to operate and the Permit to Operate is not specifically denied.

EXPIRES LAST DAY OF: SEPTEMBER 2019

OWNER OR OPERATOR (Co.#133)

NASA/Goldstone
93 Goldstone Rd.
Fort Irwin, CA 92310

EQUIPMENT LOCATION (Fac.#611)

NASA/Goldstone Deep Space Communications Complex
Goldstone Lake
Fort Irwin, CA 92311

Description:
PORTABLE SPRAY SYSTEM consisting of: a Binks, MX1231 air assist & airless finishing system with a 31:1 pump system.

CONDITIONS:

1. This equipment shall be operated and maintained in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles which produce the minimum emissions of contaminants. Unless otherwise noted, this equipment shall also be operated in accordance with all data and specifications submitted with the application for this permit. [District Rule 1302(C)(2)(a)]

2. All Coatings (including diluents, activators, thinners, etc.) Solvents, Application Methods, Surface Preparation & Cleaning Operations, and Record Keeping, shall comply with District Rules 442, 1113, 1114, and 1115, as applicable. These rules pertain to Usage of Solvents, Architectural Coatings, Wood Products Coating Operations, and Metal Parts & Products Coating Operations, respectively. Any use of a Coating or Solvent that is not compliant with a District Rule must have written approval from the District prior to use.
[District Rule 1302(C)(2)(a)]

3. The owner/operator must use one of the following application methods when applying coatings:
a. High Volume Low Pressure (HVLP) Spray equipment, operated in accordance with the manufacturer's recommendations; or
b. Hand Application Methods.

Fee Schedule: 7 (C)	Rating: 1 device	SIC: 9661	SCC: 30900198	Location/Coordinates: +35.42479, -116.89100

This permit does not authorize the emission of air contaminants in excess of those allowed by law, including Division 26 of the Health and Safety Code of the State of California and the Rules and Regulations of the District. This permit cannot be construed as permission to violate existing laws, ordinances, statutes or regulations of this or other governmental agencies. This permit must be renewed by the expiration date above. If billing for renewal fee required by Rule 301(c) is not received by expiration date above, please contact the District.

NASA/Goldstone
93 Goldstone Rd.
Fort Irwin, CA 92310

By: **COPY**

Brad Poiriez
Air Pollution Control Officer

Any alternate Coating applications must be demonstrated to the satisfaction of the District and receive written approval from the District prior to use. Air Assist/Airless spray application is an approved application method.
[District Rules 1114, 1115 and 1302(C)(2)(a)]

4. The owner/operator shall maintain an operations log for this equipment, current and on-site (or at a central location), for a minimum of five (5) years, and this log shall be provided to District, State and/or Federal personnel, upon request. The log shall include, at a minimum, the information specified below:
a. Equipment by permit number, or name of operation for unpermitted equipment, that uses material containing VOC.
b. Type of material (Coating, Activator, Thinner, Solvent, etc.) and its applicable VOC limit in pounds per gallon (or grams per liter) by District Rule or Rules.
c. Manufacturer of each material, manufacturer product name, and/or code number.
d. Quantity of each material used (Coating, Activator, Thinner, Solvent, etc.) and its VOC content and mix ratio, if applicable. (Note: Units most be consistent. If quantity used is in gallons (or liters), the VOC must be in pounds per gallon (or grams per liter). Units used in item 'b.' and 'd.' must be the same).
e. Copies of the Environmental Data Sheet and/or Material Safety Data Sheet (MSDS) for each material used (Coating, Activator, Thinner, Solvent, etc.). These data sheets must indicate the toxic compounds in each material and the percentage weight of each toxic compound in order to demonstrate compliance with toxic emission reporting required by condition 10. Toxic compounds are those Hazardous Air Pollutants found in Section 112(b)(1) of the Federal Clean Air Act or at web site: http://www.epa.gov/ttn/atw/188polls.html
[District Rules 1114, 1115 and 1302(C)(2)(a)]

5. Facility-wide emissions shall not exceed 80 tons per year of NOx, 24 tons per year of VOC, and 18 tons per year of PM10. Facility-wide emissions shall be calculated and recorded, in tons, on a calendar month basis and totaled for each consecutive twelve-month basis. For emergency engines, only emissions generated during testing and maintenance shall apply toward the facility-wide emission limits. These records shall be maintained as current for a minimum of five (5) years, and made available upon District, State and/or Federal request.
[District Rule 221(B)]

6. All containers of VOC-containing materials must be closed when not in use, including containers used to apply the contents of VOC-containing materials to a surface directly from the container by pouring, siphoning, brushing, rolling, padding, ragging or other means, must be closed when not in use. These containers include, but are not limited to, drums, buckets, cans, pails, trays or other application containers.
[District Rule 1113(C)(6) and 1302(C)(2)(a)]

7. Any coating that is formulated for use as an Industrial Maintenance Coating pursuant to District Rule 1113 must display on the label or lid of the container in which the Coating is sold or distributed one or more of the descriptions listed:
a. "For industrial use only".
b. "For professional use only".
c. "Not for Residential use" or "Not intended for Residential use".
[District Rule 1113(e)]

8. This equipment cannot be used to coat Motor Vehicles or Mobile Equipment and/or use coatings manufactured for such coatings.

Motor Vehicles passenger cars, truck cabs and chassis, vans, motorcycles, and buses.

Mobile Equipment means any equipment that is designed to be physically capable of being driven or drawn upon rails or a roadway, except for motor vehicles, and components for and from such equipment. Examples of Mobile Equipment include mobile cranes; bulldozers; concrete mixers; tractors; plows; pesticide sprayers; street cleaners; golf carts; hauling equipment used inside and around an airport, dock, depot, and industrial and commercial plants; trains; railcars; truck trailers; implements of husbandry; aircraft ground support equipment; all terrain vehicles; self-propelled wheelchairs, invalid tricycles, and invalid quadricycles.
[District Rule 1302(C)(2)(a) and 17 CCR 93112]

9. The National Emission Standards for Hazardous Air Pollutants for Paint Stripping and Miscellaneous Surface Coating Operations (40 CFR 63, Subpart HHHHHH) does not apply to this facility as section 63.11169(d)(1) specifically exempts surface coating or paint stripping performed on site at installations owned or operated by the National Aeronautics and Space Administration.
[40 CFR 63, Subpart HHHHHH]

10. A facility wide Comprehensive Emission Inventory (CEI) for all emitted criteria and toxic air pollutants must be submitted to the District, in a format approved by the District, upon District request.
[District Rule 107(b), H&S Code 39607 & 44341-44342, and 40 CFR 51, Subpart A]

MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT
14306 Park Avenue, Victorville, CA 92392-2310
760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

AUTHORITY TO CONSTRUCT

T003003

If construction is not completed by the expiration date of this permit, it may be renewed for one additional year upon payment of applicable fees. Any additional extension will require the written approval of the Air Pollution Control Officer. This Authority to Construct may serve as a temporary Permit to Operate provided the APCO is given prior notice of intent to operate and the Permit to Operate is not specifically denied.

EXPIRES LAST DAY OF: SEPTEMBER 2019

OWNER OR OPERATOR (Co.#133)

NASA/Goldstone
93 Goldstone Rd.
Fort Irwin, CA 92310

EQUIPMENT LOCATION (Fac.#611)

NASA/Goldstone Deep Space Communications Complex
Goldstone Lake
Fort Irwin, CA 92311

Description:
DIESEL FUEL STORAGE TANKS - MARS SITE consisting of: Two 25,000 gallon, underground, Diesel No. 2 fuel storage tanks, double-walled plasti-steel with leak detection, level detection and overfill protection.

CONDITIONS:

1. This equipment shall be installed, operated and maintained in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles in a manner consistent with good air pollution control practice for minimizing emissions. Unless otherwise noted, this equipment shall also be operated in accordance with all data and specifications submitted with the application for this permit.
[District Rule 1302(C)(2)(a)]

2. The applicant shall be required to comply with all applicable Rules and Regulations of the District. Applicable rules include but are not necessarily limited to Regulation IV.
[District Rule 1302 (C)(2)(a)]

3. All of the components of this tank, including but not limited to tanks, flanges, seals, pipes, pumps, valves, meters, connectors, shall be maintained and operated so as to prevent fugitive vapor leaks, fugitive liquid leaks, and excess organic liquid drainage during transfer, storage and handling operations. This condition shall be verified via a visual inspection conducted on a monthly basis.

Fee Schedule: 5 (b)	Rating: 50000 gallons	SIC: 9661	SCC: 40600651	Location/Coordinates: +35.42488, -116.89075

This permit does not authorize the emission of air contaminants in excess of those allowed by law, including Division 26 of the Health and Safety Code of the State of California and the Rules and Regulations of the District. This permit cannot be construed as permission to violate existing laws, ordinances, statutes or regulations of this or other governmental agencies. This permit must be renewed by the expiration date above. If billing for renewal fee required by Rule 301(c) is not received by expiration date above, please contact the District.

NASA/Goldstone
93 Goldstone Rd.
Fort Irwin, CA 92310

By: **COPY**

Brad Poiriez
Air Pollution Control Officer

Permit: T003003 Issue Date: DRAFT

[District Rule 463(C)(3)]

4. Facility-wide emissions shall not exceed 80 tons per year of NOx, 24 tons per year of VOC, and 18 tons per year of PM10. Facility-wide emissions shall be calculated and recorded, in tons, on a calendar month basis and totaled for each consecutive twelve-month basis. For emergency engines, only emissions generated during testing and maintenance shall apply toward the facility-wide emission limits. These records shall be maintained as current for a minimum of five (5) years, and made available upon District, State and/or Federal request.
[District Rule 221(B)]

5. The owner/operator shall maintain an operations log for this equipment, current and on-site (or at a central location) for a minimum of five (5) years, and this log shall be provided to District, State and/or Federal personnel, upon request. The log shall include, at a minimum, the information specified below:
(a) Record of liquids stored in this tank, verified by retention of fuel supplier invoices, bill of lading, or similar document.
(b) A log containing the date and results of the inspections specified by condition 2, and any repairs and maintenance conducted on this equipment.
[District Rule 463(D)(1) and (D)(3)]

6. A facility wide Comprehensive Emission Inventory (CEI) for all emitted criteria and toxic air pollutants must be submitted to the District, in a format approved by the District, upon District request.
[District Rule 107(b), H&S Code 39607 & 44341-44342, and 40 CFR 51, Subpart A]

MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT
14306 Park Avenue, Victorville, CA 92392-2310
760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

AUTHORITY TO CONSTRUCT

T012185

If construction is not completed by the expiration date of this permit, it may be renewed for one additional year upon payment of applicable fees. Any additional extension will require the written approval of the Air Pollution Control Officer. This Authority to Construct may serve as a temporary Permit to Operate provided the APCO is given prior notice of intent to operate and the Permit to Operate is not specifically denied.

EXPIRES LAST DAY OF: SEPTEMBER 2019

OWNER OR OPERATOR (Co.#133)

NASA/Goldstone
93 Goldstone Rd.
Fort Irwin, CA 92310

EQUIPMENT LOCATION (Fac.#611)

NASA/Goldstone Deep Space Communications Complex
Goldstone Lake
Fort Irwin, CA 92311

Description:
STORAGE TANK, WASTE OIL - MARS SITE consisting of:
A 2,000 gallon, underground, double walled tank manufactured by Joor Manufacturing, serial G-81-3. This tank is electronically monitored by a Veeder Root 350 TLS monitoring system, and is used to store waste oil generated from the ten (10), diesel IC engines powering emergency generators at the Mars site. This tank includes a vent pipe measuring 25 feet high and 3 inches in diameter.

CONDITIONS:

1. This equipment shall be installed, operated and maintained in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles in a manner consistent with good air pollution control practice for minimizing emissions. Unless otherwise noted, this equipment shall also be operated in accordance with all data and specifications submitted with the application for this permit.
[District Rule 1302(C)(2)(a)]

2. The owner/operator shall strictly adhere to all Federal, State, and/or District rules and regulations which pertain to the storing, handling, transferring, transporting, and disposing of waste oils.
[District Rule 1302(C)(2)(a)]

3. Only waste oil generated from the ten (10), diesel IC engines powering emergency generators at the Mars site, under the

Fee Schedule: 5 (a)	Rating: 2000 gallons	SIC: 9661	SCC: 30630006	Location/Coordinates: +35.42490, -116.89066

This permit does not authorize the emission of air contaminants in excess of those allowed by law, including Division 26 of the Health and Safety Code of the State of California and the Rules and Regulations of the District. This permit cannot be construed as permission to violate existing laws, ordinances, statutes or regulations of this or other governmental agencies. This permit must be renewed by the expiration date above. If billing for renewal fee required by Rule 301(c) is not received by expiration date above, please contact the District.

NASA/Goldstone
93 Goldstone Rd.
Fort Irwin, CA 92310

By: **COPY**
Brad Poiriez
Air Pollution Control Officer

Permit: T012185 Issue Date: DRAFT

following permits, shall be transferred and/or stored into/in this tank: E000272, E000273, E000274, E000275, E000276, E000277, E000278, E000279, E000280, and E000281.
[District Rule 463(D)(1)]

4. All of the components of this tank, including but not limited to tanks, flanges, seals, pipes, pumps, valves, meters, connectors, shall be maintained and operated so as to prevent fugitive vapor leaks, fugitive liquid leaks, and excess organic liquid drainage during transfer, storage and handling operations. This condition shall be verified via a visual inspection conducted on a monthly basis.
[District Rule 463(C)(3)].

5. Facility-wide emissions shall not exceed 80 tons per year of NOx, 24 tons per year of VOC, and 18 tons per year of PM10. Facility-wide emissions shall be calculated and recorded, in tons, on a calendar month basis and totaled for each consecutive twelve-month basis. For emergency engines, only emissions generated during testing and maintenance shall apply toward the facility-wide emission limits. These records shall be maintained as current for a minimum of five (5) years, and made available upon District, State and/or Federal request.
[District Rule 221(B)]

6. The owner/operator shall maintain an operations log for this equipment, current and on-site (or at a central location) for a minimum of five (5) years, and this log shall be provided to District, State and/or Federal personnel, upon request. The log shall include, at a minimum, the information specified below:
a. Record of liquids stored in this tank, verified by recording the dates of each oil transfer to this tank from the allowed engines specified in condition 3, and by retention of the waste manifests issued upon disposal of waste oil.
b. A log containing the date and results of the inspections specified by condition 4, and any repairs and maintenance conducted on this equipment.
[District Rule 463 (D)(1) and (D)(3)].

7. A facility wide Comprehensive Emission Inventory (CEI) for all emitted criteria and toxic air pollutants must be submitted to the District, in a format approved by the District, upon District request.
[District Rule 107(b), H&S Code 39607 & 44341-44342, and 40 CFR 51, Subpart A]