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***MOJAVE DESERT***  
***AIR QUALITY MANAGEMENT DISTRICT***

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**Statement of Basis**  
*for*  
*Surrender of*

**FOP Number:1330611**

*For:*

**National Aeronautics & Space  
Administration**

*Facility:*

**NASA Goldstone Deep Space  
Communication Complex**

*Facility Address:*

**93 Goldstone Road  
Fort Irwin, CA 92310**

Document Date: June 1, 2019  
Submittal date to EPA/CARB for review: June 7, 2019  
EPA/CARB 45-day Commenting Period ends: July 22, 2019  
Public Notice Posted: June 11, 2019  
Public Commenting Period ends: July 11, 2019  
Final Determination Issuance date: July 15, 2019

Permitting Engineer:  
Sheri Haggard

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***14306 PARK AVENUE, VICTORVILLE, CALIFORNIA 92392***  
***PHONE: (760) 245-1661 • FAX: (760) 245-2022 • EMAIL: PERMITTING@MDAQMD.CA.GOV***

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## **A. Proposal**

NASA Goldstone Deep Space Communication Complex (Goldstone) is a government-owned, contract-operated facility using satellite ground stations primarily engaged in deep space communications to track and communicate with space missions. This facility operates 24 hours per day, seven days per week, and 52 weeks per year.

The District received an application on 4/29/19 in which the Responsible Official for this facility requested to surrender their Federal Operating Permit by electing to voluntarily limit its facility emissions to the extent that the facility is no longer subject to the provisions of District Regulation XII, pursuant to the provisions of District Rule 221, section B.

A copy of this application can be viewed in Appendix A.

Goldstone is currently defined as a federal Major Facility pursuant to District Rule 1201 – *Federal Operating Permit Definitions* as this source has a federally enforceable limit greater than the Major Facility thresholds for NOx (limit is currently 250 tons per year). This permitting action proposes to cap the facility limit for NOx at 80 tons per year which is 80 percent of the Major Facility threshold for a facility located outside the FONA. This proposed limit will effectively designate Goldstone as a synthetic minor source and will alleviate this facility from its Federal Operating Permit requirements.

Pursuant to Section (C) of district Rule 221, this evaluation document and draft permits will be sent to USEPA and CARB for review and comment for a 45-day review period; and, the District will publish a Public Notice for a 30-day public commenting period that will include the following information:

1. The name and location of the Facility, including the name and address of the permit holder or applicant if different.
2. A statement that the Facility is applying for a Voluntary Emission Limitation.
3. The District name, address, telephone number and contact person from whom interested persons may obtain additional information.

A copy of this Public Notice is included in Appendix B.

## **B. Analysis**

District Rule 221 – *Federal Operating Permit Requirement* specifies the requirements for obtaining Federal Operating Permits and the requirements to void applicability of Federal Operating Permit Requirements. Pursuant to Section B of this rule and Facility which would otherwise be subject to the provisions of Regulation XII – Federal Operating Permits may elect to voluntarily limit its emissions to the extent that the Facility is no longer subject to the provisions therein.

Goldstone requested to surrender their Federal Operating Permit by electing to voluntarily limit its emission to the extent that the facility is no longer subject to the provisions of District Regulation XII, pursuant to the provisions of District Rule 221, section B.

Pursuant to District Rule 221, section B, this facility has met all the following requirements:

- a. [Rule 221(B)(1)(a)(i)] - Applied for permit modifications for the appropriate permits for all permit units, as defined in District Rule 1201(V), under the provisions of District Regulation II and requested, in writing, a voluntary emission limitations of 80 tpy of NO<sub>x</sub>, 24 tpy of VOC (no change) and 18 tpy of PM<sub>10</sub> (no change), which are below the Major Facility thresholds defined in District Rule 1201 for a facility located outside the FONA.
- b. [Rule 221(B)(1)(a)(ii)] - Included as an attachment in their application request As an attachment to the application(s) or as a part of the request for a voluntary emission limitation the Facility shall identify and describe all sources of emissions at the Facility, including all permit units as defined in District Rule 1201(V) and all equipment not requiring a permit pursuant to District Rule 219.
- c. [Rule 221(B)(1)(a)(iii)] - Identifying the fugitive emissions of Hazardous Air Pollutants, as defined in District Rule 1201(R), was not required since this facility is not included on the list of categories that are required to report fugitives Fugitive emissions pursuant to 40 CFR 70.2 Major Source(2). However, HAP is reported by this facility on an annual basis to satisfy the requirements of the AB2588 Hot Spots Program and the actual emissions of HAP at this facility are below the thresholds of the Major Facility thresholds defined in District Rule 1201 for a facility located outside the FONA.
- d. [Rule 221(B)(1)(a)(iv)] - Included in their application a reference to their most recently submitted Emission Inventory data that represents a calculation of annual emissions from the sources of emissions identified at this facility. A summary of this data is attached to this evaluation and confirms that actual emissions associated with this facility are below the Major Facility thresholds defined in District Rule 1201 for a facility located outside the FONA, and below the voluntary emission limitations of 80 tpy of NO<sub>x</sub>, 24 tpy of VOC and 18 tpy of PM<sub>10</sub>.
- e. [Rule 221(B)(1)(a)(v)] - The District has modified all the local air permits with permit conditions that limit emissions at this facility, to a level below that of a Major Facility as defined in District Rule 1201. Copies of these permits are attached to this evaluation in the appendix.

Please note that the emission limits for VOC and PM<sub>10</sub> were existing facility limits, and that this proposal does not affect, nor decrease these limits since the existing limits were below the Major Facility thresholds of Rule 1201. There is no need to establish limits for CO, SO<sub>x</sub>, or HAP as the Potential to Emit for these pollutants are significantly below 50 percent of the Major Facility thresholds of Rule 1201, which is consistent with the provisions of District Rule 222(C) - Emission Limitations. Please refer to the attached emissions summary of this facility's actual emissions for emission year 2018 in the Appendix C.

## **C. Comment Period and Notifications**

### **1. Public Comment**

This preliminary determination will be publicly noticed on June 11, 2019, allowing for public comment until July 11, 2019. Please see Appendix B for noticing details.

### **2. Notifications**

This evaluation document and proposed permits were submitted to USEPA and CARB pursuant for a forty-five (45) day review period on or before June 7, 2019. The final modified FOP shall be issued on or about July 15, 2019.

All correspondence were forwarded to electronically to the following recipients:

Director, Office of Air Division  
United States EPA, Region IX  
75 Hawthorne Street  
San Francisco, CA 94105  
[R9airpermits\\_AV\\_MD@epa.gov](mailto:R9airpermits_AV_MD@epa.gov)

Chief, Stationary Source Division  
California Air Resources Board  
P.O. Box 2815  
Sacramento, CA 95812  
[permits@arb.ca.gov](mailto:permits@arb.ca.gov)

Mark Solheid  
Sr. Environmental Analyst  
NASA Goldstone DSCC  
93 Goldstone Road  
Fort Irwin, CA 92310  
[Mark.J.Solheid@jpl.nasa.gov](mailto:Mark.J.Solheid@jpl.nasa.gov)

## **D. Conclusion**

After the USEPA and CARB commenting period ends; and, after the Public commenting periods end, provided that no comments are received that cause a revision to this proposal, the District recommends issuing the proposed local permits as proposed and formally closing the associated Federal Operating Permit. The proposed draft permits are in Appendix D.

# Appendix A Application



Peraton

*Goldstone Deep Space Communication Complex*  
93 Goldstone Rd., Ft. Irwin, Ca 92310

Mojave Desert Air Quality Management District  
14306 Park Ave  
Victorville, CA 92392

To Whom It May Concern;

The Goldstone Deep Space Communications Complex (GDSCC) is a Government Owned (NASA) Contractor Operated (Peraton) Facility located on the US Army Base, Ft. Irwin, CA. Numerous years ago GDSCC came into compliance with the Airborne Toxic Control Regulations which required the vast majority of our prime engines to convert to emergency engines; this resulted in GDSCC no longer having a potential to emit requiring a Title V Federal Operating Permit. At this time GDSCC would like to voluntarily change our status to that of a synthetic minor, with emission limits appropriate to a natural minor; NOx 80 tpy, VOC 24 tpy and 18 tpy of PM10.

Our last CEIR was submitted to the MDAQMD on February 8<sup>th</sup>, 2019.

Please see the attached application packet per MDAQMD Rule 221(B)(1)(a)(i,ii,iv and v).

Thank you for your consideration.

Don Westbrook  
GDSCC Complex Manager

**RULE 219 EXEMPT EQUIPMENT**

<b>Equipment Name</b>	<b>Location</b>	<b>Fuel Type</b>	<b>Estimated Fuel Capacity</b>	<b>Estimated H.P.</b>
Blower #1 Back Pack	Echo Yard	Gasoline	1.5 Gal	2.7
Blower #2 Back Pack	Echo Yard	Gasoline	1.5 Gal	2.7
Blower/Vac	Echo Yard	Gasoline	.25 Gal	1.4
Blower/Vac	Echo Yard	Gasoline	.25 Gal	1.4
Chain Saw	Echo Yard	Gasoline	.25 Gal	2.3
Chain Saw	Echo Yard	Gasoline	.25 Gal	2.8
Chop Saw	Echo Yard	Gasoline	.5 Gal	3
Club Car		Gasoline	7 Gal	3
Club Car		Gasoline	7 Gal	3
Club Car		Gasoline	7 Gal	3
Club Car		Gasoline	7 Gal	3
Compressor	Service Truck	Gasoline	2.5 Gal	12.5
Compressor Skid Mount	Echo Yard	Gasoline	2.5 Gal	12.5
Concrete Cutter	Echo Yard	Gasoline	1 Gal	19
Concrete Mixer	Gen Maint Sea Van	Gasoline	1.5 Gal	8.5
Crack Seal Machine	Echo Yard	Propane	25 Gal	20
Drain Cleaner	Plumbers sea van	Gasoline	5 Gal	13
Edger	Echo Yard	Gasoline	1 Gal	3.5
Electric Generator GM	Echo Yard	Gasoline	5 Gal	11
Electric Generator HE	Echo Yard	Gasoline	3.0 Gal	7
Electric Generator PLB	Echo Yard	Gasoline	1.5 Gal	11
Hatz	Echo Yard	Diesel	30 Gal	25
Hedge Trimmer #1	Echo Yard	Gasoline	.25 Gal	1.8
Hedge Trimmer #2	Echo Yard	Gasoline	.25 Gal	1.8
Hyster 14,800	Echo Yard	Gasoline	15 Gal	45
Jumping Jack	Echo Yard	Gasoline	3 Gal	2.5
Kaeser Blower	Echo Yard	Gasoline	5 Gal	21
Light Plant #1	Echo Yard	Diesel	30 Gal	28
Light Plant #2	Echo Yard	Diesel	30 Gal	28
Mower Honda #1	Echo Yard	Gasoline	.25 Gal	4.4
Mower Honda #2	Echo Yard	Gasoline	.25 Gal	4.4
Mower Toro #1	Echo Yard	Gasoline	.25 Gal	4
Mower Toro #2	Echo Yard	Gasoline	.25 Gal	4
Pole Saw	Echo Yard	Gasoline	18 Oz	1.4
Pressure Washer Big		Diesel	18 Gal	21
Pressure Washer Med.		Electric	18 Gal	18
Pressure Washer Small		Diesel	36 Gal	25
Skidsteer	Echo Yard	Diesel	18 Gal	45
Stripping machine	Gen Maint Sea Van	Gasoline	1 Gal	3.5
Sweeper	Echo Yard	Gasoline	5 Gal	20
Trash Pump (New)	Plumbers sea van	Gasoline	1 Gal	8
Trash Pump (Old)	Plumbers sea van	Gasoline	.5 Gal	2.5
Vibriplate	Echo Yard	Gasoline	1.5 Gal	4
Weed Whacker #3 Stihl	Echo Yard	Gasoline	.25 Gal	2
Weed Whacker #4 Stihl	Echo Yard	Gasoline	0.25	2
Weed Wacker #1. Echo	Echo Yard	Gasoline	14 Oz	1.5
Weed Wacker #2 Echo	Echo Yard	Gasoline	14 Oz	1.5
BBQ Grill	G-86	Propane	5 gal	NA
BBQ Grill	G-41	Propane	5 gal	NA
Honda Generator	G-41	Gasoline	NA	7 HP
Honda Generator	G-41	Gasoline	NA	7 HP
Honda Generator	G-41	Gasoline	NA	7 HP
Honda Generator	G-41	Gasoline	NA	7 HP
Honda Generator	G-41	Gasoline	NA	15 HP
Honda Generator	G-41	Gasoline	NA	15 HP
Boiler 1	G-33	Propane	N/A	520,000 Btu
Boiler 2	G-33	Propane	N/A	122,000 Btu
Boiler	G-21	Propane	N/A	680,000 Btu
Boiler	G-23	Propane	N/A	102,000 Btu
Pressure Washer	Venus	Gasoline	NA	8 HP
Sweeper	Venus	Gasoline	NA	8 HP

Generator Honda/Winco	Venus	Gasoline	NA	5.5 HP
Water Pump	Mars	Gasoline	NA	5.5 HP
Generator Honda	Mars Optic	Gasoline	NA	13 HP
Generator Honda	Mars Optic	Gasoline	NA	3.5 HP
Generator Honda	Mars	Gasoline	NA	7 HP
Generator Hyd Pump-Vangaurd	Mars	Gasoline	NA	8 HP
BBQ Grill	Mars G-101	Propane	5 gal	NA
Heater	Mars	Kerosene	NA	NA
Heater	Mars	Kerosene	NA	NA
Grout Mixer	Mars	Gasoline	NA	8 HP
Grout Mixer	Mars	Gasoline	NA	8 HP

**PERMITTED EQUIPMENT**

EQUIPMENT NAME	PERMIT #	FUEL TYPE	BHP / Size
Portable Generator 1	B010789	Propane	162
Portable Generator 2	B011623	Propane	162
Portable Generator 3	B012695	Propane	185
Portable Welder 1	B012692	Diesel	72
Portable Welder 2	B012693	Diesel	72
Stationary Generator 2C	E000272	Diesel	875
Stationary Generator 1C	E000273	Diesel	875
Stationary Generator 2B	E000274	Diesel	1280
Stationary Generator 3B	E000275	Diesel	1280
Stationary Generator 1B	E000276	Diesel	1280
Stationary Generator 4B	E000277	Diesel	1280
Stationary Generator 4A	E000278	Diesel	875
Stationary Generator 3A	E000279	Diesel	875
Stationary Generator 1A	E000280	Diesel	875
Stationary Generator 2A	E000281	Diesel	875
Stationary Fire Pump Apollo	E003381	Diesel	140
Stationary Generator Echo	E003382	Diesel	375
Stationary Generator Apollo	E005133	Diesel	380
Stationary Fire Pump Venus	E009239	Diesel	99
Stationary Fire Pump Echo	E009240	Diesel	99
Stationary Fire Pump Mars	E009241	Diesel	117
Portable Spray Gun 3	P012830	Paint	HPLV
Portable Spray Gun 2	P012831	Paint	HPLV
Portable Spray Gun 1	P012832	Paint	HPLV
Portable Spray System	P012833	Paint	HVLP
GDF	N001477	Unleaded / Diesel	
Underground Storage Tank	T012185	Waste Oil	2,000 gal.
Underground Storage Tank	T003003	Diesel	2 x 25,000 gal.



**MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT**

**BRAD POIRIEZ, EXECUTIVE DIRECTOR**  
 14306 Park Avenue, Victorville, CA 92392-2310  
 760.245.1661 • Fax 760.245.2022  
 Email: [engineering@mdaqmd.ca.gov](mailto:engineering@mdaqmd.ca.gov)  
 www.MDAQMD.ca.gov • @MDAQMD

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# General Application Form

Remit **\$288.00** with this document (\$164.00 for change of owner)

PLEASE TYPE OR PRINT

## Section 1: Owner information

a. Permit to be issued to (company name): NASA/Goldstone		b. Federal tax ID #: 52-1597904	
c. Mailing/billing address (for above company name) include city, state and zip code: 93 Goldstone Road, Ft. Irwin, CA 92310			
d. Facility or business license name (for equipment location):			
e. Facility Address — Location of equipment (if same as for company, enter "Same"): SAME			Equip. coordinates (lat/long):
f. Contact name: Mark Solheid	Title: Sr. Environmental Analyst	Email address: mark.j.solheid@jpl.nasa.gov	Phone: 760.255.8225
General nature of business: Deep Space Communications			Company NAICS: 517919
Type of Organization <input type="checkbox"/> Individual owner <input type="checkbox"/> Partnership <input type="checkbox"/> Corporation <input type="checkbox"/> Utility <input type="checkbox"/> Local agency <input type="checkbox"/> State agency <input checked="" type="checkbox"/> Federal agency			

## Section 2: Nature of application

Application is hereby made for the following equipment: Propane IC engine portable generator	
Application is for what type of permit: <input type="checkbox"/> New construction <input checked="" type="checkbox"/> Modification <input type="checkbox"/> Change of owner	For modification or change of owner: B0120789 _____ Current Permit Number
Do you claim Confidentiality of Data? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (attach explanation; specify which information provided is confidential)	

## Section 3: Equipment information

Equipment description (give a brief description of the equipment and/or process): Year of manufacture 2009, USEPA Family Name BPSIB5.702ED	
Manufacturer: General Motors	Model: 8.1      Serial number: 21400S09
Add-on air pollution control equipment? <input type="checkbox"/> Yes <input type="checkbox"/> No (Note: most APCE require a separate application)	
If yes: Manufacturer: _____ Model: _____ Serial #: _____ CARB EO#: _____	
Type (specify): _____	
Stack data Exhaust stack height from ground: 6.5 feet Exhaust stack diameter: _____ feet 0.16 (2")	
Stack is: <input type="checkbox"/> horizontal <input checked="" type="checkbox"/> vertical <input type="checkbox"/> open <input checked="" type="checkbox"/> weather cap	
Vent data: Exhaust temp. 1250 °F Maximum exhaust rate (CFM): 735	

**-For District use only-**

Application number:	Invoice number:	Permit number:	Company/facility number:
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### Section 4: Emissions data

Emission Factor Basis (attach any source specified): _____				
<input checked="" type="checkbox"/> Manufacturer <input type="checkbox"/> Source test <input type="checkbox"/> MDAQMD default <input type="checkbox"/> USEPA AP-42 <input type="checkbox"/> Other (please specify): _____				
Emissions data: _____				
Pollutant	Pre-control max. emissions	Units	Post control max. emissions	Units
NO <sub>x</sub>	_____	_____	0.246	gm/bhp-hr
NMHC	_____	_____	_____	_____
CO	_____	_____	0.0895	gm/bhp-hr
PM <sub>10</sub>	_____	_____	0.0149	gm/bhp-hr
SO <sub>x</sub>	_____	_____	0.002	gm/bhp-hr
Toxic pollutants — Please include a list of all toxic air pollutants and their emission rates if known.				

### Section 5: Operation information

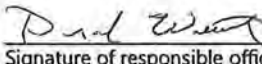
Fuel Consumption: <u>7 gal/hr</u> at max rated load <input type="checkbox"/> gal/hour <input type="checkbox"/> SCF/hour <input type="checkbox"/> MMBtu/hr	
Typical load: <u>70%</u>	
Facility annual operation by quarters (percent): <input checked="" type="checkbox"/> Uniform OR _____ % Jan-Mar           _____ % Apr-Jun _____ % Jul-Sep           _____ % Oct-Dec	Expected operating hours of equipment <u>4</u> Hrs/day <u>3</u> Days/wk <u>24</u> Wk/yr Total annual hours <u>288</u>

### Section 6: Receptor information

Distance (feet) and direction to the property line of closest: <u>38,016 S</u> residence <u>36,432 S</u> business <u>50,160 S</u> school
Name of closest school (K-12) <u>Lewis Elementary</u>
<i>If the proposed equipment operates within 1,000 feet of a school site and operation results in the emission of hazardous air pollutants, a public notice will be required at the expense of the applicant (CH&amp;S §42301.6)</i>

**\*Please note:** District staff may contact you for further information. Failure to provide additional information as requested in a timely manner may result in delays in the processing of this permit application.

### Section 7: Certification

I hereby certify that all information contained herein is true and correct.			
Donald Westbrook	Complex Manager		<u>4/16/19</u>
Name of responsible official	Official title	Signature of responsible official	Date signed
Phone: 760.255.8423	Email: donald.a.westbrook@jpl.nasa.gov		

#### Application submission instructions:

- 1) Submit completed application to Engineering@mdaqmd.ca.gov
- 2) Pay the corresponding application fee of \$288 per permit for new or modified permit (or \$164 for change of owner) via check or credit card.

#### Payment by check:

Make check payable to the Mojave Desert AQMD  
 Mail the check with a copy of this completed application to:  
**Mojave Desert AQMD**  
 14306 Park Avenue  
 Victorville, CA 92392

#### Payment by credit card:

Pay online at <http://www.mdaqmd.ca.gov>  
 Click "Pay Fees"  
 Please note: *a surcharge applies for all credit card payments.*

- 3) If payment is made online via credit card, please email the receipt to Engineering@mdaqmd.ca.gov  
 Should you have any additional questions, please, do not hesitate to contact the permitting division at 760-245-1661, or via email at [engineering@mdaqmd.ca.gov](mailto:engineering@mdaqmd.ca.gov)



**MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT**  
**BRAD POIRIEZ, EXECUTIVE DIRECTOR**  
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PLEASE TYPE OR PRINT

## Section 1: Owner information

a. Permit to be issued to (company name): NASA/Goldstone		b. Federal tax ID #: 52-1597904	
c. Mailing/billing address (for above company name) include city, state and zip code: 93 Goldstone Road, Fort Irwin, CA 92310			
d. Facility or business license name (for equipment location):			
e. Facility Address — Location of equipment (if same as for company, enter "Same"): Same		Equip. coordinates (lat/long):	
f. Contact name: Mark Solheid	Title: Sr. EHS Analyst	Email address: Mark.J.Solheid@jpl.nasa.gov	Phone: 760-255-8225
General nature of business: Deep Space Communications		Company NAICS: 517919	
Type of Organization <input type="checkbox"/> Individual owner <input type="checkbox"/> Partnership <input type="checkbox"/> Corporation <input type="checkbox"/> Utility <input type="checkbox"/> Local agency <input type="checkbox"/> State agency <input checked="" type="checkbox"/> Federal agency			

## Section 2: Nature of application

Application is hereby made for the following equipment: Diesel IC Engine, Portable Welder	
Application is for what type of permit: <input type="checkbox"/> New construction <input checked="" type="checkbox"/> Modification <input type="checkbox"/> Change of owner	For modification or change of owner: B012692 Current Permit Number
Do you claim Confidentiality of Data? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (attach explanation; specify which information provided is confidential)	

## Section 3: Equipment information

Equipment description (give a brief description of the equipment and/or process): Year of Manufacture 2015, Tier 4, USEPA Family Name FDZXL02.9020	
Manufacturer: One Deutz    Model: TD2.9L4    Serial number: 11842669	
Add-on air pollution control equipment? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Note: most APCE require a separate application)	
If yes: Manufacturer:    Model:    Serial #:    CARB EO#:	
Type (specify):	
Stack data Exhaust stack height from ground: <sup>5</sup> feet Exhaust stack diameter: <sup>16</sup> feet	
Stack is: <input type="checkbox"/> horizontal <input checked="" type="checkbox"/> vertical <input type="checkbox"/> open <input checked="" type="checkbox"/> weather cap	
Vent data: Exhaust temp. °F Maximum exhaust rate (CFM):	

**-For District use only-**

Application number:	Invoice number:	Permit number:	Company/facility number:
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### Section 4: Emissions data

Emission Factor Basis (attach any source specified): _____				
<input checked="" type="checkbox"/> Manufacturer <input type="checkbox"/> Source test <input type="checkbox"/> MDAQMD default <input type="checkbox"/> USEPA AP-42 <input type="checkbox"/> Other (please specify): _____				
Emissions data: _____				
Pollutant	Pre-control max. emissions	Units	Post control max. emissions	Units
NO <sub>x</sub>	_____	_____	2.76	gm/bhp-hr
NMHC	_____	_____	_____	_____
CO	_____	_____	0.022	gm/bhp-hr
PM <sub>10</sub>	_____	_____	0.015	gm/bhp-hr
SO <sub>x</sub>	_____	_____	0.005	gm/bhp-hr
Toxic pollutants — Please include a list of all toxic air pollutants and their emission rates if known.				

### Section 5: Operation information

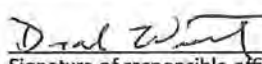
Fuel Consumption: <sup>4</sup> _____ at max rated load <input checked="" type="checkbox"/> gal/hour <input type="checkbox"/> SCF/hour <input type="checkbox"/> MMBtu/hr	
Typical load: <sup>70%</sup> _____	
Facility annual operation by quarters (percent): <input checked="" type="checkbox"/> Uniform OR _____ % Jan-Mar           _____ % Apr-Jun _____ % Jul-Sep           _____ % Oct-Dec	Expected operating hours of equipment <sup>4</sup> _____ Hrs/day <sup>3</sup> _____ Days/wk <sup>24</sup> _____ Wk/yr Total annual hours <u>288</u>

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Distance (feet) and direction to the property line of closest: <u>38,016 S</u> residence <u>36,432 S</u> business <u>50,160 S</u> school
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Donald Westbrook	Complex Manager		<u>4/16/19</u>
Name of responsible official	Official title	Signature of responsible official	Date signed
Phone: 760-255-8423	Email: Donald.A.Westbrook@jpl.nasa.gov		

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**MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT**

**BRAD POIRIEZ, EXECUTIVE DIRECTOR**  
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 760.245.1661 • Fax 760.245.2022  
 Email: [engineering@mdaqmd.ca.gov](mailto:engineering@mdaqmd.ca.gov)  
[www.MDAQMD.ca.gov](http://www.MDAQMD.ca.gov) • @MDAQMD



# General Application Form

Remit **\$288.00** with this document (**\$164.00** for change of owner)

PLEASE TYPE OR PRINT

## Section 1: Owner information

a. Permit to be issued to (company name): NASA/Goldstone		b. Federal tax ID #: 52-1597904	
c. Mailing/billing address (for above company name) include city, state and zip code: 93 Goldstone Road, Fort Irwin, CA 92310			
d. Facility or business license name (for equipment location):			
e. Facility Address — Location of equipment (if same as for company, enter "Same"): Same			Equip. coordinates (lat/long):
f. Contact name: Mark Solheid	Title: Sr. EHS Analyst	Email address: Mark.J.Solheid@jpl.nasa.gov	Phone: 760-255-8225
General nature of business: Deep Space Communications			Company NAICS: 517919
Type of Organization			
<input type="checkbox"/> Individual owner <input type="checkbox"/> Partnership <input type="checkbox"/> Corporation <input type="checkbox"/> Utility <input type="checkbox"/> Local agency <input type="checkbox"/> State agency <input checked="" type="checkbox"/> Federal agency			

## Section 2: Nature of application

Application is hereby made for the following equipment: Diesel IC Engine, Portable Welder	
Application is for what type of permit: <input type="checkbox"/> New construction <input checked="" type="checkbox"/> Modification <input type="checkbox"/> Change of owner	For modification or change of owner: B012693 _____ Current Permit Number
Do you claim Confidentiality of Data? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (attach explanation; specify which information provided is confidential)	

## Section 3: Equipment information

Equipment description (give a brief description of the equipment and/or process): Year of Manufacture 2015, Tier 4, USEPA Family Name FDZXL02.9020	
Manufacturer: <u>One Deutz</u> Model: <u>TD2.9L4</u> Serial number: <u>11848053</u>	
Add-on air pollution control equipment? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Note: most APCE require a separate application)	
If yes: Manufacturer: _____ Model: _____ Serial #: _____ CARB EO#: _____	
Type (specify): _____	
Stack data Exhaust stack height from ground: <u>6.3</u> feet Exhaust stack diameter: _____ feet <u>1.75</u> "	
Stack is: <input type="checkbox"/> horizontal <input checked="" type="checkbox"/> vertical <input type="checkbox"/> open <input checked="" type="checkbox"/> weather cap	
Vent data: Exhaust temp. _____ °F Maximum exhaust rate (CFM): _____	

**-For District use only-**

Application number:	Invoice number:	Permit number:	Company/facility number:
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**Section 4: Emissions data**

Emission Factor Basis (attach any source specified): \_\_\_\_\_

Manufacturer    Source test    MDAQMD default    USEPA AP-42

Other (please specify): \_\_\_\_\_

Emissions data:

Pollutant	Pre-control max. emissions	Units	Post control max. emissions	Units
NO <sub>x</sub>	_____	_____	2.76	gm/bhp-hr
NMHC	_____	_____	_____	_____
CO	_____	_____	0.022	gm/bhp-hr
PM <sub>10</sub>	_____	_____	0.015	gm/bhp-hr
SO <sub>x</sub>	_____	_____	0.005	gm/bhp-hr

Toxic pollutants — Please include a list of all toxic air pollutants and their emission rates if known.

**Section 5: Operation information**

Fuel Consumption: <sup>4</sup>\_\_\_\_\_ at max rated load    gal/hour    SCF/hour    MMBtu/hr

Typical load: 70% \_\_\_\_\_

Facility annual operation by quarters (percent): <input checked="" type="checkbox"/> Uniform OR _____ % Jan-Mar   _____ % Apr-Jun _____ % Jul-Sep   _____ % Oct-Dec	Expected operating hours of equipment <sup>4</sup> _____ Hrs/day <sup>3</sup> _____ Days/wk <sup>24</sup> _____ Wk/yr Total annual hours <sup>288</sup> _____
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**Section 6: Receptor information**

Distance (feet) and direction to the property line of closest: 38,016 S residence   36,432 S business   50,160 S school

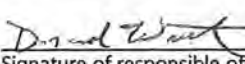
Name of closest school (K-12) Lewis Elementary

*If the proposed equipment operates within 1,000 feet of a school site and operation results in the emission of hazardous air pollutants, a public notice will be required at the expense of the applicant (CH&S §42301.6)*

**\*Please note:** District staff may contact you for further information. Failure to provide additional information as requested in a timely manner may result in delays in the processing of this permit application.

**Section 7: Certification**

I hereby certify that all information contained herein is true and correct.

Donald Westbrook	Complex Manager		4/16/19
Name of responsible official	Official title	Signature of responsible official	Date signed
Phone: 760-255-8423	Email: Donald.A.Westbrook@jpl.nasa.gov		

**Application submission instructions:**

- 1) Submit completed application to Engineering@mdaqmd.ca.gov
- 2) Pay the corresponding application fee of \$288 per permit for new or modified permit (or \$164 for change of owner) via check or credit card.

**Payment by check:**

Make check payable to the Mojave Desert AQMD  
 Mail the check with a copy of this completed application to:

**Mojave Desert AQMD**

14306 Park Avenue  
 Victorville, CA 92392

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**MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT**  
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PLEASE TYPE OR PRINT

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a. Permit to be issued to (company name): NASA/Goldstone		b. Federal tax ID #: 52-1597904	
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d. Facility or business license name (for equipment location):			
e. Facility Address — Location of equipment (if same as for company, enter "Same"): Same			Equip. coordinates (lat/long):
f. Contact name: Mark Solheid	Title: Sr. EHS Analyst	Email address: Mark.J.Solheid@jpl.nasa.gov	Phone: 760-255-8225
General nature of business: Deep Space Communications			Company NAICS: 517919
Type of Organization <input type="checkbox"/> Individual owner <input type="checkbox"/> Partnership <input type="checkbox"/> Corporation <input type="checkbox"/> Utility <input type="checkbox"/> Local agency <input type="checkbox"/> State agency <input checked="" type="checkbox"/> Federal agency			

## Section 2: Nature of application

Application is hereby made for the following equipment: Propane IC Engine, Portable Generator	
Application is for what type of permit: <input type="checkbox"/> New construction <input checked="" type="checkbox"/> Modification <input type="checkbox"/> Change of owner	For modification or change of owner: B012695 _____ Current Permit Number
Do you claim Confidentiality of Data? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (attach explanation; specify which information provided is confidential)	

## Section 3: Equipment information

Equipment description (give a brief description of the equipment and/or process): Year of Manufacture 2016, USEPA Family Name GPSIB8.80NGP-012	
Manufacturer: <u>One Power Solution Int. Inc.</u> Model: <u>Industrial 8.8L</u> Serial number: <u>SGM32HG87</u>	
Add-on air pollution control equipment? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Note: most APCE require a separate application)	
If yes: Manufacturer: _____ Model: _____ Serial #: _____ CARB EO#: _____	
Type (specify): _____	
Stack data    Exhaust stack height from ground: <sup>6</sup> _____ feet    Exhaust stack diameter: _____ feet .25"	
Stack is: <input type="checkbox"/> horizontal <input checked="" type="checkbox"/> vertical <input type="checkbox"/> open <input checked="" type="checkbox"/> weather cap	
Vent data: Exhaust temp. _____ °F    Maximum exhaust rate (CFM): _____	

### -For District use only-

Application number:	Invoice number:	Permit number:	Company/facility number:
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### Section 4: Emissions data

Emission Factor Basis (attach any source specified): _____				
<input checked="" type="checkbox"/> Manufacturer <input type="checkbox"/> Source test <input type="checkbox"/> MDAQMD default <input type="checkbox"/> USEPA AP-42				
<input type="checkbox"/> Other (please specify): _____				
Emissions data:				
Pollutant	Pre-control max. emissions	Units	Post control max. emissions	Units
NO <sub>x</sub>	_____	_____	0.032	gm/bhp-hr
NMHC	_____	_____	_____	_____
CO	_____	_____	0.176	gm/bhp-hr
PM <sub>10</sub>	_____	_____	0.010	gm/bhp-hr
SO <sub>x</sub>	_____	_____	0.001	gm/bhp-hr
Toxic pollutants — Please include a list of all toxic air pollutants and their emission rates if known.				

### Section 5: Operation information

Fuel Consumption: <u>0.02 lbs/hr</u> at max rated load <input checked="" type="checkbox"/> gal/hour <input type="checkbox"/> SCF/hour <input type="checkbox"/> MMBtu/hr	
Typical load: <u>70%</u>	
Facility annual operation by quarters (percent): <input checked="" type="checkbox"/> Uniform OR _____ % Jan-Mar   _____ % Apr-Jun _____ % Jul-Sep   _____ % Oct-Dec	Expected operating hours of equipment <sup>4</sup> _____ Hrs/day <sup>3</sup> _____ Days/wk <sup>24</sup> _____ Wk/yr Total annual hours <sup>288</sup> _____

### Section 6: Receptor information

Distance (feet) and direction to the property line of closest: <u>38,016 S</u> residence <u>36,432 S</u> business <u>50,160 S</u> school
Name of closest school (K-12) <u>Lewis Elementary</u>
<i>If the proposed equipment operates within 1,000 feet of a school site and operation results in the emission of hazardous air pollutants, a public notice will be required at the expense of the applicant (CH&amp;S 542301.6)</i>

**\*Please note:** District staff may contact you for further information. Failure to provide additional information as requested in a timely manner may result in delays in the processing of this permit application.

### Section 7: Certification

I hereby certify that all information contained herein is true and correct.			
<u>Donald Westbrook</u>	<u>Complex Manager</u>	<u>Donald Westbrook</u>	<u>4/16/19</u>
Name of responsible official	Official title	Signature of responsible official	Date signed
Phone: 760-255-8423	Email: <u>Donald.A.Westbrook@jpl.nasa.gov</u>		

#### Application submission instructions:

- 1) Submit completed application to [Engineering@mdaqmd.ca.gov](mailto:Engineering@mdaqmd.ca.gov)
- 2) Pay the corresponding application fee of \$288 per permit for new or modified permit (or \$164 for change of owner) via check or credit card.

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Mail the check with a copy of this completed application to:

#### Mojave Desert AQMD

14306 Park Avenue  
Victorville, CA 92392

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**MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT**

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Email: [engineering@mdaqmd.ca.gov](mailto:engineering@mdaqmd.ca.gov)  
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# General Application Form

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## Section 1: Owner information

a. Permit to be issued to (company name): NASA/Goldstone		b. Federal tax ID #: 52-1597904	
c. Mailing/billing address (for above company name) include city, state and zip code: 93 Goldstone Road, Fort Irwin, CA 92310			
d. Facility or business license name (for equipment location):			
e. Facility Address — Location of equipment (if same as for company, enter "Same"): Same		Equip. coordinates (lat/long):	
f. Contact name: Mark Solheid	Title: Sr. EHS Analyst	Email address: Mark.J.Solheid@jpl.nasa.gov	Phone: 760-255-8225
General nature of business: Deep Space Communications		Company NAICS: 517919	
Type of Organization <input type="checkbox"/> Individual owner <input type="checkbox"/> Partnership <input type="checkbox"/> Corporation <input type="checkbox"/> Utility <input type="checkbox"/> Local agency <input type="checkbox"/> State agency <input checked="" type="checkbox"/> Federal agency			

## Section 2: Nature of application

Application is hereby made for the following equipment: Propane IC Engine, Portable Generator	
Application is for what type of permit: <input type="checkbox"/> New construction <input checked="" type="checkbox"/> Modification <input type="checkbox"/> Change of owner	For modification or change of owner: B011623                      Current Permit Number
Do you claim Confidentiality of Data? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (attach explanation; specify which information provided is confidential)	

## Section 3: Equipment information

Equipment description (give a brief description of the equipment and/or process): Year of Manufacture 2010, USEPA Family Name BPSIB.702ED	
Manufacturer: General Motors	Model: 8.1                      Serial number: 23472
Add-on air pollution control equipment? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Note: most APCE require a separate application)	
If yes: Manufacturer:                      Model:                      Serial #:                      CARB EO#:	
Type (specify):	
Stack data    Exhaust stack height from ground: <sup>2</sup> feet    Exhaust stack diameter:                      feet <sup>2"</sup>	
Stack is: <input type="checkbox"/> horizontal <input checked="" type="checkbox"/> vertical <input type="checkbox"/> open <input checked="" type="checkbox"/> weather cap	
Vent data: Exhaust temp. <sup>1250</sup> °F    Maximum exhaust rate (CFM): <sup>735</sup>	

**-For District use only-**

Application number:	Invoice number:	Permit number:	Company/facility number:
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### Section 4: Emissions data

Emission Factor Basis (attach any source specified): _____			
<input checked="" type="checkbox"/> Manufacturer <input type="checkbox"/> Source test <input type="checkbox"/> MDAQMD default <input type="checkbox"/> USEPA AP-42 <input type="checkbox"/> Other (please specify): _____			
Emissions data:			
Pollutant	Pre-control max. emissions	Units	Post control max. emissions
NO <sub>x</sub>	_____	_____	0.246 gm/bhp-hr
NMHC	_____	_____	_____
CO	_____	_____	0.0895 gm/bhp-hr
PM <sub>10</sub>	_____	_____	0.0149 gm/bhp-hr
SO <sub>x</sub>	_____	_____	0.002 gm/bhp-hr
Toxic pollutants — Please include a list of all toxic air pollutants and their emission rates if known.			

### Section 5: Operation information

Fuel Consumption: <u>7</u> at max rated load <input checked="" type="checkbox"/> gal/hour <input type="checkbox"/> SCF/hour <input type="checkbox"/> MMBtu/hr	
Typical load: <u>70%</u>	
Facility annual operation by quarters (percent): <input checked="" type="checkbox"/> Uniform OR _____ % Jan-Mar           _____ % Apr-Jun _____ % Jul-Sep           _____ % Oct-Dec	Expected operating hours of equipment <sup>4</sup> _____ Hrs/day <sup>3</sup> _____ Days/wk <sup>24</sup> _____ Wk/yr Total annual hours <sup>288</sup> _____

### Section 6: Receptor information

Distance (feet) and direction to the property line of closest: <u>38,016 S</u> residence <u>36,432 S</u> business <u>50,160 S</u> school
Name of closest school (K-12) <u>Lewis Elementary</u>
<i>If the proposed equipment operates within 1,000 feet of a school site and operation results in the emission of hazardous air pollutants, a public notice will be required at the expense of the applicant (CH&amp;S §42301.6)</i>

**\*Please note:** District staff may contact you for further information. Failure to provide additional information as requested in a timely manner may result in delays in the processing of this permit application.

### Section 7: Certification

I hereby certify that all information contained herein is true and correct.			
Donald Westbrook	Complex Manager	<i>Donald Westbrook</i>	<u>4/16/19</u>
Name of responsible official	Official title	Signature of responsible official	Date signed
Phone: 760-255-8423	Email: Donald.A.Westbrook@jpl.nasa.gov		

#### Application submission instructions:

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- 2) Pay the corresponding application fee of \$288 per permit for new or modified permit (or \$164 for change of owner) via check or credit card.

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 14306 Park Avenue  
 Victorville, CA 92392

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**MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT**

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d. Facility or business license name (for equipment location):			
e. Facility Address — Location of equipment (if same as for company, enter "Same"): Same			Equip. coordinates (lat/long):
f. Contact name: Mark Solheid	Title: Sr. EHS Analyst	Email address: Mark.J.Solheid@jpl.nasa.gov	Phone: 760-255-8225
General nature of business: Deep Space Communications			Company NAICS: 517919
Type of Organization <input type="checkbox"/> Individual owner <input type="checkbox"/> Partnership <input type="checkbox"/> Corporation <input type="checkbox"/> Utility <input type="checkbox"/> Local agency <input type="checkbox"/> State agency <input checked="" type="checkbox"/> Federal agency			

## Section 2: Nature of application

Application is hereby made for the following equipment: Diesel IC Engine, Emergency Generator	
Application is for what type of permit: <input type="checkbox"/> New construction <input checked="" type="checkbox"/> Modification <input type="checkbox"/> Change of owner	For modification or change of owner: E000272      Current Permit Number
Do you claim Confidentiality of Data? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (attach explanation; specify which information provided is confidential)	

## Section 3: Equipment information

Equipment description (give a brief description of the equipment and/or process): (Unit #2C: Building G-81) Year of Manufacture 1967	
Manufacturer: Caterpillar	Model: 398      Serial number: 66B1555
Add-on air pollution control equipment? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Note: most APCE require a separate application)	
If yes: Manufacturer:      Model:      Serial #:      CARB EO#:	
Type (specify):	
Stack data Exhaust stack height from ground: 27.5 feet Exhaust stack diameter:      feet 12"	
Stack is: <input type="checkbox"/> horizontal <input checked="" type="checkbox"/> vertical <input type="checkbox"/> open <input checked="" type="checkbox"/> weather cap	
Vent data: Exhaust temp. 738 °F Maximum exhaust rate (CFM): 1155	

**-For District use only-**

Application number:	Invoice number:	Permit number:	Company/facility number:
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### Section 4: Emissions data

Emission Factor Basis (attach any source specified): _____				
<input type="checkbox"/> Manufacturer <input type="checkbox"/> Source test <input checked="" type="checkbox"/> MDAQMD default <input type="checkbox"/> USEPA AP-42 <input type="checkbox"/> Other (please specify): _____				
Emissions data:				
Pollutant	Pre-control max. emissions	Units	Post control max. emissions	Units
NO <sub>x</sub>	_____	_____	_____	_____
NMHC	_____	_____	_____	_____
CO	_____	_____	_____	_____
PM <sub>10</sub>	_____	_____	_____	_____
SO <sub>x</sub>	_____	_____	_____	_____
Toxic pollutants — Please include a list of all toxic air pollutants and their emission rates if known.				

### Section 5: Operation information

Fuel Consumption: <sup>48</sup> _____ at max rated load <input checked="" type="checkbox"/> gal/hour <input type="checkbox"/> SCF/hour <input type="checkbox"/> MMBtu/hr	
Typical load: <sup>70%</sup> _____	
Facility annual operation by quarters (percent): <input checked="" type="checkbox"/> Uniform OR _____ % Jan-Mar           _____ % Apr-Jun _____ % Jul-Sep           _____ % Oct-Dec	Expected operating hours of equipment <sup>4</sup> _____ Hrs/day <sup>3</sup> _____ Days/wk <sup>24</sup> _____ Wk/yr Total annual hours <sup>288</sup> _____

### Section 6: Receptor information

Distance (feet) and direction to the property line of closest: <u>38,016 S</u> residence <u>36,432 S</u> business <u>50,160 S</u> school
Name of closest school (K-12) <u>Lewis Elementary</u>
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I hereby certify that all information contained herein is true and correct.			
Donald Westbrook	Complex Manager	<i>Donald Westbrook</i>	<u>4/16/19</u>
Name of responsible official	Official title	Signature of responsible official	Date signed
Phone: 760-255-8423	Email: Donald.A.Westbrook@jpl.nasa.gov		

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**MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT**

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c. Mailing/billing address (for above company name) include city, state and zip code: 93 Goldstone Road, Fort Irwin, CA 92310			
d. Facility or business license name (for equipment location):			
e. Facility Address — Location of equipment (if same as for company, enter "Same"): Same			Equip. coordinates (lat/long):
f. Contact name: Mark Solheid	Title: Sr. EHS Analyst	Email address: Mark.J.Solheid@jpl.nasa.gov	Phone: 760-255-8225
General nature of business: Deep Space Communications			Company NAICS: 517919
Type of Organization <input type="checkbox"/> Individual owner <input type="checkbox"/> Partnership <input type="checkbox"/> Corporation <input type="checkbox"/> Utility <input type="checkbox"/> Local agency <input type="checkbox"/> State agency <input checked="" type="checkbox"/> Federal agency			

## Section 2: Nature of application

Application is hereby made for the following equipment: Diesel IC Engine, Emergency Generator	
Application is for what type of permit: <input type="checkbox"/> New construction <input checked="" type="checkbox"/> Modification <input type="checkbox"/> Change of owner	For modification or change of owner: E000273 _____ Current Permit Number
Do you claim Confidentiality of Data? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (attach explanation; specify which information provided is confidential)	

## Section 3: Equipment information

Equipment description (give a brief description of the equipment and/or process): (Unit #1C: Building G-81) Year of Manufacture 1987	
Manufacturer: Caterpillar	Model: 398      Serial number: 66B1556
Add-on air pollution control equipment? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Note: most APCE require a separate application)	
If yes: Manufacturer: _____ Model: _____ Serial #: _____ CARB EO#: _____	
Type (specify): _____	
Stack data Exhaust stack height from ground: 27.6 feet Exhaust stack diameter: _____ feet 12"	
Stack is: <input type="checkbox"/> horizontal <input checked="" type="checkbox"/> vertical <input type="checkbox"/> open <input checked="" type="checkbox"/> weather cap	
Vent data: Exhaust temp. 738 °F Maximum exhaust rate (CFM): 1155	

**-For District use only-**

Application number:	Invoice number:	Permit number:	Company/facility number:
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## Section 4: Emissions data

Emission Factor Basis (attach any source specified): _____				
<input type="checkbox"/> Manufacturer <input type="checkbox"/> Source test <input checked="" type="checkbox"/> MDAQMD default <input type="checkbox"/> USEPA AP-42 <input type="checkbox"/> Other (please specify): _____				
Emissions data: _____				
Pollutant	Pre-control max. emissions	Units	Post control max. emissions	Units
NO <sub>x</sub>	_____	_____	_____	_____
NMHC	_____	_____	_____	_____
CO	_____	_____	_____	_____
PM <sub>10</sub>	_____	_____	_____	_____
SO <sub>x</sub>	_____	_____	_____	_____
Toxic pollutants — Please include a list of all toxic air pollutants and their emission rates if known.				

## Section 5: Operation information

Fuel Consumption: <sup>48</sup> _____ at max rated load <input checked="" type="checkbox"/> gal/hour <input type="checkbox"/> SCF/hour <input type="checkbox"/> MMBtu/hr	
Typical load: <sup>70%</sup> _____	
Facility annual operation by quarters (percent): <input checked="" type="checkbox"/> Uniform OR _____ % Jan-Mar    _____ % Apr-Jun _____ % Jul-Sep    _____ % Oct-Dec	Expected operating hours of equipment <sup>4</sup> _____ Hrs/day <sup>3</sup> _____ Days/wk <sup>24</sup> _____ Wk/yr Total annual hours <sup>288</sup> _____

## Section 6: Receptor information

Distance (feet) and direction to the property line of closest: <u>38,016 S</u> residence <u>36,432 S</u> business <u>50,160 S</u> school
Name of closest school (K-12) <u>Lewis Elementary</u>
<i>If the proposed equipment operates within 1,000 feet of a school site and operation results in the emission of hazardous air pollutants, a public notice will be required at the expense of the applicant (CH&amp;S §42301.6)</i>

**\*Please note:** District staff may contact you for further information. Failure to provide additional information as requested in a timely manner may result in delays in the processing of this permit application.

## Section 7: Certification

I hereby certify that all information contained herein is true and correct.			
Donald Westbrook	Complex Manager	<u>Donald Westbrook</u>	<u>4/16/19</u>
Name of responsible official	Official title	Signature of responsible official	Date signed
Phone: 760-255-8423	Email: Donald.A.Westbrook@jpl.nasa.gov		

### Application submission instructions:

- 1) Submit completed application to Engineering@mdaqmd.ca.gov
- 2) Pay the corresponding application fee of \$288 per permit for new or modified permit (or \$164 for change of owner) via check or credit card.

#### Payment by check:

Make check payable to the Mojave Desert AQMD  
 Mail the check with a copy of this completed application to:

#### Mojave Desert AQMD

14306 Park Avenue  
 Victorville, CA 92392

#### Payment by credit card:

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**MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT**

**BRAD POIRIEZ, EXECUTIVE DIRECTOR**  
 14306 Park Avenue, Victorville, CA 92392-2310  
 760.245.1661 • Fax 760.245.2022  
 Email: [engineering@mdaqmd.ca.gov](mailto:engineering@mdaqmd.ca.gov)  
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# General Application Form

Remit **\$288.00** with this document (\$164.00 for change of owner)

PLEASE TYPE OR PRINT

## Section 1: Owner information

a. Permit to be issued to (company name): NASA/Goldstone		b. Federal tax ID #: 52-1597904	
c. Mailing/billing address (for above company name) include city, state and zip code: 93 Goldstone Road, Fort Irwin, CA 92310			
d. Facility or business license name (for equipment location):			
e. Facility Address — Location of equipment (if same as for company, enter "Same"): Same			Equip. coordinates (lat/long):
f. Contact name: Mark Solheid	Title: Sr. EHS Analyst	Email address: Mark.J.Solheid@jpl.nasa.gov	Phone: 760-255-8225
General nature of business: Deep Space Communications			Company NAICS: 517919
Type of Organization <input type="checkbox"/> Individual owner <input type="checkbox"/> Partnership <input type="checkbox"/> Corporation <input type="checkbox"/> Utility <input type="checkbox"/> Local agency <input type="checkbox"/> State agency <input checked="" type="checkbox"/> Federal agency			

## Section 2: Nature of application

Application is hereby made for the following equipment: Diesel IC Engine, Emergency Generator	
Application is for what type of permit: <input type="checkbox"/> New construction <input checked="" type="checkbox"/> Modification <input type="checkbox"/> Change of owner	For modification or change of owner: E000274 Current Permit Number
Do you claim Confidentiality of Data? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (attach explanation; specify which information provided is confidential)	

## Section 3: Equipment information

Equipment description (give a brief description of the equipment and/or process): (Unit #2B; Building G-81) Year of Manufacture 1973	
<hr/> <hr/> <hr/> <hr/>	
Manufacturer: Caterpillar	Model: 399      Serial number: 35B835
Add-on air pollution control equipment? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Note: most APCE require a separate application)	
If yes: Manufacturer: _____ Model: _____ Serial #: _____ CARB EO#: _____	
Type (specify): _____	
<b>Stack data</b> Exhaust stack height from ground: 27.5 feet Exhaust stack diameter: _____ feet 12"	
Stack is: <input type="checkbox"/> horizontal <input checked="" type="checkbox"/> vertical <input type="checkbox"/> open <input checked="" type="checkbox"/> weather cap	
Vent data: Exhaust temp. 833.5 °F Maximum exhaust rate (CFM): 1690	

**-For District use only-**

Application number:	Invoice number:	Permit number:	Company/facility number:
---------------------	-----------------	----------------	--------------------------

### Section 4: Emissions data

Emission Factor Basis (attach any source specified): _____				
<input type="checkbox"/> Manufacturer <input type="checkbox"/> Source test <input checked="" type="checkbox"/> MDAQMD default <input type="checkbox"/> USEPA AP-42 <input type="checkbox"/> Other (please specify): _____				
Emissions data: _____				
Pollutant	Pre-control max. emissions	Units	Post control max. emissions	Units
NO <sub>x</sub>	_____	_____	_____	_____
NMHC	_____	_____	_____	_____
CO	_____	_____	_____	_____
PM <sub>10</sub>	_____	_____	_____	_____
SO <sub>x</sub>	_____	_____	_____	_____
Toxic pollutants — Please include a list of all toxic air pollutants and their emission rates if known.				

### Section 5: Operation information

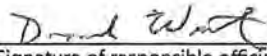
Fuel Consumption: <sup>68</sup> _____ at max rated load <input checked="" type="checkbox"/> gal/hour <input type="checkbox"/> SCF/hour <input type="checkbox"/> MMBtu/hr	
Typical load: <sup>70%</sup> _____	
Facility annual operation by quarters (percent): <input checked="" type="checkbox"/> Uniform OR _____ % Jan-Mar    _____ % Apr-Jun _____ % Jul-Sep    _____ % Oct-Dec	Expected operating hours of equipment <sup>4</sup> _____ Hrs/day <sup>3</sup> _____ Days/wk <sup>24</sup> _____ Wk/yr Total annual hours <sup>288</sup> _____

### Section 6: Receptor information

Distance (feet) and direction to the property line of closest: <u>38,016 S</u> residence <u>36,432 S</u> business <u>50,160 S</u> school
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<i>If the proposed equipment operates within 1,000 feet of a school site and operation results in the emission of hazardous air pollutants, a public notice will be required at the expense of the applicant (CH&amp;S §42301.6)</i>

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Donald Westbrook	Complex Manager		<u>4/16/19</u>
Name of responsible official	Official title	Signature of responsible official	Date signed
Phone: 760-255-8423	Email: Donald.A.Westbrook@jpl.nasa.gov		

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**MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT**

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Email: [engineering@mdaqmd.ca.gov](mailto:engineering@mdaqmd.ca.gov)  
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# General Application Form

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## Section 1: Owner information

a. Permit to be issued to (company name): NASA/Goldstone		b. Federal tax ID #: 52-1597904	
c. Mailing/billing address (for above company name) include city, state and zip code: 93 Goldstone Road, Fort Irwin, CA 92310			
d. Facility or business license name (for equipment location):			
e. Facility Address — Location of equipment (if same as for company, enter "Same"): Same			Equip. coordinates (lat/long):
f. Contact name: Mark Solheid	Title: Sr. EHS Analyst	Email address: Mark.J.Solheid@jpl.nasa.gov	Phone: 760-255-8225
General nature of business: Deep Space Communications			Company NAICS: 517919
Type of Organization <input type="checkbox"/> Individual owner <input type="checkbox"/> Partnership <input type="checkbox"/> Corporation <input type="checkbox"/> Utility <input type="checkbox"/> Local agency <input type="checkbox"/> State agency <input checked="" type="checkbox"/> Federal agency			

## Section 2: Nature of application

Application is hereby made for the following equipment: Diesel IC Engine, Emergency Generator	
Application is for what type of permit: <input type="checkbox"/> New construction <input checked="" type="checkbox"/> Modification <input type="checkbox"/> Change of owner	For modification or change of owner: E000275 _____ Current Permit Number
Do you claim Confidentiality of Data? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (attach explanation; specify which information provided is confidential)	

## Section 3: Equipment information

Equipment description (give a brief description of the equipment and/or process): (Unit #3B: Building G-81) Year of Manufacture 1973	
Manufacturer: Caterpillar    Model: 399    Serial number: 35B838	
Add-on air pollution control equipment? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Note: most APCE require a separate application)	
If yes: Manufacturer: _____ Model: _____ Serial #: _____ CARB EO#: _____	
Type (specify): _____	
Stack data Exhaust stack height from ground: 27.6 feet Exhaust stack diameter: _____ feet 12"	
Stack is: <input type="checkbox"/> horizontal <input checked="" type="checkbox"/> vertical <input type="checkbox"/> open <input checked="" type="checkbox"/> weather cap	
Vent data: Exhaust temp. 833.5 °F Maximum exhaust rate (CFM): 1690	

**-For District use only-**

Application number:	Invoice number:	Permit number:	Company/facility number:
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### Section 4: Emissions data

Emission Factor Basis (attach any source specified): _____				
<input type="checkbox"/> Manufacturer <input type="checkbox"/> Source test <input checked="" type="checkbox"/> MDAQMD default <input type="checkbox"/> USEPA AP-42 <input type="checkbox"/> Other (please specify): _____				
Emissions data: _____				
Pollutant	Pre-control max. emissions	Units	Post control max. emissions	Units
NO <sub>x</sub>	_____	_____	_____	_____
NMHC	_____	_____	_____	_____
CO	_____	_____	_____	_____
PM <sub>10</sub>	_____	_____	_____	_____
SO <sub>x</sub>	_____	_____	_____	_____
Toxic pollutants — Please include a list of all toxic air pollutants and their emission rates if known.				

### Section 5: Operation information

Fuel Consumption: <sup>68</sup> _____ at max rated load <input checked="" type="checkbox"/> gal/hour <input type="checkbox"/> SCF/hour <input type="checkbox"/> MMBtu/hr	
Typical load: <sup>70%</sup> _____	
Facility annual operation by quarters (percent): <input checked="" type="checkbox"/> Uniform OR _____ % Jan-Mar    _____ % Apr-Jun _____ % Jul-Sep    _____ % Oct-Dec	Expected operating hours of equipment <sup>4</sup> _____ Hrs/day <sup>3</sup> _____ Days/wk <sup>24</sup> _____ Wk/yr Total annual hours <sup>288</sup> _____

### Section 6: Receptor information

Distance (feet) and direction to the property line of closest: <sup>38,016 S</sup> _____ residence <sup>36,432 S</sup> _____ business <sup>50,160 S</sup> _____ school
Name of closest school (K-12) <u>Lewis Elementary</u>
<i>If the proposed equipment operates within 1,000 feet of a school site and operation results in the emission of hazardous air pollutants, a public notice will be required at the expense of the applicant (CH&amp;S §42301.6)</i>

**\*Please note:** District staff may contact you for further information. Failure to provide additional information as requested in a timely manner may result in delays in the processing of this permit application.

### Section 7: Certification

I hereby certify that all information contained herein is true and correct.			
Donald Westbrook	Complex Manager		<u>4/16/19</u>
Name of responsible official	Official title	Signature of responsible official	Date signed
Phone: 760-255-8423	Email: Donald.A.Westbrook@jpl.nasa.gov		

#### Application submission instructions:

- 1) Submit completed application to Engineering@mdaqmd.ca.gov
- 2) Pay the corresponding application fee of \$288 per permit for new or modified permit (or \$164 for change of owner) via check or credit card.

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#### Mojave Desert AQMD

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 Victorville, CA 92392

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**MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT**

**BRAD POIRIEZ, EXECUTIVE DIRECTOR**  
 14306 Park Avenue, Victorville, CA 92392-2310  
 760.245.1661 • Fax 760.245.2022  
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[@MDAQMD](http://www.MDAQMD.ca.gov)

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# General Application Form

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PLEASE TYPE OR PRINT

## Section 1: Owner information

a. Permit to be issued to (company name): NASA/Goldstone		b. Federal tax ID #: 52-1597904	
c. Mailing/billing address (for above company name) include city, state and zip code: 93 Goldstone Road, Fort Irwin, CA 92310			
d. Facility or business license name (for equipment location):			
e. Facility Address — Location of equipment (if same as for company, enter "Same"): Same		Equip. coordinates (lat/long):	
f. Contact name: Mark Solheid	Title: Sr. EHS Analyst	Email address: Mark.J.Solheid@jpl.nasa.gov	Phone: 760-255-8225
General nature of business: Deep Space Communications		Company NAICS: 517919	
Type of Organization <input type="checkbox"/> Individual owner <input type="checkbox"/> Partnership <input type="checkbox"/> Corporation <input type="checkbox"/> Utility <input type="checkbox"/> Local agency <input type="checkbox"/> State agency <input checked="" type="checkbox"/> Federal agency			

## Section 2: Nature of application

Application is hereby made for the following equipment: Diesel IC Engine, Emergency Generator	
Application is for what type of permit: <input type="checkbox"/> New construction <input checked="" type="checkbox"/> Modification <input type="checkbox"/> Change of owner	For modification or change of owner: E000276 Current Permit Number
Do you claim Confidentiality of Data? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (attach explanation; specify which information provided is confidential)	

## Section 3: Equipment information

Equipment description (give a brief description of the equipment and/or process): (Unit #1B: Building G-81) Year of Manufacture 1973	
Manufacturer: Caterpillar	Model: 399    Serial number: 358837
Add-on air pollution control equipment? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Note: most APCE require a separate application)	
If yes: Manufacturer:    Model:    Serial #:    CARB EO#:	
Type (specify):	
Stack data Exhaust stack height from ground: 27.5 feet Exhaust stack diameter:    feet	
Stack is: <input type="checkbox"/> horizontal <input checked="" type="checkbox"/> vertical <input type="checkbox"/> open <input checked="" type="checkbox"/> weather cap	
Vent data: Exhaust temp. 833.5 °F Maximum exhaust rate (CFM):	

**-For District use only-**

Application number:	Invoice number:	Permit number:	Company/facility number:
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### Section 4: Emissions data

Emission Factor Basis (attach any source specified): _____			
<input type="checkbox"/> Manufacturer <input type="checkbox"/> Source test <input checked="" type="checkbox"/> MDAQMD default <input type="checkbox"/> USEPA AP-42 <input type="checkbox"/> Other (please specify): _____			
Emissions data: _____			
Pollutant	Pre-control max. emissions	Units	Post control max. emissions
NO <sub>x</sub>	_____	_____	_____
NMHC	_____	_____	_____
CO	_____	_____	_____
PM <sub>10</sub>	_____	_____	_____
SO <sub>x</sub>	_____	_____	_____
Toxic pollutants — Please include a list of all toxic air pollutants and their emission rates if known.			

### Section 5: Operation information

Fuel Consumption: <sup>68</sup> _____ at max rated load <input checked="" type="checkbox"/> gal/hour <input type="checkbox"/> SCF/hour <input type="checkbox"/> MMBtu/hr	
Typical load: <sup>70%</sup> _____	
Facility annual operation by quarters (percent): <input checked="" type="checkbox"/> Uniform OR _____ % Jan-Mar    _____ % Apr-Jun _____ % Jul-Sep    _____ % Oct-Dec	Expected operating hours of equipment <sup>4</sup> _____ Hrs/day <sup>3</sup> _____ Days/wk <sup>24</sup> _____ Wk/yr Total annual hours <sup>288</sup> _____

### Section 6: Receptor information

Distance (feet) and direction to the property line of closest: <u>38,018 S</u> residence <u>36,432 S</u> business <u>50,160 S</u> school
Name of closest school (K-12) <u>Lewis Elementary</u>
<i>If the proposed equipment operates within 1,000 feet of a school site and operation results in the emission of hazardous air pollutants, a public notice will be required at the expense of the applicant (CH&amp;S §42301.6)</i>

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### Section 7: Certification

I hereby certify that all information contained herein is true and correct.			
Donald Westbrook	Complex Manager	<i>Donald Westbrook</i>	<u>4/16/19</u>
Name of responsible official	Official title	Signature of responsible official	Date signed
Phone: 760-255-8423	Email: Donald.A.Westbrook@jpl.nasa.gov		

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# General Application Form

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e. Facility Address — Location of equipment (if same as for company, enter "Same"): Same		Equip. coordinates (lat/long):	
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General nature of business: Deep Space Communications		Company NAICS: 517919	
Type of Organization			
<input type="checkbox"/> Individual owner <input type="checkbox"/> Partnership <input type="checkbox"/> Corporation <input type="checkbox"/> Utility <input type="checkbox"/> Local agency <input type="checkbox"/> State agency <input checked="" type="checkbox"/> Federal agency			

## Section 2: Nature of application

Application is hereby made for the following equipment: Diesel IC Engine, Emergency Generator	
Application is for what type of permit: <input type="checkbox"/> New construction <input checked="" type="checkbox"/> Modification <input type="checkbox"/> Change of owner	For modification or change of owner: E000277 _____ Current Permit Number
Do you claim Confidentiality of Data? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (attach explanation; specify which information provided is confidential)	

## Section 3: Equipment information

Equipment description (give a brief description of the equipment and/or process): (Unit #4B: Building G-81) Year of Manufacture 1973	
<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>	
Manufacturer: Caterpillar	Model: 399      Serial number: 35B834
Add-on air pollution control equipment? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Note: most APCE require a separate application)	
If yes: Manufacturer: _____ Model: _____ Serial #: _____ CARB EO#: _____	
Type (specify): _____	
<b>Stack data</b> Exhaust stack height from ground: 27.6 feet Exhaust stack diameter: _____ feet 12"	
Stack is: <input type="checkbox"/> horizontal <input checked="" type="checkbox"/> vertical <input type="checkbox"/> open <input checked="" type="checkbox"/> weather cap	
Vent data: Exhaust temp. 833.5 °F Maximum exhaust rate (CFM): 1690	

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Application number:	Invoice number:	Permit number:	Company/facility number:
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Emission Factor Basis (attach any source specified): _____				
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Emissions data: _____				
Pollutant	Pre-control max. emissions	Units	Post control max. emissions	Units
NO <sub>x</sub>	_____	_____	_____	_____
NMHC	_____	_____	_____	_____
CO	_____	_____	_____	_____
PM <sub>10</sub>	_____	_____	_____	_____
SO <sub>x</sub>	_____	_____	_____	_____
Toxic pollutants — Please include a list of all toxic air pollutants and their emission rates if known.				

### Section 5: Operation information

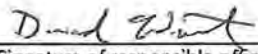
Fuel Consumption: <sup>68</sup> _____ at max rated load <input checked="" type="checkbox"/> gal/hour <input type="checkbox"/> SCF/hour <input type="checkbox"/> MMBtu/hr	
Typical load: <sup>70%</sup> _____	
Facility annual operation by quarters (percent): <input checked="" type="checkbox"/> Uniform OR _____ % Jan-Mar _____ % Apr-Jun _____ % Jul-Sep _____ % Oct-Dec	Expected operating hours of equipment <sup>4</sup> _____ Hrs/day <sup>3</sup> _____ Days/wk <sup>24</sup> _____ Wk/yr Total annual hours <sup>288</sup> _____

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Donald Westbrook	Complex Manager		<u>4/16/19</u>
Name of responsible official	Official title	Signature of responsible official	Date signed
Phone: 760-255-8423	Email: Donald.A.Westbrook@jpl.nasa.gov		

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 Should you have any additional questions, please, do not hesitate to contact the permitting division at 760-245-1661, or via email at [engineering@mdaqmd.ca.gov](mailto:engineering@mdaqmd.ca.gov)



**MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT**

**BRAD POIRIEZ, EXECUTIVE DIRECTOR**  
 14306 Park Avenue, Victorville, CA 92392-2310  
 760.245.1661 • Fax 760.245.2022  
 Email: [engineering@mdaqmd.ca.gov](mailto:engineering@mdaqmd.ca.gov)  
[www.MDAQMD.ca.gov](http://www.MDAQMD.ca.gov) • @MDAQMD

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# General Application Form

Remit **\$288.00** with this document (**\$164.00** for change of owner)

PLEASE TYPE OR PRINT

## Section 1: Owner information

a. Permit to be issued to (company name): NASA/Goldstone		b. Federal tax ID #: 52-1597904	
c. Mailing/billing address (for above company name) include city, state and zip code: 93 Goldstone Road, Fort Irwin, CA 92310			
d. Facility or business license name (for equipment location):			
e. Facility Address — Location of equipment (if same as for company, enter "Same"): Same			Equip. coordinates (lat/long):
f. Contact name: Mark Solheid	Title: Sr. EHS Analyst	Email address: Mark.J.Solheid@pl.nasa.gov	Phone: 760-255-8225
General nature of business: Deep Space Communications			Company NAICS: 517919
Type of Organization			
<input type="checkbox"/> Individual owner <input type="checkbox"/> Partnership <input type="checkbox"/> Corporation <input type="checkbox"/> Utility <input type="checkbox"/> Local agency <input type="checkbox"/> State agency <input checked="" type="checkbox"/> Federal agency			

## Section 2: Nature of application

Application is hereby made for the following equipment: Diesel IC Engine, Emergency Generator	
Application is for what type of permit: <input type="checkbox"/> New construction <input checked="" type="checkbox"/> Modification <input type="checkbox"/> Change of owner	For modification or change of owner: E000278 _____ Current Permit Number
Do you claim Confidentiality of Data? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (attach explanation; specify which information provided is confidential)	

## Section 3: Equipment information

Equipment description (give a brief description of the equipment and/or process): (Unit #4A: Building G-81) Year of Manufacture 1967	
_____ _____ _____ _____	
Manufacturer: Caterpillar	Model: 398      Serial number: 66B2912
Add-on air pollution control equipment? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Note: most APCE require a separate application)	
If yes: Manufacturer: _____ Model: _____ Serial #: _____ CARB EO#: _____	
Type (specify): _____	
Stack data Exhaust stack height from ground: <sup>21</sup> _____ feet Exhaust stack diameter: _____ feet <sup>12</sup> _____	
Stack is: <input type="checkbox"/> horizontal <input checked="" type="checkbox"/> vertical <input type="checkbox"/> open <input checked="" type="checkbox"/> weather cap	
Vent data: Exhaust temp. <sup>738</sup> _____ °F Maximum exhaust rate (CFM): <sup>1155</sup> _____	

**-For District use only-**

Application number:	Invoice number:	Permit number:	Company/facility number:
---------------------	-----------------	----------------	--------------------------

### Section 4: Emissions data

Emission Factor Basis (attach any source specified): _____				
<input type="checkbox"/> Manufacturer <input type="checkbox"/> Source test <input checked="" type="checkbox"/> MDAQMD default <input type="checkbox"/> USEPA AP-42 <input type="checkbox"/> Other (please specify): _____				
Emissions data:				
Pollutant	Pre-control max. emissions	Units	Post control max. emissions	Units
NO <sub>x</sub>	_____	_____	_____	_____
NMHC	_____	_____	_____	_____
CO	_____	_____	_____	_____
PM <sub>10</sub>	_____	_____	_____	_____
SO <sub>x</sub>	_____	_____	_____	_____
Toxic pollutants — Please include a list of all toxic air pollutants and their emission rates if known.				

### Section 5: Operation information

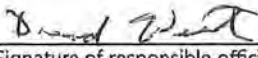
Fuel Consumption: <sup>48</sup> _____ at max rated load <input checked="" type="checkbox"/> gal/hour <input type="checkbox"/> SCF/hour <input type="checkbox"/> MMBtu/hr	
Typical load: <sup>70%</sup> _____	
Facility annual operation by quarters (percent): <input checked="" type="checkbox"/> Uniform OR _____ % Jan-Mar    _____ % Apr-Jun _____ % Jul-Sep    _____ % Oct-Dec	Expected operating hours of equipment <sup>4</sup> _____ Hrs/day <sup>3</sup> _____ Days/wk <sup>24</sup> _____ Wk/yr Total annual hours <sup>288</sup> _____

### Section 6: Receptor information

Distance (feet) and direction to the property line of closest: <u>38,016 S</u> residence <u>36,432 S</u> business <u>50,160 S</u> school
Name of closest school (K-12) <u>Lewis Elementary</u>
<i>If the proposed equipment operates within 1,000 feet of a school site and operation results in the emission of hazardous air pollutants, a public notice will be required at the expense of the applicant (CH&amp;S §42301.6)</i>

**\*Please note:** District staff may contact you for further information. Failure to provide additional information as requested in a timely manner may result in delays in the processing of this permit application.

### Section 7: Certification

I hereby certify that all information contained herein is true and correct.			
Donald Westbrook	Complex Manager		4/16/19
Name of responsible official	Official title	Signature of responsible official	Date signed
Phone: 760-255-8423	Email: Donald.A.Westbrook@jpl.nasa.gov		

#### Application submission instructions:

- 1) Submit completed application to Engineering@mdaqmd.ca.gov
- 2) Pay the corresponding application fee of \$288 per permit for new or modified permit (or \$164 for change of owner) via check or credit card.

#### Payment by check:

Make check payable to the Mojave Desert AQMD  
 Mail the check with a copy of this completed application to:

#### Mojave Desert AQMD

14306 Park Avenue  
 Victorville, CA 92392

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**MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT**

**BRAD POIRIEZ, EXECUTIVE DIRECTOR**  
 14306 Park Avenue, Victorville, CA 92392-2370  
 760.245.1661 • Fax 760.245.2022  
 Email: [engineering@mdaqmd.ca.gov](mailto:engineering@mdaqmd.ca.gov)  
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# General Application Form

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PLEASE TYPE OR PRINT

## Section 1: Owner information

a. Permit to be issued to (company name): NASA/Goldstone		b. Federal tax ID #: 52-1597904	
c. Mailing/billing address (for above company name) include city, state and zip code: 93 Goldstone Road, Fort Irwin, CA 92310			
d. Facility or business license name (for equipment location):			
e. Facility Address — Location of equipment (if same as for company, enter "Same"): Same			Equip. coordinates (lat/long):
f. Contact name: Mark Solheid	Title: Sr. EHS Analyst	Email address: Mark.J.Solheid@jpl.nasa.gov	Phone: 760-255-8225
General nature of business: Deep Space Communications			Company NAICS: 517919
Type of Organization <input type="checkbox"/> Individual owner <input type="checkbox"/> Partnership <input type="checkbox"/> Corporation <input type="checkbox"/> Utility <input type="checkbox"/> Local agency <input type="checkbox"/> State agency <input checked="" type="checkbox"/> Federal agency			

## Section 2: Nature of application

Application is hereby made for the following equipment: Diesel IC Engine, Emergency Generator	
Application is for what type of permit: <input type="checkbox"/> New construction <input checked="" type="checkbox"/> Modification <input type="checkbox"/> Change of owner	For modification or change of owner: E000279 _____ Current Permit Number
Do you claim Confidentiality of Data? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (attach explanation; specify which information provided is confidential)	

## Section 3: Equipment information

Equipment description (give a brief description of the equipment and/or process): (Unit #3A: Building G-81) Year of Manufacture 1985	
_____ _____ _____ _____ _____	
Manufacturer: Caterpillar	Model: 398    Serial number: 86B733
Add-on air pollution control equipment? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Note: most APCE require a separate application)	
If yes: Manufacturer: _____ Model: _____ Serial #: _____ CARB EO#: _____	
Type (specify): _____	
<b>Stack data</b> Exhaust stack height from ground: 17.9 feet Exhaust stack diameter: _____ feet 12"	
Stack is: <input type="checkbox"/> horizontal <input checked="" type="checkbox"/> vertical <input type="checkbox"/> open <input checked="" type="checkbox"/> weather cap	
Vent data: Exhaust temp. 738 °F Maximum exhaust rate (CFM): 1155	

**-For District use only-**

Application number:	Invoice number:	Permit number:	Company/facility number:
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### Section 4: Emissions data

Emission Factor Basis (attach any source specified): _____				
<input type="checkbox"/> Manufacturer <input type="checkbox"/> Source test <input checked="" type="checkbox"/> MDAQMD default <input type="checkbox"/> USEPA AP-42 <input type="checkbox"/> Other (please specify): _____				
Emissions data: _____				
Pollutant	Pre-control max. emissions	Units	Post control max. emissions	Units
NO <sub>x</sub>	_____	_____	_____	_____
NMHC	_____	_____	_____	_____
CO	_____	_____	_____	_____
PM <sub>10</sub>	_____	_____	_____	_____
SO <sub>x</sub>	_____	_____	_____	_____
Toxic pollutants — Please include a list of all toxic air pollutants and their emission rates if known.				

### Section 5: Operation information

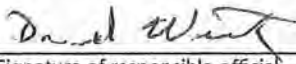
Fuel Consumption: <sup>48</sup> _____ at max rated load <input checked="" type="checkbox"/> gal/hour <input type="checkbox"/> SCF/hour <input type="checkbox"/> MMBtu/hr	
Typical load: <sup>70%</sup> _____	
Facility annual operation by quarters (percent): <input checked="" type="checkbox"/> Uniform OR _____ % Jan-Mar    _____ % Apr-Jun _____ % Jul-Sep    _____ % Oct-Dec	Expected operating hours of equipment <sup>4</sup> _____ Hrs/day <sup>3</sup> _____ Days/wk <sup>24</sup> _____ Wk/yr Total annual hours <sup>288</sup> _____

### Section 6: Receptor information

Distance (feet) and direction to the property line of closest: <sup>38,016 S</sup> _____ residence <sup>36,432 S</sup> _____ business <sup>50,160 S</sup> _____ school
Name of closest school (K-12) <u>Lewis Elementary</u>
<i>If the proposed equipment operates within 1,000 feet of a school site and operation results in the emission of hazardous air pollutants, a public notice will be required at the expense of the applicant (CH&amp;S §42301.6)</i>

**\*Please note:** District staff may contact you for further information. Failure to provide additional information as requested in a timely manner may result in delays in the processing of this permit application.

### Section 7: Certification

I hereby certify that all information contained herein is true and correct.			
Donald Westbrook	Complex Manager		<sup>4/16/19</sup>
Name of responsible official	Official title	Signature of responsible official	Date signed
Phone: 760-255-8423	Email: Donald.A.Westbrook@jpl.nasa.gov		

#### Application submission instructions:

- 1) Submit completed application to Engineering@mdaqmd.ca.gov
- 2) Pay the corresponding application fee of \$288 per permit for new or modified permit (or \$164 for change of owner) via check or credit card.

#### Payment by check:

Make check payable to the Mojave Desert AQMD  
 Mail the check with a copy of this completed application to:

#### Mojave Desert AQMD

14306 Park Avenue  
 Victorville, CA 92392

#### Payment by credit card:

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**MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT**

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 760.245.1661 • Fax 760.245.2022  
 Email: [engineering@mdaqmd.ca.gov](mailto:engineering@mdaqmd.ca.gov)  
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# General Application Form

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PLEASE TYPE OR PRINT

## Section 1: Owner information

a. Permit to be issued to (company name): NASA/Goldstone		b. Federal tax ID #: 52-1597904	
c. Mailing/billing address (for above company name) include city, state and zip code: 93 Goldstone Road, Fort Irwin, CA 92310			
d. Facility or business license name (for equipment location):			
e. Facility Address — Location of equipment (if same as for company, enter "Same"): Same		Equip. coordinates (lat/long):	
f. Contact name: Mark Solheid	Title: Sr. EHS Analyst	Email address: Mark.J.Solheid@jpl.nasa.gov	Phone: 760-255-8225
General nature of business: Deep Space Communications		Company NAICS: 517919	
Type of Organization			
<input type="checkbox"/> Individual owner <input type="checkbox"/> Partnership <input type="checkbox"/> Corporation <input type="checkbox"/> Utility <input type="checkbox"/> Local agency <input type="checkbox"/> State agency <input checked="" type="checkbox"/> Federal agency			

## Section 2: Nature of application

Application is hereby made for the following equipment: Diesel IC Engine, Emergency Generator	
Application is for what type of permit: <input type="checkbox"/> New construction <input checked="" type="checkbox"/> Modification <input type="checkbox"/> Change of owner	For modification or change of owner: E000280 _____ Current Permit Number
Do you claim Confidentiality of Data? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (attach explanation; specify which information provided is confidential)	

## Section 3: Equipment information

Equipment description (give a brief description of the equipment and/or process): (Unit #1A: Building G-81) Year of Manufacture 1984	
_____ _____ _____ _____	
Manufacturer: Caterpillar	Model: 398      Serial number: 66B2911
Add-on air pollution control equipment? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Note: most APCE require a separate application)	
If yes: Manufacturer: _____ Model: _____ Serial #: _____ CARB EO#: _____	
Type (specify): _____	
Stack data Exhaust stack height from ground: 27.9 feet Exhaust stack diameter: _____ feet 12"	
Stack is: <input type="checkbox"/> horizontal <input checked="" type="checkbox"/> vertical <input type="checkbox"/> open <input checked="" type="checkbox"/> weather cap	
Vent data: Exhaust temp. 738 °F Maximum exhaust rate (CFM): 1155	

**-For District use only-**

Application number:	Invoice number:	Permit number:	Company/facility number:
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## Section 4: Emissions data

Emission Factor Basis (attach any source specified): _____				
<input type="checkbox"/> Manufacturer <input type="checkbox"/> Source test <input checked="" type="checkbox"/> MDAQMD default <input type="checkbox"/> USEPA AP-42				
<input type="checkbox"/> Other (please specify): _____				
Emissions data: _____				
Pollutant	Pre-control max. emissions	Units	Post control max. emissions	Units
NO <sub>x</sub>	_____	_____	_____	_____
NMHC	_____	_____	_____	_____
CO	_____	_____	_____	_____
PM <sub>10</sub>	_____	_____	_____	_____
SO <sub>x</sub>	_____	_____	_____	_____
Toxic pollutants — Please include a list of all toxic air pollutants and their emission rates if known.				

## Section 5: Operation information

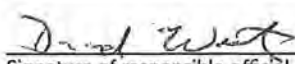
Fuel Consumption: <sup>48</sup> _____ at max rated load		<input checked="" type="checkbox"/> gal/hour	<input type="checkbox"/> SCF/hour	<input type="checkbox"/> MMBtu/hr
Typical load: <sup>70%</sup> _____				
Facility annual operation by quarters (percent):			Expected operating hours of equipment	
<input checked="" type="checkbox"/> Uniform OR _____ % Jan-Mar _____ % Apr-Jun _____ % Jul-Sep _____ % Oct-Dec			<sup>4</sup> _____ Hrs/day <sup>3</sup> _____ Days/wk <sup>24</sup> _____ Wk/yr Total annual hours <sup>288</sup> _____	

## Section 6: Receptor information

Distance (feet) and direction to the property line of closest:	<sup>38,016 S</sup> _____ residence	<sup>36,432 S</sup> _____ business	<sup>50,160 S</sup> _____ school
Name of closest school (K-12) <u>Lewis Elementary</u>			
<i>If the proposed equipment operates within 1,000 feet of a school site and operation results in the emission of hazardous air pollutants, a public notice will be required at the expense of the applicant (CH&amp;S §42301.6)</i>			

**\*Please note:** District staff may contact you for further information. Failure to provide additional information as requested in a timely manner may result in delays in the processing of this permit application.

## Section 7: Certification

I hereby certify that all information contained herein is true and correct.			
Donald Westbrook	Complex Manager		<u>4/16/19</u>
Name of responsible official	Official title	Signature of responsible official	Date signed
Phone: 760-255-8423	Email: Donald.A.Westbrook@jpl.nasa.gov		

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#### Mojave Desert AQMD

14306 Park Avenue  
 Victorville, CA 92392

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# General Application Form

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a. Permit to be issued to (company name): NASA/Goldstone		b. Federal tax ID #: 52-1597904	
c. Mailing/billing address (for above company name) include city, state and zip code: 93 Goldstone Road, Fort Irwin, CA 92310			
d. Facility or business license name (for equipment location):			
e. Facility Address — Location of equipment (if same as for company, enter "Same"): Same		Equip. coordinates (lat/long):	
f. Contact name: Mark Solheid	Title: Sr. EHS Analyst	Email address: Mark.J.Solheid@jpl.nasa.gov	Phone: 760-255-8225
General nature of business: Deep Space Communications		Company NAICS: 517919	
Type of Organization <input type="checkbox"/> Individual owner <input type="checkbox"/> Partnership <input type="checkbox"/> Corporation <input type="checkbox"/> Utility <input type="checkbox"/> Local agency <input type="checkbox"/> State agency <input checked="" type="checkbox"/> Federal agency			

## Section 2: Nature of application

Application is hereby made for the following equipment: Diesel IC Engine, Emergency Generator	
Application is for what type of permit: <input type="checkbox"/> New construction <input checked="" type="checkbox"/> Modification <input type="checkbox"/> Change of owner	For modification or change of owner: E000281 Current Permit Number
Do you claim Confidentiality of Data? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (attach explanation; specify which information provided is confidential)	

## Section 3: Equipment information

Equipment description (give a brief description of the equipment and/or process): (Unit #2A; Building G-81) Year of Manufacture 1995	
<hr/> <hr/> <hr/> <hr/> <hr/> <hr/>	
Manufacturer: Caterpillar	Model: 398      Serial number: 66B2909
Add-on air pollution control equipment? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Note: most APCE require a separate application)	
If yes: Manufacturer: _____ Model: _____ Serial #: _____ CARB EO#: _____	
Type (specify): _____	
Stack data Exhaust stack height from ground: 17.9 feet Exhaust stack diameter: _____ feet 12"	
Stack is: <input type="checkbox"/> horizontal <input checked="" type="checkbox"/> vertical <input type="checkbox"/> open <input checked="" type="checkbox"/> weather cap	
Vent data: Exhaust temp. 738 °F Maximum exhaust rate (CFM): 1155	

**-For District use only-**

Application number:	Invoice number:	Permit number:	Company/facility number:
---------------------	-----------------	----------------	--------------------------

### Section 4: Emissions data

Emission Factor Basis (attach any source specified): _____				
<input type="checkbox"/> Manufacturer <input type="checkbox"/> Source test <input checked="" type="checkbox"/> MDAQMD default <input type="checkbox"/> USEPA AP-42 <input type="checkbox"/> Other (please specify): _____				
Emissions data: _____				
Pollutant	Pre-control max. emissions	Units	Post control max. emissions	Units
NO <sub>x</sub>	_____	_____	_____	_____
NMHC	_____	_____	_____	_____
CO	_____	_____	_____	_____
PM <sub>10</sub>	_____	_____	_____	_____
SO <sub>x</sub>	_____	_____	_____	_____
Toxic pollutants — Please include a list of all toxic air pollutants and their emission rates if known.				

### Section 5: Operation information

Fuel Consumption: <sup>48</sup> _____ at max rated load <input checked="" type="checkbox"/> gal/hour <input type="checkbox"/> SCF/hour <input type="checkbox"/> MMBtu/hr	
Typical load: <sup>70%</sup> _____	
Facility annual operation by quarters (percent): <input checked="" type="checkbox"/> Uniform OR _____ % Jan-Mar    _____ % Apr-Jun _____ % Jul-Sep    _____ % Oct-Dec	Expected operating hours of equipment <sup>4</sup> _____ Hrs/day <sup>3</sup> _____ Days/wk <sup>24</sup> _____ Wk/yr Total annual hours <sup>208</sup> _____

### Section 6: Receptor information

Distance (feet) and direction to the property line of closest: <u>36,016 S</u> residence <u>36,432 S</u> business <u>50,160 S</u> school
Name of closest school (K-12) <u>Lewis Elementary</u>
<i>If the proposed equipment operates within 1,000 feet of a school site and operation results in the emission of hazardous air pollutants, a public notice will be required at the expense of the applicant (CH&amp;S §42301.6)</i>

**\*Please note:** District staff may contact you for further information. Failure to provide additional information as requested in a timely manner may result in delays in the processing of this permit application.

### Section 7: Certification

I hereby certify that all information contained herein is true and correct.			
Donald Westbrook	Complex Manager	<i>Donald Westbrook</i>	<u>4/16/12</u>
Name of responsible official	Official title	Signature of responsible official	Date signed
Phone: 760-255-8423	Email: Donald.A.Westbrook@jpl.nasa.gov		

#### Application submission instructions:

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 Victorville, CA 92392

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**MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT**

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# General Application Form

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a. Permit to be issued to (company name): NASA/Goldstone		b. Federal tax ID #: 52-1597904	
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d. Facility or business license name (for equipment location):			
e. Facility Address — Location of equipment (if same as for company, enter "Same"): Same			Equip. coordinates (lat/long):
f. Contact name: Mark Solheid	Title: Sr. EHS Analyst	Email address: Mark.J.Solheid@jpl.nasa.gov	Phone: 760-255-8225
General nature of business: Deep Space Communications			Company NAICS: 517919
Type of Organization <input type="checkbox"/> Individual owner <input type="checkbox"/> Partnership <input type="checkbox"/> Corporation <input type="checkbox"/> Utility <input type="checkbox"/> Local agency <input type="checkbox"/> State agency <input checked="" type="checkbox"/> Federal agency			

## Section 2: Nature of application

Application is hereby made for the following equipment: Diesel IC Engine, Emergency Fire Pump	
Application is for what type of permit: <input type="checkbox"/> New construction <input checked="" type="checkbox"/> Modification <input type="checkbox"/> Change of owner	For modification or change of owner: E003381 _____ Current Permit Number
Do you claim Confidentiality of Data? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (attach explanation; specify which information provided is confidential)	

## Section 3: Equipment information

Equipment description (give a brief description of the equipment and/or process): Year of Manufacture 2000	
Manufacturer: Detroit Diesel    Model: VMFPT6HT    Serial number: 91B-1059	
Add-on air pollution control equipment? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Note: most APCE require a separate application)	
If yes: Manufacturer: _____ Model: _____ Serial #: _____ CARB EO#: _____	
Type (specify): _____	
Stack data Exhaust stack height from ground: 10 _____ feet Exhaust stack diameter: _____ feet 4"	
Stack is: <input type="checkbox"/> horizontal <input checked="" type="checkbox"/> vertical <input type="checkbox"/> open <input checked="" type="checkbox"/> weather cap	
Vent data: Exhaust temp. _____ °F Maximum exhaust rate (CFM): _____	

**-For District use only-**

Application number:	Invoice number:	Permit number:	Company/facility number:
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### Section 4: Emissions data

Emission Factor Basis (attach any source specified): _____				
<input type="checkbox"/> Manufacturer <input type="checkbox"/> Source test <input checked="" type="checkbox"/> MDAQMD default <input type="checkbox"/> USEPA AP-42 <input type="checkbox"/> Other (please specify): _____				
Emissions data:				
Pollutant	Pre-control max. emissions	Units	Post control max. emissions	Units
NO <sub>x</sub>	_____	_____	_____	_____
NMHC	_____	_____	_____	_____
CO	_____	_____	_____	_____
PM <sub>10</sub>	_____	_____	_____	_____
SO <sub>x</sub>	_____	_____	_____	_____
Toxic pollutants — Please include a list of all toxic air pollutants and their emission rates if known.				

### Section 5: Operation information

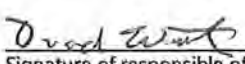
Fuel Consumption: <sup>6</sup> _____ at max rated load <input checked="" type="checkbox"/> gal/hour <input type="checkbox"/> SCF/hour <input type="checkbox"/> MMBtu/hr	
Typical load: <sup>70%</sup> _____	
Facility annual operation by quarters (percent): <input checked="" type="checkbox"/> Uniform OR _____ % Jan-Mar    _____ % Apr-Jun _____ % Jul-Sep    _____ % Oct-Dec	Expected operating hours of equipment <sup>4</sup> _____ Hrs/day <sup>3</sup> _____ Days/wk <sup>24</sup> _____ Wk/yr Total annual hours <sup>288</sup> _____

### Section 6: Receptor information

Distance (feet) and direction to the property line of closest: <u>38,016 S</u> residence <u>36,432 S</u> business <u>50,160 S</u> school
Name of closest school (K-12) <u>Lewis Elementary</u>
<i>If the proposed equipment operates within 1,000 feet of a school site and operation results in the emission of hazardous air pollutants, a public notice will be required at the expense of the applicant (CH&amp;S §42301.6)</i>

**\*Please note:** District staff may contact you for further information. Failure to provide additional information as requested in a timely manner may result in delays in the processing of this permit application.

### Section 7: Certification

I hereby certify that all information contained herein is true and correct.			
Donald Westbrook	Complex Manager		4/16/12
Name of responsible official	Official title	Signature of responsible official	Date signed
Phone: 760-255-8423	Email: Donald.A.Westbrook@jpl.nasa.gov		

#### Application submission instructions:

- 1) Submit completed application to Engineering@mdaqmd.ca.gov
- 2) Pay the corresponding application fee of \$288 per permit for new or modified permit (or \$164 for change of owner) via check or credit card.

#### Payment by check:

Make check payable to the Mojave Desert AQMD  
 Mail the check with a copy of this completed application to:

#### Mojave Desert AQMD

14306 Park Avenue  
 Victorville, CA 92392

#### Payment by credit card:

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 Click "Pay Fees"

Please note: *a surcharge applies for all credit card payments.*

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 Should you have any additional questions, please, do not hesitate to contact the permitting division at 760-245-1661, or via email at [engineering@mdaqmd.ca.gov](mailto:engineering@mdaqmd.ca.gov)



**MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT**

**BRAD POIRIEZ, EXECUTIVE DIRECTOR**  
 14306 Park Avenue, Victorville, CA 92392-2310  
 760.245.1661 • Fax 760.245.2022  
 Email: [engineering@mdaqmd.ca.gov](mailto:engineering@mdaqmd.ca.gov)  
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# General Application Form

Remit **\$288.00** with this document (**\$164.00** for change of owner)

PLEASE TYPE OR PRINT

## Section 1: Owner information

a. Permit to be issued to (company name): NASA/Goldstone		b. Federal tax ID #: 52-1597904	
c. Mailing/billing address (for above company name) include city, state and zip code: 93 Goldstone Road, Fort Irwin, CA 92310			
d. Facility or business license name (for equipment location):			
e. Facility Address — Location of equipment (if same as for company, enter "Same"): Same			Equip. coordinates (lat/long):
f. Contact name: Mark Solheid	Title: Sr. EHS Analyst	Email address: Mark.J.Solheid@jpl.nasa.gov	Phone: 760-255-8225
General nature of business: Deep Space Communications			Company NAICS: 517919
Type of Organization <input type="checkbox"/> Individual owner <input type="checkbox"/> Partnership <input type="checkbox"/> Corporation <input type="checkbox"/> Utility <input type="checkbox"/> Local agency <input type="checkbox"/> State agency <input checked="" type="checkbox"/> Federal agency			

## Section 2: Nature of application

Application is hereby made for the following equipment: Diesel IC Engine, Emergency Generator.	
Application is for what type of permit: <input type="checkbox"/> New construction <input checked="" type="checkbox"/> Modification <input type="checkbox"/> Change of owner	For modification or change of owner: E003382                      Current Permit Number
Do you claim Confidentiality of Data? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (attach explanation; specify which information provided is confidential)	

## Section 3: Equipment information

Equipment description (give a brief description of the equipment and/or process): Year of Manufacture 1991	
Manufacturer: <u>Cummins</u> Model: <u>BT-855-64</u> Serial number: <u>11638482</u>	
Add-on air pollution control equipment? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Note: most APCE require a separate application)	
If yes: Manufacturer: _____ Model: _____ Serial #: _____ CARB EO#: _____	
Type (specify): _____	
Stack data Exhaust stack height from ground: <sup>8</sup> _____ feet Exhaust stack diameter: _____ feet <sup>5</sup>	
Stack is: <input type="checkbox"/> horizontal <input checked="" type="checkbox"/> vertical <input type="checkbox"/> open <input checked="" type="checkbox"/> weather cap	
Vent data: Exhaust temp. _____ °F Maximum exhaust rate (CFM): _____	

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Application number:	Invoice number:	Permit number:	Company/facility number:
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## Section 4: Emissions data

Emission Factor Basis (attach any source specified): _____				
<input type="checkbox"/> Manufacturer <input type="checkbox"/> Source test <input checked="" type="checkbox"/> MDAQMD default <input type="checkbox"/> USEPA AP-42 <input type="checkbox"/> Other (please specify): _____				
Emissions data: _____				
Pollutant	Pre-control max. emissions	Units	Post control max. emissions	Units
NO <sub>x</sub>	_____	_____	_____	_____
NMHC	_____	_____	_____	_____
CO	_____	_____	_____	_____
PM <sub>10</sub>	_____	_____	_____	_____
SO <sub>x</sub>	_____	_____	_____	_____
Toxic pollutants — Please include a list of all toxic air pollutants and their emission rates if known.				

## Section 5: Operation information

Fuel Consumption: <sup>9</sup> _____ at max rated load <input checked="" type="checkbox"/> gal/hour <input type="checkbox"/> SCF/hour <input type="checkbox"/> MMBtu/hr	
Typical load: <sup>70%</sup> _____	
Facility annual operation by quarters (percent): <input checked="" type="checkbox"/> Uniform OR _____ % Jan-Mar    _____ % Apr-Jun _____ % Jul-Sep    _____ % Oct-Dec	Expected operating hours of equipment <sup>4</sup> _____ Hrs/day <sup>3</sup> _____ Days/wk <sup>24</sup> _____ Wk/yr Total annual hours <sup>288</sup> _____

## Section 6: Receptor information

Distance (feet) and direction to the property line of closest: <u>38,016 S</u> residence <u>36,432 S</u> business <u>50,160 S</u> school
Name of closest school (K-12) <u>Lewis Elementary</u>
<i>If the proposed equipment operates within 1,000 feet of a school site and operation results in the emission of hazardous air pollutants, a public notice will be required at the expense of the applicant (CH&amp;S §42301.6)</i>

**\*Please note:** District staff may contact you for further information. Failure to provide additional information as requested in a timely manner may result in delays in the processing of this permit application.

## Section 7: Certification

I hereby certify that all information contained herein is true and correct.			
Donald Westbrook	Complex Manager	<i>Donald Westbrook</i>	<u>4/16/10</u>
Name of responsible official	Official title	Signature of responsible official	Date signed
Phone: 760-255-8423	Email: Donald.A.Westbrook@jpl.nasa.gov		

### Application submission instructions:

- 1) Submit completed application to Engineering@mdaqmd.ca.gov
- 2) Pay the corresponding application fee of \$288 per permit for new or modified permit (or \$164 for change of owner) via check or credit card.

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 Victorville, CA 92392

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**MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT**

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14306 Park Avenue, Victorville, CA 92392-2310  
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Email: [engineering@mdaqmd.ca.gov](mailto:engineering@mdaqmd.ca.gov)  
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# General Application Form

Remit **\$288.00** with this document (\$164.00 for change of owner)

PLEASE TYPE OR PRINT

## Section 1: Owner information

a. Permit to be issued to (company name): NASA/Goldstone		b. Federal tax ID #: 52-1597904	
c. Mailing/billing address (for above company name) include city, state and zip code: 93 Goldstone Road, Fort Irwin, CA 92310			
d. Facility or business license name (for equipment location):			
e. Facility Address — Location of equipment (if same as for company, enter "Same"): Same			Equip. coordinates (lat/long):
f. Contact name: Mark Solheid	Title: Sr. EHS Analyst	Email address: Mark.J.Solheid@jpl.nasa.gov	Phone: 760-255-8225
General nature of business: Deep Space Communications			Company NAICS: 517919
Type of Organization <input type="checkbox"/> Individual owner <input type="checkbox"/> Partnership <input type="checkbox"/> Corporation <input type="checkbox"/> Utility <input type="checkbox"/> Local agency <input type="checkbox"/> State agency <input checked="" type="checkbox"/> Federal agency			

## Section 2: Nature of application

Application is hereby made for the following equipment: Diesel IC Engine, Emergency Generator	
Application is for what type of permit: <input type="checkbox"/> New construction <input checked="" type="checkbox"/> Modification <input type="checkbox"/> Change of owner	For modification or change of owner: E005133                      Current Permit Number
Do you claim Confidentiality of Data? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (attach explanation; specify which information provided is confidential)	

## Section 3: Equipment information

Equipment description (give a brief description of the equipment and/or process): Year of Manufacture 1997	
Manufacturer: Cummins                      Model: LTA10G1                      Serial number: 34886879	
Add-on air pollution control equipment? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Note: most APCE require a separate application)	
If yes: Manufacturer:                      Model:                      Serial #:                      CARB EO#:                      Type (specify):	
Stack data    Exhaust stack height from ground: <sup>10</sup> feet    Exhaust stack diameter:                      feet <sup>5"</sup>	
Stack is: <input type="checkbox"/> horizontal <input checked="" type="checkbox"/> vertical <input type="checkbox"/> open <input checked="" type="checkbox"/> weather cap	
Vent data: Exhaust temp.                      °F    Maximum exhaust rate (CFM):	

**-For District use only-**

Application number:	Invoice number:	Permit number:	Company/facility number:
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### Section 4: Emissions data

Emission Factor Basis (attach any source specified): _____				
<input checked="" type="checkbox"/> Manufacturer <input type="checkbox"/> Source test <input type="checkbox"/> MDAQMD default <input type="checkbox"/> USEPA AP-42 <input type="checkbox"/> Other (please specify): _____				
Emissions data:				
Pollutant	Pre-control max. emissions	Units	Post control max. emissions	Units
NO <sub>x</sub>	_____	_____	8.40	gm/bhp-hr
NMHC	_____	_____	_____	_____
CO	_____	_____	1.16	gm/bhp-hr
PM <sub>10</sub>	_____	_____	0.50	gm/bhp-hr
SO <sub>x</sub>	_____	_____	0.57	gm/bhp-hr
Toxic pollutants — Please include a list of all toxic air pollutants and their emission rates if known.				

### Section 5: Operation information

Fuel Consumption: <sup>15,6</sup> _____ at max rated load		<input checked="" type="checkbox"/> gal/hour	<input type="checkbox"/> SCF/hour	<input type="checkbox"/> MMBtu/hr
Typical load: <sup>70%</sup> _____				
Facility annual operation by quarters (percent):			Expected operating hours of equipment	
<input checked="" type="checkbox"/> Uniform OR _____ % Jan-Mar _____ % Apr-Jun _____ % Jul-Sep _____ % Oct-Dec			<sup>4</sup> _____ Hrs/day <sup>3</sup> _____ Days/wk <sup>24</sup> _____ Wk/yr Total annual hours <sup>288</sup> _____	

### Section 6: Receptor information

Distance (feet) and direction to the property line of closest:	<u>38,016 S</u> residence	<u>36,432 S</u> business	<u>50,160 S</u> school
Name of closest school (K-12) <u>Lewis Elementary</u>			
If the proposed equipment operates within 1,000 feet of a school site and operation results in the emission of hazardous air pollutants, a public notice will be required at the expense of the applicant (CH&S 542301.6)			

**\*Please note:** District staff may contact you for further information. Failure to provide additional information as requested in a timely manner may result in delays in the processing of this permit application.

### Section 7: Certification

I hereby certify that all information contained herein is true and correct.			
Donald Westbrook	Complex Manager	<u>Donald Westbrook</u>	<u>4/16/19</u>
Name of responsible official	Official title	Signature of responsible official	Date signed
Phone: 760-255-8423	Email: Donald.A.Westbrook@jpl.nasa.gov		

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 Victorville, CA 92392

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**MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT**

**BRAD POIRIEZ, EXECUTIVE DIRECTOR**  
 14306 Park Avenue, Victorville, CA 92392-2310  
 760.245.1661 • Fax 760.245.2022  
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# General Application Form

Remit **\$288.00** with this document (**\$164.00** for change of owner)

PLEASE TYPE OR PRINT

## Section 1: Owner information

a. Permit to be issued to (company name): NASA/Goldstone		b. Federal tax ID #: 52-1597904	
c. Mailing/billing address (for above company name) include city, state and zip code: 93 Goldstone Road, Fort Irwin, CA 92310			
d. Facility or business license name (for equipment location):			
e. Facility Address — Location of equipment (if same as for company, enter "Same"): Same			Equip. coordinates (lat/long):
f. Contact name: Mark Solheid	Title: Sr. EHS Analyst	Email address: Mark.J.Solheid@pl.nasa.gov	Phone: 760-255-8225
General nature of business: Deep Space Communications			Company NAICS: 517919
Type of Organization			
<input type="checkbox"/> Individual owner <input type="checkbox"/> Partnership <input type="checkbox"/> Corporation <input type="checkbox"/> Utility <input type="checkbox"/> Local agency <input type="checkbox"/> State agency <input checked="" type="checkbox"/> Federal agency			

## Section 2: Nature of application

Application is hereby made for the following equipment: Diesel IC Engine, Fire Pump	
Application is for what type of permit: <input type="checkbox"/> New construction <input checked="" type="checkbox"/> Modification <input type="checkbox"/> Change of owner	For modification or change of owner: E009239 _____ Current Permit Number
Do you claim Confidentiality of Data? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (attach explanation; specify which information provided is confidential)	

## Section 3: Equipment information

Equipment description (give a brief description of the equipment and/or process): Year of Manufacture 1989	
<hr/> <hr/> <hr/> <hr/> <hr/>	
Manufacturer: Detroit Diesel	Model: DDDF03ANHLH7086    Serial number: 3A102239
Add-on air pollution control equipment? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Note: most APCE require a separate application)	
If yes: Manufacturer: _____ Model: _____ Serial #: _____ CARB EO#: _____	
Type (specify): _____	
Stack data Exhaust stack height from ground: <sup>8</sup> _____ feet Exhaust stack diameter: _____ feet <sup>3</sup> _____	
Stack is: <input type="checkbox"/> horizontal <input checked="" type="checkbox"/> vertical <input type="checkbox"/> open <input checked="" type="checkbox"/> weather cap	
Vent data: Exhaust temp. _____ °F Maximum exhaust rate (CFM): _____	

### -For District use only-

Application number:	Invoice number:	Permit number:	Company/facility number:
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### Section 4: Emissions data

Emission Factor Basis (attach any source specified): _____				
<input checked="" type="checkbox"/> Manufacturer <input type="checkbox"/> Source test <input type="checkbox"/> MDAQMD default <input type="checkbox"/> USEPA AP-42 <input type="checkbox"/> Other (please specify): _____				
Emissions data:				
Pollutant	Pre-control max. emissions	Units	Post control max. emissions	Units
NO <sub>x</sub>	_____	_____	10.0	gm/bhp-hr
NMHC	_____	_____	_____	_____
CO	_____	_____	5.0	gm/bhp-hr
PM <sub>10</sub>	_____	_____	1.0	gm/bhp-hr
SO <sub>x</sub>	_____	_____	_____	_____
Toxic pollutants — Please include a list of all toxic air pollutants and their emission rates if known.				

### Section 5: Operation information


Fuel Consumption: <sup>4</sup> _____ at max rated load <input checked="" type="checkbox"/> gal/hour <input type="checkbox"/> SCF/hour <input type="checkbox"/> MMBtu/hr	
Typical load: <sup>70%</sup> _____	
Facility annual operation by quarters (percent): <input checked="" type="checkbox"/> Uniform OR _____ % Jan-Mar _____ % Apr-Jun _____ % Jul-Sep _____ % Oct-Dec	Expected operating hours of equipment <sup>4</sup> _____ Hrs/day <sup>3</sup> _____ Days/wk <sup>24</sup> _____ Wk/yr Total annual hours <sup>288</sup> _____

### Section 6: Receptor information

Distance (feet) and direction to the property line of closest: <u>38,016 S</u> residence <u>36,432 S</u> business <u>50,160 S</u> school
Name of closest school (K-12) <u>Lewis Elementary</u>
<i>If the proposed equipment operates within 1,000 feet of a school site and operation results in the emission of hazardous air pollutants, a public notice will be required at the expense of the applicant (CH&amp;S §42301.6)</i>

**\*Please note:** District staff may contact you for further information. Failure to provide additional information as requested in a timely manner may result in delays in the processing of this permit application.

### Section 7: Certification

I hereby certify that all information contained herein is true and correct.			
Donald Westbrook	Complex Manager		<u>4/16/19</u>
Name of responsible official	Official title	Signature of responsible official	Date signed
Phone: 760-255-8423	Email: Donald.A.Westbrook@jpl.nasa.gov		

#### Application submission instructions:

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 Victorville, CA 92392

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**MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT**

**BRAD POIRIEZ, EXECUTIVE DIRECTOR**  
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 760.245.1661 • Fax 760.245.2022  
 Email: [engineering@mdaqmd.ca.gov](mailto:engineering@mdaqmd.ca.gov)  
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# General Application Form

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PLEASE TYPE OR PRINT

## Section 1: Owner information

a. Permit to be issued to (company name): NASA/Goldstone		b. Federal tax ID #: 52-1597904	
c. Mailing/billing address (for above company name) <i>include city, state and zip code:</i> 93 Goldstone Road, Fort Irwin, CA 92310			
d. Facility or business license name (for equipment location):			
e. Facility Address — Location of equipment (if same as for company, enter "Same"): Same		Equip. coordinates (lat/long):	
f. Contact name: Mark Solheid	Title: Sr. EHS Analyst	Email address: Mark.J.Solheid@jpl.nasa.gov	Phone: 760-255-8225
General nature of business: Deep Space Communications		Company NAICS: 517919	
Type of Organization <input type="checkbox"/> Individual owner <input type="checkbox"/> Partnership <input type="checkbox"/> Corporation <input type="checkbox"/> Utility <input type="checkbox"/> Local agency <input type="checkbox"/> State agency <input checked="" type="checkbox"/> Federal agency			

## Section 2: Nature of application

Application is hereby made for the following equipment: Diesel IC Engine, Fire Pump	
Application is for what type of permit: <input type="checkbox"/> New construction <input checked="" type="checkbox"/> Modification <input type="checkbox"/> Change of owner	For modification or change of owner: E009240 _____ Current Permit Number
Do you claim Confidentiality of Data? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (attach explanation; specify which information provided is confidential)	

## Section 3: Equipment information

Equipment description (give a brief description of the equipment and/or process): Year of Manufacture 1989	
<hr/> <hr/> <hr/> <hr/> <hr/> <hr/>	
Manufacturer: <u>Detroit Diesel</u>	Model: <u>DDFP03ANH1H7086</u> Serial number: <u>3A102268</u>
Add-on air pollution control equipment? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Note: most APCE require a separate application)	
If yes: Manufacturer: _____ Model: _____ Serial #: _____ CARB EO#: _____	
Type (specify): _____	
Stack data Exhaust stack height from ground: <u>7</u> feet Exhaust stack diameter: _____ feet <sup>3"</sup>	
Stack is: <input type="checkbox"/> horizontal <input checked="" type="checkbox"/> vertical <input type="checkbox"/> open <input checked="" type="checkbox"/> weather cap	
Vent data: Exhaust temp. _____ °F Maximum exhaust rate (CFM): _____	

**-For District use only-**

Application number:	Invoice number:	Permit number:	Company/facility number:
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## Section 4: Emissions data

Emission Factor Basis (attach any source specified): _____				
<input checked="" type="checkbox"/> Manufacturer <input type="checkbox"/> Source test <input type="checkbox"/> MDAQMD default <input type="checkbox"/> USEPA AP-42 <input type="checkbox"/> Other (please specify): _____				
Emissions data:				
Pollutant	Pre-control max. emissions	Units	Post control max. emissions	Units
NO <sub>x</sub>	_____	_____	10.0	gm/bhp-hr
NMHC	_____	_____	_____	_____
CO	_____	_____	5.0	gm/bhp-hr
PM <sub>10</sub>	_____	_____	1.0	gm/bhp-hr
SO <sub>x</sub>	_____	_____	_____	_____
Toxic pollutants — Please include a list of all toxic air pollutants and their emission rates if known.				

## Section 5: Operation information

Fuel Consumption: <sup>6</sup> _____ at max rated load <input checked="" type="checkbox"/> gal/hour <input type="checkbox"/> SCF/hour <input type="checkbox"/> MMBtu/hr	
Typical load: <sup>70%</sup> _____	
Facility annual operation by quarters (percent): <input checked="" type="checkbox"/> Uniform OR _____ % Jan-Mar _____ % Apr-Jun _____ % Jul-Sep _____ % Oct-Dec	Expected operating hours of equipment <sup>4</sup> _____ Hrs/day <sup>3</sup> _____ Days/wk <sup>24</sup> _____ Wk/yr Total annual hours <sup>288</sup> _____

## Section 6: Receptor information

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Name of closest school (K-12) <u>Lewis Elementary</u>
<i>If the proposed equipment operates within 1,000 feet of a school site and operation results in the emission of hazardous air pollutants, a public notice will be required at the expense of the applicant (CH&amp;S §42301.6)</i>

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## Section 7: Certification

I hereby certify that all information contained herein is true and correct.			
Donald Westbrook	Complex Manager	<u>Donald Westbrook</u>	<u>4/16/19</u>
Name of responsible official	Official title	Signature of responsible official	Date signed
Phone: 760-255-8423	Email:	Donald.A.Westbrook@jpl.nasa.gov	

### Application submission instructions:

- 1) Submit completed application to Engineering@mdaqmd.ca.gov
- 2) Pay the corresponding application fee of \$288 per permit for new or modified permit (or \$164 for change of owner) via check or credit card.

#### Payment by check:

Make check payable to the Mojave Desert AQMD  
 Mail the check with a copy of this completed application to:

#### Mojave Desert AQMD

14306 Park Avenue  
 Victorville, CA 92392

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 Click "Pay Fees"

Please note: *a surcharge applies for all credit card payments.*

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 Should you have any additional questions, please, do not hesitate to contact the permitting division at 760-245-1661, or via email at [engineering@mdaqmd.ca.gov](mailto:engineering@mdaqmd.ca.gov)



**MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT**

**BRAD POIRIEZ, EXECUTIVE DIRECTOR**  
 14306 Park Avenue, Victorville, CA 92392-2310  
 760.245.1661 • Fax 760.245.2022  
 Email: [engineering@mdaqmd.ca.gov](mailto:engineering@mdaqmd.ca.gov)  
[www.MDAQMD.ca.gov](http://www.MDAQMD.ca.gov) • @MDAQMD

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# General Application Form

Remit **\$288.00** with this document (\$164.00 for change of owner)

PLEASE TYPE OR PRINT

## Section 1: Owner information

a. Permit to be issued to (company name): NASA/Goldstone		b. Federal tax ID #: 52-1597904	
c. Mailing/billing address (for above company name) include city, state and zip code: 93 Goldstone Road, Fort Irwin, CA 92310			
d. Facility or business license name (for equipment location):			
e. Facility Address — Location of equipment (if same as for company, enter "Same"): Same		Equip. coordinates (lat/long):	
f. Contact name: Mark Solheid	Title: Sr. EHS Analyst	Email address: Mark.J.Solheid@jpl.nasa.gov	Phone: 760-255-8225
General nature of business: Deep Space Communications		Company NAICS: 517919	
Type of Organization			
<input type="checkbox"/> Individual owner <input type="checkbox"/> Partnership <input type="checkbox"/> Corporation <input type="checkbox"/> Utility <input type="checkbox"/> Local agency <input type="checkbox"/> State agency <input checked="" type="checkbox"/> Federal agency			

## Section 2: Nature of application

Application is hereby made for the following equipment: Diesel IC Engine, Fire Pump	
Application is for what type of permit: <input type="checkbox"/> New construction <input checked="" type="checkbox"/> Modification <input type="checkbox"/> Change of owner	For modification or change of owner: E009241 _____ Current Permit Number
Do you claim Confidentiality of Data? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (attach explanation; specify which information provided is confidential)	

## Section 3: Equipment information

Equipment description (give a brief description of the equipment and/or process): Year of Manufacture 1989	
_____ _____ _____ _____	
Manufacturer: <u>Detroit Diesel</u>	Model: <u>10447110</u> Serial number: <u>4A0254393</u>
Add-on air pollution control equipment? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Note: most APCE require a separate application)	
If yes: Manufacturer: _____ Model: _____ Serial #: _____ CARB EO#: _____	
Type (specify): _____	
Stack data Exhaust stack height from ground: <u>15</u> feet Exhaust stack diameter: _____ feet <sup>4"</sup>	
Stack is: <input type="checkbox"/> horizontal <input checked="" type="checkbox"/> vertical <input type="checkbox"/> open <input checked="" type="checkbox"/> weather cap	
Vent data: Exhaust temp. _____ °F Maximum exhaust rate (CFM): _____	

**-For District use only-**

Application number:	Invoice number:	Permit number:	Company/facility number:
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### Section 4: Emissions data

Emission Factor Basis (attach any source specified): _____				
<input checked="" type="checkbox"/> Manufacturer <input type="checkbox"/> Source test <input type="checkbox"/> MDAQMD default <input type="checkbox"/> USEPA AP-42 <input type="checkbox"/> Other (please specify): _____				
Emissions data: _____				
Pollutant	Pre-control max. emissions	Units	Post control max. emissions	Units
NO <sub>x</sub>	_____	_____	10.0	gm/bhp-hr
NMHC	_____	_____	_____	_____
CO	_____	_____	5.0	gm/bhp-hr
PM <sub>10</sub>	_____	_____	1.0	gm/bhp-hr
SO <sub>x</sub>	_____	_____	_____	_____
Toxic pollutants — Please include a list of all toxic air pollutants and their emission rates if known.				

### Section 5: Operation information

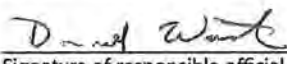
Fuel Consumption: <sup>7</sup> _____ at max rated load <input checked="" type="checkbox"/> gal/hour <input type="checkbox"/> SCF/hour <input type="checkbox"/> MMBtu/hr	
Typical load: <sup>70%</sup> _____	
Facility annual operation by quarters (percent): <input checked="" type="checkbox"/> Uniform OR _____ % Jan-Mar _____ % Apr-Jun _____ % Jul-Sep _____ % Oct-Dec	Expected operating hours of equipment <sup>4</sup> _____ Hrs/day <sup>3</sup> _____ Days/wk <sup>24</sup> _____ Wk/yr Total annual hours <sup>288</sup> _____

### Section 6: Receptor information

Distance (feet) and direction to the property line of closest: <u>38,016 S</u> residence <u>36,432 S</u> business <u>50,160 S</u> school
Name of closest school (K-12) <u>Lewis Elementary</u>
<i>If the proposed equipment operates within 1,000 feet of a school site and operation results in the emission of hazardous air pollutants, a public notice will be required at the expense of the applicant (CH&amp;S §42301.6)</i>

**\*Please note:** District staff may contact you for further information. Failure to provide additional information as requested in a timely manner may result in delays in the processing of this permit application.

### Section 7: Certification

I hereby certify that all information contained herein is true and correct.			
Donald Westbrook	Complex Manager		<u>4/16/19</u>
Name of responsible official	Official title	Signature of responsible official	Date signed
Phone: 760-255-8423	Email: Donald.A.Westbrook@jpl.nasa.gov		

#### Application submission instructions:

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**MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT**

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 760.245.1661 • Fax 760.245.2022  
 Email: [engineering@mdaqmd.ca.gov](mailto:engineering@mdaqmd.ca.gov)  
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# General Application Form

Remit **\$288.00** with this document (\$164.00 for change of owner)

PLEASE TYPE OR PRINT

## Section 1: Owner information

a. Permit to be issued to (company name): NASA/Goldstone		b. Federal tax ID #: 52-1597904	
c. Mailing/billing address (for above company name) include city, state and zip code: 93 Goldstone Road, Fort Irwin, CA 92310			
d. Facility or business license name (for equipment location):			
e. Facility Address — Location of equipment (if same as for company, enter "Same"): Same			Equip. coordinates (lat/long):
f. Contact name: Mark Solheid	Title: Sr. EHS Analyst	Email address: Mark.J.Solheid@jpl.nasa.gov	Phone: 760-255-8225
General nature of business: Deep Space Communications			Company NAICS: 517919
Type of Organization			
<input type="checkbox"/> Individual owner <input type="checkbox"/> Partnership <input type="checkbox"/> Corporation <input type="checkbox"/> Utility <input type="checkbox"/> Local agency <input type="checkbox"/> State agency <input checked="" type="checkbox"/> Federal agency			

## Section 2: Nature of application

Application is hereby made for the following equipment: Portable Spray Gun	
Application is for what type of permit: <input type="checkbox"/> New construction <input checked="" type="checkbox"/> Modification <input type="checkbox"/> Change of owner	For modification or change of owner: P012830 _____ Current Permit Number
Do you claim Confidentiality of Data? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (attach explanation; specify which information provided is confidential)	

## Section 3: Equipment information

Equipment description (give a brief description of the equipment and/or process): #3, Binks MACH 1 HVLP Spray Gun	
Manufacturer: Binks	Model: _____ Serial number: _____
Add-on air pollution control equipment? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Note: most APCE require a separate application)	
If yes: Manufacturer: _____ Model: _____ Serial #: _____ CARB EO#: _____	
Type (specify): _____	
Stack data Exhaust stack height from ground: <sup>15</sup> _____ feet Exhaust stack diameter: _____ feet <sup>4"</sup>	
Stack is: <input type="checkbox"/> horizontal <input checked="" type="checkbox"/> vertical <input type="checkbox"/> open <input checked="" type="checkbox"/> weather cap	
Vent data: Exhaust temp. _____ °F Maximum exhaust rate (CFM): _____	

**-For District use only-**

Application number:	Invoice number:	Permit number:	Company/facility number:
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## Section 4: Emissions data

Emission Factor Basis (attach any source specified): _____				
<input checked="" type="checkbox"/> Manufacturer <input type="checkbox"/> Source test <input type="checkbox"/> MDAQMD default <input type="checkbox"/> USEPA AP-42 <input type="checkbox"/> Other (please specify): _____				
Emissions data: _____				
Pollutant	Pre-control max. emissions	Units	Post control max. emissions	Units
NO <sub>x</sub>	_____	_____	_____	_____
NMHC	_____	_____	_____	_____
CO	_____	_____	_____	_____
PM <sub>10</sub>	_____	_____	_____	_____
SO <sub>x</sub>	_____	_____	_____	_____
Toxic pollutants — Please include a list of all toxic air pollutants and their emission rates if known.				

## Section 5: Operation information

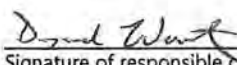
Fuel Consumption: _____ at max rated load <input checked="" type="checkbox"/> gal/hour <input type="checkbox"/> SCF/hour <input type="checkbox"/> MMBtu/hr	
Typical load: _____	
Facility annual operation by quarters (percent): <input checked="" type="checkbox"/> Uniform OR _____ % Jan-Mar   _____ % Apr-Jun _____ % Jul-Sep   _____ % Oct-Dec	Expected operating hours of equipment <sup>4</sup> _____ Hrs/day <sup>3</sup> _____ Days/wk <sup>24</sup> _____ Wk/yr Total annual hours <sup>288</sup> _____

## Section 6: Receptor information

Distance (feet) and direction to the property line of closest: <u>38,016 S</u> residence <u>36,432 S</u> business <u>60,160 S</u> school
Name of closest school (K-12) <u>Lewis Elementary</u>
<i>If the proposed equipment operates within 1,000 feet of a school site and operation results in the emission of hazardous air pollutants, a public notice will be required at the expense of the applicant (CH&amp;S §42301.6)</i>

**\*Please note:** District staff may contact you for further information. Failure to provide additional information as requested in a timely manner may result in delays in the processing of this permit application.

## Section 7: Certification

I hereby certify that all information contained herein is true and correct.			
Donald Westbrook	Complex Manager		<u>4/16/19</u>
Name of responsible official	Official title	Signature of responsible official	Date signed
Phone: 760-255-8423	Email: Donald.A.Westbrook@jpl.nasa.gov		

### Application submission instructions:

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#### Mojave Desert AQMD

14306 Park Avenue  
 Victorville, CA 92392

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**MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT**

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760.245.1661 • Fax 760.245.2022  
Email: [engineering@mdaqmd.ca.gov](mailto:engineering@mdaqmd.ca.gov)  
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# General Application Form

Remit **\$288.00** with this document (**\$164.00** for change of owner)

PLEASE TYPE OR PRINT

## Section 1: Owner information

a. Permit to be issued to (company name): NASA/Goldstone		b. Federal tax ID #: 52-1597904	
c. Mailing/billing address (for above company name) include city, state and zip code: 93 Goldstone Road, Fort Irwin, CA 92310			
d. Facility or business license name (for equipment location):			
e. Facility Address — Location of equipment (if same as for company, enter "Same"): Same			Equip. coordinates (lat/long):
f. Contact name: Mark Solheid	Title: Sr. EHS Analyst	Email address: Mark.J.Solheid@jpl.nasa.gov	Phone: 760-255-8225
General nature of business: Deep Space Communications			Company NAICS: 517919
Type of Organization			
<input type="checkbox"/> Individual owner <input type="checkbox"/> Partnership <input type="checkbox"/> Corporation <input type="checkbox"/> Utility <input type="checkbox"/> Local agency <input type="checkbox"/> State agency <input checked="" type="checkbox"/> Federal agency			

## Section 2: Nature of application

Application is hereby made for the following equipment: Portable Spray Gun	
Application is for what type of permit: <input type="checkbox"/> New construction <input checked="" type="checkbox"/> Modification <input type="checkbox"/> Change of owner	For modification or change of owner: P012831 _____ Current Permit Number
Do you claim Confidentiality of Data? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (attach explanation; specify which information provided is confidential)	

## Section 3: Equipment information

Equipment description (give a brief description of the equipment and/or process): #3, Blinks MACH 1 HVLP Spray Gun	
<hr/> <hr/> <hr/> <hr/>	
Manufacturer: <u>Blinks</u>	Model: _____ Serial number: _____
Add-on air pollution control equipment? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Note: most APCE require a separate application)	
If yes: Manufacturer: _____ Model: _____ Serial #: _____ CARB EO#: _____	
Type (specify): _____	
Stack data Exhaust stack height from ground: <sup>15</sup> _____ feet Exhaust stack diameter: _____ feet <sup>4"</sup>	
Stack is: <input type="checkbox"/> horizontal <input checked="" type="checkbox"/> vertical <input type="checkbox"/> open <input checked="" type="checkbox"/> weather cap	
Vent data: Exhaust temp. _____ °F Maximum exhaust rate (CFM): _____	

**-For District use only-**

Application number:	Invoice number:	Permit number:	Company/facility number:
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### Section 4: Emissions data

Emission Factor Basis (attach any source specified): _____				
<input checked="" type="checkbox"/> Manufacturer <input type="checkbox"/> Source test <input type="checkbox"/> MDAQMD default <input type="checkbox"/> USEPA AP-42 <input type="checkbox"/> Other (please specify): _____				
Emissions data: _____				
Pollutant	Pre-control max. emissions	Units	Post control max. emissions	Units
NO <sub>x</sub>	_____	_____	_____	_____
NMHC	_____	_____	_____	_____
CO	_____	_____	_____	_____
PM <sub>10</sub>	_____	_____	_____	_____
SO <sub>x</sub>	_____	_____	_____	_____
Toxic pollutants — Please include a list of all toxic air pollutants and their emission rates if known.				

### Section 5: Operation information

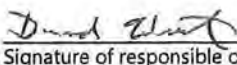
Fuel Consumption: _____ at max rated load		<input checked="" type="checkbox"/> gal/hour	<input type="checkbox"/> SCF/hour	<input type="checkbox"/> MMBtu/hr
Typical load: _____				
Facility annual operation by quarters (percent):			Expected operating hours of equipment	
<input checked="" type="checkbox"/> Uniform OR _____ % Jan-Mar           _____ % Apr-Jun _____ % Jul-Sep           _____ % Oct-Dec			4 _____ Hrs/day           3 _____ Days/wk           24 _____ Wk/yr Total annual hours _____	

### Section 6: Receptor information

Distance (feet) and direction to the property line of closest:	38,016 S	residence	36,432 S	business	50,160 S	school
Name of closest school (K-12)	Lewis Elementary					
<i>If the proposed equipment operates within 1,000 feet of a school site and operation results in the emission of hazardous air pollutants, a public notice will be required at the expense of the applicant (CH&amp;S §42301.6)</i>						

**\*Please note:** District staff may contact you for further information. Failure to provide additional information as requested in a timely manner may result in delays in the processing of this permit application.

### Section 7: Certification

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Donald Westbrook	Complex Manager		4/16/19
Name of responsible official	Official title	Signature of responsible official	Date signed
Phone: 760-255-8423	Email: Donald.A.Westbrook@jpl.nasa.gov		

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 Victorville, CA 92392

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**MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT**

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# General Application Form

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d. Facility or business license name (for equipment location):			
e. Facility Address — Location of equipment (if same as for company, enter "Same"): Same		Equip. coordinates (lat/long):	
f. Contact name: Mark Solheid	Title: Sr. EHS Analyst	Email address: Mark.J.Solheid@jpl.nasa.gov	Phone: 760-255-8225
General nature of business: Deep Space Communications		Company NAICS: 517919	
Type of Organization <input type="checkbox"/> Individual owner <input type="checkbox"/> Partnership <input type="checkbox"/> Corporation <input type="checkbox"/> Utility <input type="checkbox"/> Local agency <input type="checkbox"/> State agency <input checked="" type="checkbox"/> Federal agency			

## Section 2: Nature of application

Application is hereby made for the following equipment: Portable Spray Gun	
Application is for what type of permit: <input type="checkbox"/> New construction <input checked="" type="checkbox"/> Modification <input type="checkbox"/> Change of owner	For modification or change of owner: P012832    Current Permit Number
Do you claim Confidentiality of Data? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (attach explanation; specify which information provided is confidential)	

## Section 3: Equipment information

Equipment description (give a brief description of the equipment and/or process): #3, Blinks MACH 1 HVLP Spray Gun	
Manufacturer: Blinks	Model:    Serial number:
Add-on air pollution control equipment? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Note: most APCE require a separate application)	
If yes: Manufacturer:    Model:    Serial #:    CARB EO#:	
Type (specify):	
Stack data Exhaust stack height from ground: <sup>15</sup> feet Exhaust stack diameter:    feet <sup>4"</sup>	
Stack is: <input type="checkbox"/> horizontal <input checked="" type="checkbox"/> vertical <input type="checkbox"/> open <input checked="" type="checkbox"/> weather cap	
Vent data: Exhaust temp.    °F Maximum exhaust rate (CFM):	

**-For District use only-**

Application number:	Invoice number:	Permit number:	Company/facility number:
---------------------	-----------------	----------------	--------------------------



### Section 4: Emissions data

Emission Factor Basis (attach any source specified): _____				
<input checked="" type="checkbox"/> Manufacturer <input type="checkbox"/> Source test <input type="checkbox"/> MDAQMD default <input type="checkbox"/> USEPA AP-42 <input type="checkbox"/> Other (please specify): _____				
Emissions data: _____				
Pollutant	Pre-control max. emissions	Units	Post control max. emissions	Units
NO <sub>x</sub>	_____	_____	_____	_____
NMHC	_____	_____	_____	_____
CO	_____	_____	_____	_____
PM <sub>10</sub>	_____	_____	_____	_____
SO <sub>x</sub>	_____	_____	_____	_____
Toxic pollutants — Please include a list of all toxic air pollutants and their emission rates if known.				

### Section 5: Operation information

Fuel Consumption: _____ at max rated load		<input checked="" type="checkbox"/> gal/hour	<input type="checkbox"/> SCF/hour	<input type="checkbox"/> MMBtu/hr
Typical load: _____				
Facility annual operation by quarters (percent):			Expected operating hours of equipment	
<input checked="" type="checkbox"/> Uniform OR _____ % Jan-Mar _____ % Apr-Jun _____ % Jul-Sep _____ % Oct-Dec			<sup>4</sup> _____ Hrs/day <sup>3</sup> _____ Days/wk <sup>24</sup> _____ Wk/yr Total annual hours <sup>288</sup> _____	

### Section 6: Receptor information

Distance (feet) and direction to the property line of closest:	38,016 S	residence	36,432 S	business	50,160 S	school
Name of closest school (K-12)	Lewis Elementary					
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I hereby certify that all information contained herein is true and correct.			
Donald Westbrook	Complex Manager	<i>Donald Westbrook</i>	4/16/19
Name of responsible official	Official title	Signature of responsible official	Date signed
Phone: 760-255-8423	Email: Donald.A.Westbrook@jpl.nasa.gov		

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**MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT**

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14306 Park Avenue, Victorville, CA 92392-2310

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Email: [engineering@mdaqmd.ca.gov](mailto:engineering@mdaqmd.ca.gov)

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d. Facility or business license name (for equipment location):			
e. Facility Address — Location of equipment (if same as for company, enter "Same"): Same		Equip. coordinates (lat/long):	
f. Contact name: Mark Solheid	Title: Sr. EHS Analyst	Email address: Mark.J.Solheid@jpl.nasa.gov	Phone: 760-255-8225
General nature of business: Deep Space Communications		Company NAICS: 517919	
Type of Organization			
<input type="checkbox"/> Individual owner <input type="checkbox"/> Partnership <input type="checkbox"/> Corporation <input type="checkbox"/> Utility <input type="checkbox"/> Local agency <input type="checkbox"/> State agency			
<input checked="" type="checkbox"/> Federal agency			

## Section 2: Nature of application

Application is hereby made for the following equipment: Portable Spray System	
Application is for what type of permit:	For modification or change of owner:
<input type="checkbox"/> New construction <input checked="" type="checkbox"/> Modification <input type="checkbox"/> Change of owner	P012832      Current Permit Number
Do you claim Confidentiality of Data? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (attach explanation; specify which information provided is confidential)	

## Section 3: Equipment information

Equipment description (give a brief description of the equipment and/or process): Blinks MX1231 air assist & airless finishing system with 31:1 pump system	
Manufacturer: Blinks      Model:      Serial number:	
Add-on air pollution control equipment? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Note: most APCE require a separate application)	
If yes: Manufacturer:      Model:      Serial #:      CARB EO#:	
Type (specify):	
Stack data Exhaust stack height from ground: 15 feet Exhaust stack diameter: feet 4"	
Stack is: <input type="checkbox"/> horizontal <input checked="" type="checkbox"/> vertical <input type="checkbox"/> open <input checked="" type="checkbox"/> weather cap	
Vent data: Exhaust temp. °F Maximum exhaust rate (CFM):	

**-For District use only-**

Application number:	Invoice number:	Permit number:	Company/facility number:
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## Section 4: Emissions data

Emission Factor Basis (attach any source specified): _____				
<input checked="" type="checkbox"/> Manufacturer <input type="checkbox"/> Source test <input type="checkbox"/> MDAQMD default <input type="checkbox"/> USEPA AP-42 <input type="checkbox"/> Other (please specify): _____				
Emissions data: _____				
Pollutant	Pre-control max. emissions	Units	Post control max. emissions	Units
NO <sub>x</sub>	_____	_____	_____	_____
NMHC	_____	_____	_____	_____
CO	_____	_____	_____	_____
PM <sub>10</sub>	_____	_____	_____	_____
SO <sub>x</sub>	_____	_____	_____	_____
Toxic pollutants — Please include a list of all toxic air pollutants and their emission rates if known.				

## Section 5: Operation information

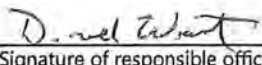
Fuel Consumption: _____ at max rated load		<input checked="" type="checkbox"/> gal/hour	<input type="checkbox"/> SCF/hour	<input type="checkbox"/> MMBtu/hr
Typical load: _____				
Facility annual operation by quarters (percent):			Expected operating hours of equipment	
<input checked="" type="checkbox"/> Uniform OR _____ % Jan-Mar	_____ % Apr-Jun		<sup>4</sup> _____ Hrs/day	<sup>3</sup> _____ Days/wk
_____ % Jul-Sep	_____ % Oct-Dec		Total annual hours <sup>288</sup> _____	

## Section 6: Receptor information

Distance (feet) and direction to the property line of closest:	38,016 S	residence	36,432 S	business	50,160 S	school
Name of closest school (K-12)	Lewis Elementary					
<i>If the proposed equipment operates within 1,000 feet of a school site and operation results in the emission of hazardous air pollutants, a public notice will be required at the expense of the applicant (CH&amp;S §42301.6)</i>						

**\*Please note:** District staff may contact you for further information. Failure to provide additional information as requested in a timely manner may result in delays in the processing of this permit application.

## Section 7: Certification

I hereby certify that all information contained herein is true and correct.			
Donald Westbrook	Complex Manager		4/16/19
Name of responsible official	Official title	Signature of responsible official	Date signed
Phone: 760-255-8423	Email: Donald.A.Westbrook@jpl.nasa.gov		

### Application submission instructions:

- 1) Submit completed application to Engineering@mdaqmd.ca.gov
- 2) Pay the corresponding application fee of \$288 per permit for new or modified permit (or \$164 for change of owner) via check or credit card.

#### Payment by check:

Make check payable to the Mojave Desert AQMD  
Mail the check with a copy of this completed application to:

#### Mojave Desert AQMD

14306 Park Avenue  
Victorville, CA 92392

#### Payment by credit card:

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Click "Pay Fees"

Please note: *a surcharge applies for all credit card payments.*

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Should you have any additional questions, please, do not hesitate to contact the permitting division at 760-245-1661, or via email at [engineering@mdaqmd.ca.gov](mailto:engineering@mdaqmd.ca.gov)



**MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT**

**BRAD POIRIEZ, EXECUTIVE DIRECTOR**  
 14306 Park Avenue, Victorville, CA 92392-2310  
 760.245.1661 • Fax 760.245.2022  
 Email: [engineering@mdaqmd.ca.gov](mailto:engineering@mdaqmd.ca.gov)  
[www.MDAQMD.ca.gov](http://www.MDAQMD.ca.gov) • @MDAQMD

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# General Application Form

Remit **\$288.00** with this document (\$164.00 for change of owner)

PLEASE TYPE OR PRINT

## Section 1: Owner information

a. Permit to be issued to (company name): NASA/Goldstone		b. Federal tax ID #: 52-1597904	
c. Mailing/billing address (for above company name) include city, state and zip code: 93 Goldstone Road, Fort Irwin, CA 92310			
d. Facility or business license name (for equipment location):			
e. Facility Address — Location of equipment (if same as for company, enter "Same"): Same			Equip. coordinates (lat/long):
f. Contact name: Mark Solheid	Title: Sr. EHS Analyst	Email address: Mark.J.Solheid@jpl.nasa.gov	Phone: 760-255-8225
General nature of business: Deep Space Communications			Company NAICS: 517919
Type of Organization			
<input type="checkbox"/> Individual owner <input type="checkbox"/> Partnership <input type="checkbox"/> Corporation <input type="checkbox"/> Utility <input type="checkbox"/> Local agency <input type="checkbox"/> State agency <input checked="" type="checkbox"/> Federal agency			

## Section 2: Nature of application

Application is hereby made for the following equipment: Gasoline Dispensing Facility	
Application is for what type of permit: <input type="checkbox"/> New construction <input checked="" type="checkbox"/> Modification <input type="checkbox"/> Change of owner	For modification or change of owner: P012832 _____ Current Permit Number
Do you claim Confidentiality of Data? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (attach explanation; specify which information provided is confidential)	

## Section 3: Equipment information

Equipment description (give a brief description of the equipment and/or process): Non-Retail, B7U, Diesel	
Manufacturer: Joor	Model: _____ Serial number: _____
Add-on air pollution control equipment? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Note: most APCE require a separate application)	
If yes: Manufacturer: _____ Model: _____ Serial #: _____ CARB EO#: _____	
Type (specify): _____	
Stack data Exhaust stack height from ground: <sup>15</sup> _____ feet Exhaust stack diameter: _____ feet <sup>4"</sup>	
Stack is: <input type="checkbox"/> horizontal <input checked="" type="checkbox"/> vertical <input type="checkbox"/> open <input checked="" type="checkbox"/> weather cap	
Vent data: Exhaust temp. _____ °F Maximum exhaust rate (CFM): _____	

**-For District use only-**

Application number:	Invoice number:	Permit number:	Company/facility number:
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### Section 4: Emissions data

Emission Factor Basis (attach any source specified): _____				
<input checked="" type="checkbox"/> Manufacturer <input type="checkbox"/> Source test <input type="checkbox"/> MDAQMD default <input type="checkbox"/> USEPA AP-42				
<input type="checkbox"/> Other (please specify): _____				
Emissions data: _____				
Pollutant	Pre-control max. emissions	Units	Post control max. emissions	Units
NO <sub>x</sub>	_____	_____	_____	_____
NMHC	_____	_____	_____	_____
CO	_____	_____	_____	_____
PM <sub>10</sub>	_____	_____	_____	_____
SO <sub>x</sub>	_____	_____	_____	_____
Toxic pollutants — Please include a list of all toxic air pollutants and their emission rates if known.				

### Section 5: Operation information

Fuel Consumption: _____ at max rated load <input checked="" type="checkbox"/> gal/hour <input type="checkbox"/> SCF/hour <input type="checkbox"/> MMBtu/hr	
Typical load: _____	
Facility annual operation by quarters (percent): <input checked="" type="checkbox"/> Uniform OR _____ % Jan-Mar    _____ % Apr-Jun _____ % Jul-Sep    _____ % Oct-Dec	Expected operating hours of equipment <sup>4</sup> _____ Hrs/day <sup>3</sup> _____ Days/wk <sup>24</sup> _____ Wk/yr Total annual hours <sup>288</sup> _____

### Section 6: Receptor information

Distance (feet) and direction to the property line of closest: <u>38,016 S</u> residence <u>36,432 S</u> business <u>50,160 S</u> school
Name of closest school (K-12) <u>Lewis Elementary</u>
<i>If the proposed equipment operates within 1,000 feet of a school site and operation results in the emission of hazardous air pollutants, a public notice will be required at the expense of the applicant (CH&amp;S 542301.6)</i>

**\*Please note:** District staff may contact you for further information. Failure to provide additional information as requested in a timely manner may result in delays in the processing of this permit application.

### Section 7: Certification

I hereby certify that all information contained herein is true and correct.			
Donald Westbrook	Complex Manager	<u>Donald Westbrook</u>	<u>4/16/10</u>
Name of responsible official	Official title	Signature of responsible official	Date signed
Phone: 760-255-8423	Email:	Donald.A.Westbrook@jpl.nasa.gov	

#### Application submission instructions:

- 1) Submit completed application to Engineering@mdaqmd.ca.gov
- 2) Pay the corresponding application fee of \$288 per permit for new or modified permit (or \$164 for change of owner) via check or credit card.

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#### Mojave Desert AQMD

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Victorville, CA 92392

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Should you have any additional questions, please, do not hesitate to contact the permitting division at 760-245-1661, or via email at [engineering@mdaqmd.ca.gov](mailto:engineering@mdaqmd.ca.gov)



**MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT**

**BRAD POIRIEZ, EXECUTIVE DIRECTOR**  
 14306 Park Avenue, Victorville, CA 92392-2310  
 760.245.1661 • Fax 760.245.2022  
 Email: [engineering@mdaqmd.ca.gov](mailto:engineering@mdaqmd.ca.gov)  
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# General Application Form

Remit **\$288.00** with this document (\$164.00 for change of owner)

PLEASE TYPE OR PRINT

## Section 1: Owner information

a. Permit to be issued to (company name): NASA/Goldstone		b. Federal tax ID #: 52-1597904	
c. Mailing/billing address (for above company name) include city, state and zip code: 83 Goldstone Road, Fort Irwin, CA 92310			
d. Facility or business license name (for equipment location):			
e. Facility Address — Location of equipment (if same as for company, enter "Same"): Same			Equip. coordinates (lat/long):
f. Contact name: Mark Solheid	Title: Sr. EHS Analyst	Email address: Mark.J.Solheid@jpl.nasa.gov	Phone: 760-255-8225
General nature of business: Deep Space Communications			Company NAICS: 517919
Type of Organization			
<input type="checkbox"/> Individual owner <input type="checkbox"/> Partnership <input type="checkbox"/> Corporation <input type="checkbox"/> Utility <input type="checkbox"/> Local agency <input type="checkbox"/> State agency <input checked="" type="checkbox"/> Federal agency			

## Section 2: Nature of application

Application is hereby made for the following equipment: Storage Tank	
Application is for what type of permit: <input type="checkbox"/> New construction <input checked="" type="checkbox"/> Modification <input type="checkbox"/> Change of owner	For modification or change of owner: P012832 _____ Current Permit Number
Do you claim Confidentiality of Data? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (attach explanation; specify which information provided is confidential)	

## Section 3: Equipment information

Equipment description (give a brief description of the equipment and/or process): Waste Oil, _____ _____ _____ _____	
Manufacturer: Joor	Model: _____ Serial number: _____
Add-on air pollution control equipment? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Note: most APCE require a separate application)	
If yes: Manufacturer: _____ Model: _____ Serial #: _____ CARB EO#: _____	
Type (specify): _____	
<b>Stack data</b> Exhaust stack height from ground: <sup>15</sup> _____ feet Exhaust stack diameter: _____ feet <sup>4"</sup> _____	
Stack is: <input type="checkbox"/> horizontal <input checked="" type="checkbox"/> vertical <input type="checkbox"/> open <input checked="" type="checkbox"/> weather cap	
Vent data: Exhaust temp. _____ °F Maximum exhaust rate (CFM): _____	

### -For District use only-

Application number:	Invoice number:	Permit number:	Company/facility number:
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### Section 4: Emissions data

Emission Factor Basis (attach any source specified): _____				
<input checked="" type="checkbox"/> Manufacturer <input type="checkbox"/> Source test <input type="checkbox"/> MDAQMD default <input type="checkbox"/> USEPA AP-42 <input type="checkbox"/> Other (please specify): _____				
Emissions data: _____				
Pollutant	Pre-control max. emissions	Units	Post control max. emissions	Units
NO <sub>x</sub>	_____	_____	_____	_____
NMHC	_____	_____	_____	_____
CO	_____	_____	_____	_____
PM <sub>10</sub>	_____	_____	_____	_____
SO <sub>x</sub>	_____	_____	_____	_____
Toxic pollutants — Please include a list of all toxic air pollutants and their emission rates if known.				

### Section 5: Operation information

Fuel Consumption: _____ at max rated load		<input checked="" type="checkbox"/> gal/hour	<input type="checkbox"/> SCF/hour	<input type="checkbox"/> MMBtu/hr
Typical load: _____				
Facility annual operation by quarters (percent):			Expected operating hours of equipment	
<input checked="" type="checkbox"/> Uniform OR _____ % Jan-Mar	_____ % Apr-Jun	_____ % Jul-Sep	_____ % Oct-Dec	<sup>4</sup> _____ Hrs/day <sup>3</sup> _____ Days/wk <sup>24</sup> _____ Wk/yr Total annual hours <sup>288</sup> _____

### Section 6: Receptor information

Distance (feet) and direction to the property line of closest:	<u>38,016 S</u> residence	<u>36,432 S</u> business	<u>50,160 S</u> school
Name of closest school (K-12)	<u>Lewis Elementary</u>		
<i>If the proposed equipment operates within 1,000 feet of a school site and operation results in the emission of hazardous air pollutants, a public notice will be required at the expense of the applicant (CH&amp;S §42301.6)</i>			

**\*Please note:** District staff may contact you for further information. Failure to provide additional information as requested in a timely manner may result in delays in the processing of this permit application.

### Section 7: Certification

I hereby certify that all information contained herein is true and correct.			
<u>Donald Westbrook</u>	<u>Complex Manager</u>	<u>Donald Westbrook</u>	<u>4/16/19</u>
Name of responsible official	Official title	Signature of responsible official	Date signed
Phone: 760-255-8423	Email: <u>Donald.A.Westbrook@jpl.nasa.gov</u>		

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 Victorville, CA 92392

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**MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT**

**BRAD POIRIEZ, EXECUTIVE DIRECTOR**  
14306 Park Avenue, Victorville, CA 92392-2310  
760.245.1661 • Fax 760.245.2022  
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# General Application Form

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PLEASE TYPE OR PRINT

## Section 1: Owner information

a. Permit to be issued to (company name): NASA/Goldstone		b. Federal tax ID #: 52-1597904	
c. Mailing/billing address (for above company name) include city, state and zip code: 93 Goldstone Road, Fort Irwin, CA 92310			
d. Facility or business license name (for equipment location):			
e. Facility Address — Location of equipment (if same as for company, enter "Same"): Same			Equip. coordinates (lat/long):
f. Contact name: Mark Solheid	Title: Sr. EHS Analyst	Email address: Mark.J.Solheid@jpl.nasa.gov	Phone: 760-255-8225
General nature of business: Deep Space Communications			Company NAICS: 517919
Type of Organization			
<input type="checkbox"/> Individual owner <input type="checkbox"/> Partnership <input type="checkbox"/> Corporation <input type="checkbox"/> Utility <input type="checkbox"/> Local agency <input type="checkbox"/> State agency			
<input checked="" type="checkbox"/> Federal agency			

## Section 2: Nature of application

Application is hereby made for the following equipment: Diesel Fuel Storage Tank	
Application is for what type of permit: <input type="checkbox"/> New construction <input checked="" type="checkbox"/> Modification <input type="checkbox"/> Change of owner	For modification or change of owner: P012832 _____ Current Permit Number
Do you claim Confidentiality of Data? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (attach explanation; specify which information provided is confidential)	

## Section 3: Equipment information

Equipment description (give a brief description of the equipment and/or process): Diesel #2	
_____ _____ _____ _____	
Manufacturer: Joor	Model: _____ Serial number: _____
Add-on air pollution control equipment? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Note: most APCE require a separate application)	
If yes: Manufacturer: _____ Model: _____ Serial #: _____ CARB EO#: _____	
Type (specify): _____	
<b>Stack data</b> Exhaust stack height from ground: <sup>15</sup> _____ feet Exhaust stack diameter: _____ feet <sup>4"</sup>	
Stack is: <input type="checkbox"/> horizontal <input checked="" type="checkbox"/> vertical <input type="checkbox"/> open <input checked="" type="checkbox"/> weather cap	
Vent data: Exhaust temp. _____ °F Maximum exhaust rate (CFM): _____	

**-For District use only-**

Application number:	Invoice number:	Permit number:	Company/facility number:
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### Section 4: Emissions data

Emission Factor Basis (attach any source specified): _____				
<input checked="" type="checkbox"/> Manufacturer <input type="checkbox"/> Source test <input type="checkbox"/> MDAQMD default <input type="checkbox"/> USEPA AP-42 <input type="checkbox"/> Other (please specify): _____				
Emissions data: _____				
Pollutant	Pre-control max. emissions	Units	Post control max. emissions	Units
NO <sub>x</sub>	_____	_____	_____	_____
NMHC	_____	_____	_____	_____
CO	_____	_____	_____	_____
PM <sub>10</sub>	_____	_____	_____	_____
SO <sub>x</sub>	_____	_____	_____	_____
Toxic pollutants — Please include a list of all toxic air pollutants and their emission rates if known.				

### Section 5: Operation information

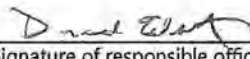
Fuel Consumption: _____ at max rated load		<input checked="" type="checkbox"/> gal/hour	<input type="checkbox"/> SCF/hour	<input type="checkbox"/> MMBtu/hr	
Typical load: _____					
Facility annual operation by quarters (percent):			Expected operating hours of equipment		
<input checked="" type="checkbox"/> Uniform OR	_____ % Jan-Mar	_____ % Apr-Jun	<sup>4</sup> _____ Hrs/day	<sup>3</sup> _____ Days/wk	<sup>24</sup> _____ Wk/yr
_____ % Jul-Sep	_____ % Oct-Dec		Total annual hours <sup>288</sup> _____		

### Section 6: Receptor information

Distance (feet) and direction to the property line of closest:	<u>38,016 S</u> residence	<u>38,432 S</u> business	<u>50,160 S</u> school
Name of closest school (K-12)	<u>Lewis Elementary</u>		
<i>If the proposed equipment operates within 1,000 feet of a school site and operation results in the emission of hazardous air pollutants, a public notice will be required at the expense of the applicant (CH&amp;S §42301.6)</i>			

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### Section 7: Certification

I hereby certify that all information contained herein is true and correct.			
Donald Westbrook	Complex Manager		<u>4/16/19</u>
Name of responsible official	Official title	Signature of responsible official	Date signed
Phone: 760-255-8423	Email: Donald.A.Westbrook@jpl.nasa.gov		

#### Application submission instructions:

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#### Mojave Desert AQMD

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 Victorville, CA 92392

#### Payment by credit card:

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## Appendix B Public Notice

*Noticing Methods include the following, per District Rule 1207 (A)(1)(a) and District Rule 1302(D)(2)and(3):*

- Published in newspapers of general circulation - *Riverside Press Enterprise* (Riverside County) and the *Daily Press* (San Bernardino County).
- Mailed and/or emailed to MDAQMD contact list of persons requesting notice of actions (see the contact list following the Public Notice in this Appendix.
- Posted on the MDAQMD Website at the following link:  
<http://www.mdaqmd.ca.gov/permitting/public-notices-advisories/public-notices-permitting-regulated-industry>

## NOTICE OF VOLUNTARY EMISSION LIMIT TO SURRENDER TITLE V APPLICABILITY



NOTICE IS HEREBY GIVEN THAT National Aeronautics & Space Administration – NASA Goldstone Deep Space Communication Complex, located at 93 Goldstone Road in Fort Irwin, CA 92310 has submitted an application to surrender/cancel their Federal Operating Permit (13300611) by electing to voluntarily limit its facility emissions to the extent that the facility is no longer subject to the provisions of District Regulation XII – Federal Operating Permits, pursuant to the provisions of District Rule 221, section B. This permitting action proposes to cap the facility limit for NOx at 80 tons per year which is 20 percent below the Major Facility threshold for a facility located outside the Federal Ozone Nonattainment Area. This proposed limit will effectively designate Goldstone as a synthetic minor source and will alleviate this facility from its Federal Operating Permit requirements. This proposed action will result in a net decrease in potential regulated air pollutants.

**REQUEST FOR COMMENTS:** Interested persons are invited to submit written comments and/or other documents regarding the terms and conditions of the proposed modification to MCC’s Federal Operating Permit. If you submit written comments, you may also request a public hearing on the proposed renewal of the Federal Operating Permit. To be considered, comments, documents and requests for public hearing must be submitted no later than 5:00 P.M. on July 11, 2019, to the MDAQMD, at the address listed below.

**PETITION FOR REVIEW:** Federal Operating Permits are also subject to review and approval by USEPA. If USEPA has not objected to a proposed permit, and the MDAQMD has not addressed a public comment in a satisfactory manner, the public may petition USEPA, Region IX, Operation Permits Section at 75 Hawthorne Street, San Francisco, CA 94105 within 60 days after the end of the USEPA review period for USEPA to reconsider its decision not to object to the permit.

**AVAILABILITY OF DOCUMENTS:** The proposed Federal Operating Permit, as well as the application and other supporting documentation are available for review at the MDAQMD offices, 14306 Park Avenue, Victorville, CA 92392. In addition, these documents are available on the MDAQMD website and can be viewed at following link:

<http://www.mdaqmd.ca.gov/permitting/public-notices-advisories/public-notices-permitting-regulated-industry>

Please contact Sheri Haggard, Supervising Air Quality Engineer at the address above, or (760) 245-1661, extension 1864, or at [shaggard@mdaqmd.ca.gov](mailto:shaggard@mdaqmd.ca.gov) with additional questions pertaining to this action and/or corresponding documents. *\*Traducción en español esta disponible por solicitud. Por favor llame: (760) 245-1661 x1864\**

### MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT

BRAD POIRIEZ, EXECUTIVE DIRECTOR

14306 Park Avenue, Victorville, CA 92392-2310 • 760.245.1661 • Fax 760.245.2022 • [www.MDAQMD.ca.gov](http://www.MDAQMD.ca.gov) • [@MDAQMD](https://www.facebook.com/MDAQMD)

**Mr. Larry Trowsdale**

951 E Skylark Ave  
Ridgecrest, CA 93555

**Chief, Planning Division**

California Air Resources Board  
P.O. Box 2815  
Sacramento, CA 95812

**Mr. Mike Sword**

Planning Div Mgr, Clark Co Dept of Air Q and  
4701 Russell Road, Suite 200  
Las Vegas, NV 89118

**Environmental Manager**

Duffield Marine, Inc.  
17260 Muskrat Avenue  
Adelanto, CA 92301

**Mr. Jon Boyer**

High Desert Power Project LLC  
19000 Perimeter Rd  
Victorville, CA 92394

**Ms. Carol Kaufman**

Metropolitan Water District  
700 N Alameda Street, 8th Floor, Rm 106  
Los Angeles, CA 90012

**Mr. John F. Espinoza**

HES Manager, Molycorp Minerals, LLC  
HC-1 Box 224  
Mountain Pass, CA 92366

**Chief, Bureau of Air Quality**

NDCNR, Env Prot Div (Air)  
901 South Stewart St, Suite 4001  
Carson City, NV 89701-5249

**Mr. Steve Smith**

SB County Transportation Authority  
1170 W. Third Street, Second Floor  
San Bernardino, CA 92410

**Mr. Michael Eichenlaub**

Specialty Minerals Inc.  
P.O. Box 558  
Lucerne Valley, CA 92356-0558

**Ms. Janet Laurain**

Adams Broadwell Joseph & Cardozo  
601 Gateway Blvd., St. 1000  
South San Francisco, CA 94080-7037

**Ms. Desirea Haggard**

Environmental Manager, CalPortland-Oro  
2025 E Financial Way  
Glendale, CA 91741

**Ms. Brenda Abernathy**

Air Program Manager, N45NCW, Naval Air  
429 E Bowen Rd, Stop 4014  
China Lake, CA 93555-6108

**Mr. Randy Lack**

Chief Marketing Officer, Element Markets,  
3555 Timmons Lane, Suite 900  
Houston, TX 77027

**Mr. Glen King**

Environmental Manager, Luz Solar Partners  
43880 Harper Lake Road  
Harper Lake, CA 92347

**Mr. David Rib**

Environmental Manager, Mitsubishi Cement  
5808 State Highway 18  
Lucerne Valley, CA 92356-9691

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93 Goldstone Road  
Fort Irwin, CA 92310

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12351 Rancho Road  
Adelanto, CA 92301

**Mr. Anoop Sukumaran**

Environmental Engineer, Searles Valley  
P.O. Box 367  
Trona, CA 93592-0367

**Director, Air Division (Attn: AIR-3)**

United States EPA, Region IX  
75 Hawthorne Street  
San Francisco, CA 94105

**Mr. Ramon Campos**

Environmental Compliance Manager, Blythe  
P.O. Box 1210  
Blythe, CA 92226

**City Manager**

City of Barstow  
220 East Mountain View, Suite A  
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HS&E Manager, Ducommun Aerostructures  
4001 El Mirage Road  
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27801 Golden Ridge Lane  
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HQBN B CO, NREA MCAGCC  
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Twentynine Palms, CA 92278-8110

**Environmental Manager**

Mobile Pipe Lining & Coating, Inc  
12766 Violet Road  
Adelanto, CA 92301

**Mr. Don Shepherd**

National Park Service, Air Resources Div  
12795 W Alameda Pkwy  
Lakewood, CO 80228

**Ms. Diana Furman**

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P.O. Box 7640  
San Francisco, CA 94120

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Air Quality Team Lead, SoCalGas  
1650 Mountain View Avenue  
Oxnard, CA 93030

**Ms. Anne McQueen**

Senior Engineer, Yorke Engineering, LLC  
31726 Rancho Viejo Road, Suite 218  
San Juan Capistrano, CA 92675



**Air Program Manager**

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Barstow, CA 92311

Bureau of Indian Affairs  
1451 Research Park Drive, Suite 100  
Riverside, CA 92507

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14306 Park Ave  
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31763 Mountain View Road  
Newberry Springs, CA 92365

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Lucerne Valley, CA 92356

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Los Angeles, CA 90012

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Chairman, Gabriel Band of Mission Indians -  
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Glendora, CA 91741

**Mr. Joseph Hower**

Principal, Air Sciences, Ramboll Environ  
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Los Angeles, CA 90017

**Ms. Lisa Beckham**

United States EPA, Region IX  
75 Hawthorne Street  
San Francisco, CA 94105

Chief, San Gabriel Band of Mission Indians  
PO Box 693  
San Gabriel, CA 91778

**Mr. Steve Cummings**

Senior Air Quality Tech Specialist, Southern  
P.O. Box 800  
Rosemead, CA 91770

**Ms. Jenna Latt**

CARB/Office of Ombudsman  
9480 Telstar Avenue, Annex 1  
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**Mr. Guy Smith**

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14306 Park Ave  
Victorville, CA 92392

Appendix C  
Emissions Inventory Data – Emission Year 2018

File name: C:\Users\sherih\Desktop\NASA GDSCC - EMS SUM - 2018.rtf

### HARP Facility Emission Summary

HARP EIM Version: 2.1.1

Project Path: C:\Users\sherih\Desktop\CEI  
 Project Database: C:\Users\sherih\Desktop\CEI\2018SH.mdb  
 CEIDARS Utility Database: C:\HARP2\Tables\CEIDARSTables022016.mdb  
 Facility List: N/A  
 Pollutant List: N/A  
 Sorting Order: FACID, CO, AB, DIS, YEAR, TOXAPPEN, POLABBREV  
 Date Created: 5/31/2019 11:11:46 AM  
 Operator: SMH

(Note: Emissions in LBS/YR for toxics, TONS/YR for criteria pollutants, CURRIES/YR for radio nuclides. \* User defined pollutants are marked by an asterisk with the pollutant ID.)

FACILITY	NAME	FSIC								
-----										
ADDRESS										
-----										
CITY	ZIP	CO	AB	DIS	CATEGORY	HAP	POLLUTANT	POLLUTANT ID	EMISSIONS	YEAR
-----										
13300611	GOLDSTONE DEEP SPACE COMMUNIC	4899								
	93 GOLDSTONE RD									
	FT. IRWIN, CA	92310	36	MD	MOJ	A-I	Copper	7440508	6.565E-02	2018
						A-I	Cyclohexane	110827	1.009	2018
						A-I	DieseleXhPM	9901	156.184	2018
						A-I	Propylene	115071	46.351	2018
						A-I	Zinc	7440666	0.359	2018
						A-I	Y 1,1,2TriClEthan	79005	0.126	2018
						A-I	Y 1,1-DiClEthane	75343	9.301E-02	2018
						A-I	Y 1,2-DiClPropane	78875	0.106	2018
						A-I	Y 1,3-Butadiene	106990	6.107	2018
						A-I	Y 1,3-DiClPropene	542756	0.104	2018
						A-I	Y 2,2,4TriMePentn	540841	1.795	2018
						A-I	Y Acetaldehyde	75070	36.215	2018
						A-I	Y Acrolein	107028	20.389	2018
						A-I	Y Anthracene	120127	0.106	2018
						A-I	Y Arsenic	7440382	0.125	2018
						A-I	Y Benzene	71432	7.727	2018
						A-I	Y Biphenyl	92524	0.354	2018
						A-I	Y Cadmium	7440439	2.402E-02	2018
						A-I	Y CCl4	56235	0.145	2018
						A-I	Y Chlorobenzn	108907	0.113	2018
						A-I	Y Chloroform	67663	0.112	2018
						A-I	Y Chromium	7440473	5.124E-02	2018
						A-I	Y Cr(VI)	18540299	3.202E-03	2018
						A-I	Y EDB	106934	0.175	2018
						A-I	Y Ethyl Benzene	100414	0.376	2018
						A-I	Y Ethyl Chloride	75003	6.124E-03	2018
						A-I	Y Formaldehyde	50000	117.107	2018
						A-I	Y HCl	7647010	2.978	2018
						A-I	Y Hexane	110543	2.979	2018
						A-I	Y Lead	7439921	0.133	2018
						A-I	Y Manganese	7439965	4.963E-02	2018
						A-I	Y Mercury	7439976	3.683E-02	2018
						A-I	Y Methanol	67561	12.118	2018



A-I	Y	Methylene Chlor	75092	0.272	2018
A-I	Y	Naphthalene	91203	0.659	2018
A-I	Y	Nickel	7440020	6.244E-02	2018
A-I	Y	PAHs-w/	1150	1.380	2018
A-I	Y	Perc	127184	8.122E-03	2018
A-I	Y	Perylene	198550	1.628E-05	2018
A-I	Y	Phenanthrene	85018	1.420	2018
A-I	Y	Pyrene	129000	0.235	2018
A-I	Y	Selenium	7782492	0.157	2018
A-I	Y	Styrene	100425	0.112	2018
A-I	Y	TetraClEthane	79345	0.171	2018
A-I	Y	Toluene	108883	1.681	2018
A-I	Y	Xylenes	1330207	0.679	2018
Crit		CO	42101	1.262	2018
Crit		NOX	42603	5.104	2018
Crit		PM	11101	0.100	2018
Crit		PM10	85101	9.036E-02	2018
Crit		PM10-NON	85105	7.909E-02	2018
Crit		PM2.5	88101	8.050E-02	2018
Crit		PM25-NON	88105	7.438E-02	2018
Crit		PM-NON	11105	8.909E-02	2018
Crit		ROG	16113	3.050E-04	2018
Crit		SOX	42401	3.813E-02	2018
Crit		TOG	43101	0.356	2018
Crit		VOC	43104	0.109	2018
G		CO2	124389	3.360E+05	2018

File name: C:\Users\sherih\Desktop\NASA GDSCC - PS - 2018.rtf

## HARP Facility Prioritization Report

HARP EIM Version: 2.1.1

Reporting Year: 2018  
Project Path: C:\Users\sherih\Desktop\CEI  
Project Database: C:\Users\sherih\Desktop\CEI\2018SH.mdb  
CEIDARS Utility Database: C:\HARP2\Tables\CEIDARSTables022016.mdb  
HARP Health Talbe: HEALTH201808  
Sorting Order: DIS, AB, CO, TS, FACID  
Date Created: 5/31/2019 1:47:51 PM  
Operator: SMH

### POLLUTANT HEALTH VALUES FROM HARP HEALTH DATABASE:

POLLUTANT ID	POLLUTANT	CANCERURF (INH) (ug/m <sup>3</sup> ) <sup>-1</sup>	ACUTEREL ug/m <sup>3</sup>	CHRONICREL (INH) ug/m <sup>3</sup>
79005	1,1,2TriClEthan	1.60E-05	N/A	N/A
79005	1,1,2TriClEthan	1.60E-05	N/A	N/A
75343	1,1-DiClEthane	1.60E-06	N/A	N/A
75343	1,1-DiClEthane	1.60E-06	N/A	N/A
78875	1,2-DiClPropane	N/A	N/A	N/A
78875	1,2-DiClPropane	N/A	N/A	N/A
106990	1,3-Butadiene	1.70E-04	6.60E+02	2.00E+00
106990	1,3-Butadiene	1.70E-04	6.60E+02	2.00E+00
106990	1,3-Butadiene	1.70E-04	6.60E+02	2.00E+00
542756	1,3-DiClPropene	N/A	N/A	N/A
542756	1,3-DiClPropene	N/A	N/A	N/A
540841	2,2,4TriMePentn	N/A	N/A	N/A
540841	2,2,4TriMePentn	N/A	N/A	N/A
75070	Acetaldehyde	2.70E-06	4.70E+02	1.40E+02
75070	Acetaldehyde	2.70E-06	4.70E+02	1.40E+02
75070	Acetaldehyde	2.70E-06	4.70E+02	1.40E+02
107028	Acrolein	N/A	2.50E+00	3.50E-01
107028	Acrolein	N/A	2.50E+00	3.50E-01
107028	Acrolein	N/A	2.50E+00	3.50E-01
120127	Anthracene	N/A	N/A	N/A
120127	Anthracene	N/A	N/A	N/A
7440382	Arsenic	3.30E-03	2.00E-01	1.50E-02
7440382	Arsenic	3.30E-03	2.00E-01	1.50E-02
71432	Benzene	2.90E-05	2.70E+01	3.00E+00
71432	Benzene	2.90E-05	2.70E+01	3.00E+00
71432	Benzene	2.90E-05	2.70E+01	3.00E+00
92524	Biphenyl	N/A	N/A	N/A
7440439	Cadmium	4.20E-03	N/A	2.00E-02
7440439	Cadmium	4.20E-03	N/A	2.00E-02
56235	CCl4	4.20E-05	1.90E+03	4.00E+01
56235	CCl4	4.20E-05	1.90E+03	4.00E+01
108907	Chlorobenzn	N/A	N/A	1.00E+03
108907	Chlorobenzn	N/A	N/A	1.00E+03
67663	Chloroform	5.30E-06	1.50E+02	3.00E+02

67663	Chloroform	5.30E-06	1.50E+02	3.00E+02
7440473	Chromium	N/A	N/A	N/A
7440473	Chromium	N/A	N/A	N/A
42101	CO	N/A	N/A	N/A
42101	CO	N/A	N/A	N/A
42101	CO	N/A	N/A	N/A
42101	CO	N/A	N/A	N/A
124389	CO2	N/A	N/A	N/A
7440508	Copper	N/A	1.00E+02	N/A
7440508	Copper	N/A	1.00E+02	N/A
18540299	Cr(VI)	1.50E-01	N/A	2.00E-01
18540299	Cr(VI)	1.50E-01	N/A	2.00E-01
110827	Cyclohexane	N/A	N/A	N/A
9901	DieselExhPM	3.00E-04	N/A	5.00E+00
9901	DieselExhPM	3.00E-04	N/A	5.00E+00
106934	EDB	7.10E-05	N/A	8.00E-01
100414	Ethyl Benzene	2.50E-06	N/A	2.00E+03
100414	Ethyl Benzene	2.50E-06	N/A	2.00E+03
100414	Ethyl Benzene	2.50E-06	N/A	2.00E+03
75003	Ethyl Chloride	N/A	N/A	3.00E+04
75003	Ethyl Chloride	N/A	N/A	3.00E+04
50000	Formaldehyde	6.00E-06	5.50E+01	9.00E+00
50000	Formaldehyde	6.00E-06	5.50E+01	9.00E+00
50000	Formaldehyde	6.00E-06	5.50E+01	9.00E+00
7647010	HCl	N/A	2.10E+03	9.00E+00
110543	Hexane	N/A	N/A	7.00E+03
110543	Hexane	N/A	N/A	7.00E+03
7439921	Lead	1.20E-05	N/A	N/A
7439921	Lead	1.20E-05	N/A	N/A
7439965	Manganese	N/A	N/A	9.00E-02
7439965	Manganese	N/A	N/A	9.00E-02
7439976	Mercury	N/A	6.00E-01	3.00E-02
7439976	Mercury	N/A	6.00E-01	3.00E-02
67561	Methanol	N/A	2.80E+04	4.00E+03
75092	Methylene Chlor	1.00E-06	1.40E+04	4.00E+02
91203	Naphthalene	3.40E-05	N/A	9.00E+00
91203	Naphthalene	3.40E-05	N/A	9.00E+00
91203	Naphthalene	3.40E-05	N/A	9.00E+00
91203	Naphthalene	3.40E-05	N/A	9.00E+00
7440020	Nickel	2.60E-04	2.00E-01	1.40E-02
7440020	Nickel	2.60E-04	2.00E-01	1.40E-02
42603	NOX	N/A	N/A	N/A
42603	NOX	N/A	N/A	N/A
42603	NOX	N/A	N/A	N/A
42603	NOX	N/A	N/A	N/A
42603	NOX	N/A	N/A	N/A
42603	NOX	N/A	N/A	N/A
1150	PAHs-w/	N/A	N/A	N/A
1150	PAHs-w/	N/A	N/A	N/A
1150	PAHs-w/	N/A	N/A	N/A
127184	Perc	6.10E-06	2.00E+04	3.50E+01
127184	Perc	6.10E-06	2.00E+04	3.50E+01
198550	Perylene	N/A	N/A	N/A
198550	Perylene	N/A	N/A	N/A
85018	Phenanthrene	N/A	N/A	N/A
85018	Phenanthrene	N/A	N/A	N/A
11101	PM	N/A	N/A	N/A
11101	PM	N/A	N/A	N/A
85101	PM10	N/A	N/A	N/A



85101	PM10	N/A	N/A	N/A
88101	PM25	N/A	N/A	N/A
115071	Propylene	N/A	N/A	3.00E+03
115071	Propylene	N/A	N/A	3.00E+03
129000	Pyrene	N/A	N/A	N/A
129000	Pyrene	N/A	N/A	N/A
16113	ROG	N/A	N/A	N/A
7782492	Selenium	N/A	N/A	2.00E+01
42401	SOX	N/A	N/A	N/A
42401	SOX	N/A	N/A	N/A
42401	SOX	N/A	N/A	N/A
100425	Styrene	N/A	2.10E+04	9.00E+02
100425	Styrene	N/A	2.10E+04	9.00E+02
79345	TetraClethane	5.80E-05	N/A	N/A
79345	TetraClethane	5.80E-05	N/A	N/A
43101	TOG	N/A	N/A	N/A
43101	TOG	N/A	N/A	N/A
43101	TOG	N/A	N/A	N/A
108883	Toluene	N/A	3.70E+04	3.00E+02
108883	Toluene	N/A	3.70E+04	3.00E+02
43104	VOC	N/A	N/A	N/A
43104	VOC	N/A	N/A	N/A
43104	VOC	N/A	N/A	N/A
1330207	Xylenes	N/A	2.20E+04	7.00E+02
1330207	Xylenes	N/A	2.20E+04	7.00E+02
7440666	Zinc	N/A	N/A	N/A
7440666	Zinc	N/A	N/A	N/A

\*\*\*\*\*

PRIORITIZATION SCORE SUMMARY:

-----

Facility Name  
Proximity Method  
Optional Factors

FACID	CO	AB	DIS	Emission and Potency Procedure				Dispersion Adjustment Procedure				Highest Score
				Cancer	Acute	Chronic	NonCancer	Cancer	Acute	Chronic	NonCancer	

GOLDSTONE DEEP SPACE COMMUNICATIONS COMPLEX

Proximity Method:

Annual Operating Hours		8760									
Priority Multiplier		0.128									
13300611	36 MD	MOJ	4.93E-02	1.32E-02	2.74E-04	1.34E-02	4.91E-02	1.32E-02	2.74E-04	1.34E-02	4.93E-02

# Appendix D

## Proposed Permits



# 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



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 NO<sub>x</sub>, 24 tons per year of VOC, and 18 tons per year of PM<sub>10</sub>. 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

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 NO<sub>x</sub>, 24 tons per year of VOC, and 18 tons per year of PM<sub>10</sub>. 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

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 NO<sub>x</sub>, 24 tons per year of VOC, and 18 tons per year of PM<sub>10</sub>. 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](mailto: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]

DRAFT



**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



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 NO<sub>x</sub>, 24 tons per year of VOC, and 18 tons per year of PM<sub>10</sub>. 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](mailto: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]

DRAFT



## 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

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 NO<sub>x</sub>, 24 tons per year of VOC, and 18 tons per year of PM<sub>10</sub>. 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 NO<sub>x</sub>, 24 tons per year of VOC, and 18 tons per year of PM<sub>10</sub>. 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 CFR 63.6655(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 NO<sub>x</sub>, 24 tons per year of VOC, and 18 tons per year of PM<sub>10</sub>. 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:

- 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,
- 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,
- Monthly fuel use [17 CCR 93115.10(f)]; and,
- 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,
- Maintenance performed on this equipment, inclusive of the management practice requirements of condition 8 below; and,
- 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,
- Records of all required maintenance performed on the air pollution control and monitoring equipment [40 CFR 63.6655(a)(4)]; and,
- 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 CFR 63.6655(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:

- 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.);
- Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and,
- 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 NO<sub>x</sub>, 24 tons per year of VOC, and 18 tons per year of PM<sub>10</sub>. 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 CFR 63.6655(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

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 NO<sub>x</sub>, 24 tons per year of VOC, and 18 tons per year of PM<sub>10</sub>. 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:

- 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,
- 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,
- Monthly fuel use [17 CCR 93115.10(f)]; and,
- 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,
- Maintenance performed on this equipment, inclusive of the management practice requirements of condition 8 below; and,
- 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,
- Records of all required maintenance performed on the air pollution control and monitoring equipment [40 CFR 63.6655(a)(4)]; and,
- 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 CFR 63.6655(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:

- 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.);
- Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and,
- 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

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 NO<sub>x</sub>, 24 tons per year of VOC, and 18 tons per year of PM<sub>10</sub>. 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 CFR 63.6655(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 NO<sub>x</sub>, 24 tons per year of VOC, and 18 tons per year of PM<sub>10</sub>. 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 CFR 63.6655(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

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 NO<sub>x</sub>, 24 tons per year of VOC, and 18 tons per year of PM<sub>10</sub>. 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 CFR 63.6655(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 NO<sub>x</sub>, 24 tons per year of VOC, and 18 tons per year of PM<sub>10</sub>. 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 CFR 63.6655(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 NO<sub>x</sub>, 24 tons per year of VOC, and 18 tons per year of PM<sub>10</sub>. 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 CFR 63.6655(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 NO<sub>x</sub>, 24 tons per year of VOC, and 18 tons per year of PM<sub>10</sub>. 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 CFR 63.6655(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 NO<sub>x</sub>, 24 tons per year of VOC, and 18 tons per year of PM<sub>10</sub>. 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 CFR 63.6655(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]

DRAFT



**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

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 NO<sub>x</sub>, 24 tons per year of VOC, and 18 tons per year of PM<sub>10</sub>. 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 CFR 63.6655(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

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 NO<sub>x</sub>, 24 tons per year of VOC, and 18 tons per year of PM<sub>10</sub>. 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 CFR 63.6655(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



[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 NO<sub>x</sub>, 24 tons per year of VOC, and 18 tons per year of PM<sub>10</sub>. 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 CFR 63.6655(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

[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 NO<sub>x</sub>, 24 tons per year of VOC, and 18 tons per year of PM<sub>10</sub>. 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 CFR 63.6655(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

[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 NO<sub>x</sub>, 24 tons per year of VOC, and 18 tons per year of PM<sub>10</sub>. 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 CFR 63.6655(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

## 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](mailto: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](mailto: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 NO<sub>x</sub>, 24 tons per year of VOC, and 18 tons per year of PM<sub>10</sub>. 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]

DRAFT



## 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 must 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 NO<sub>x</sub>, 24 tons per year of VOC, and 18 tons per year of PM<sub>10</sub>. 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]

DRAFT



## 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

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 must 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 NO<sub>x</sub>, 24 tons per year of VOC, and 18 tons per year of PM<sub>10</sub>. 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]

DRAFT



## 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 must 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 NO<sub>x</sub>, 24 tons per year of VOC, and 18 tons per year of PM<sub>10</sub>. 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]

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## 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 must 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 NO<sub>x</sub>, 24 tons per year of VOC, and 18 tons per year of PM<sub>10</sub>. 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]

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## 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



[District Rule 463(C)(3)]

4. Facility-wide emissions shall not exceed 80 tons per year of NO<sub>x</sub>, 24 tons per year of VOC, and 18 tons per year of PM<sub>10</sub>. 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

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 NO<sub>x</sub>, 24 tons per year of VOC, and 18 tons per year of PM<sub>10</sub>. 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]