



## 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

B014533

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: MARCH 2027**

#### **OWNER OF OPERATOR (Co.#2087)**

Exquadrum, Inc.  
13313 Sabre Blvd., Suite 1  
Victorville, CA 92394

#### **EQUIPMENT LOCATION (Fac.#4205)**

Exquadrum - Victorville  
13490 Forge Street  
Victorville, CA 92392

#### **Description:**

HYPERGOLIC FUEL TEST STAND, VTS 3 consisting of: A vertical rocket motor hypergolic combustion thrust test stand. The purpose of this stand is to perform thrust tests with hypergolic fuels (aqueous hydrazine and aqueous methyl hydrazine) with oxidizer (aqueous dinitrogen tetroxide). This system contains one 3 gallon oxidizer storage tank and one 3 gallons fuel tank. Purge/vent lines from this equipment exhaust into vapor scrubbing system under District Permit C014534.

#### **CONDITIONS:**

1. This equipment shall be installed, operated and maintained in strict accordance 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]
2. Visible emissions from this equipment shall not exceed an opacity equal to, or greater than, twenty percent (20%) for a period aggregating more than three (3) minutes in any one (1) hour, excluding uncombined water vapor. This equipment shall not discharge air contaminants or materials constituting a nuisance to any considerable number of persons or to the public. No visible emissions shall extend beyond the property line of the emission source. [District Rules 401, 402, 403, and 1302]

Fee Schedule: 7 (a)

Rating: 1 device

SIC: 8733

SCC: 20400201

Location/UTM(Km):  
473E/3956N

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.

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By: **COPY**  
**Brad Poiriez**  
Executive Director

3. This facility shall not use more than 3 gallons each of oxidizer and fuel per day, and no more than 30 gallons each of oxidizer and fuel in any year (consecutive 12 month period).

[District Rule 1302 and 1320]

4. All unreacted oxidizer and fuel vapor emissions from storage, loading, unloading, testing, purging and transfer activities shall be abated by the properly functioning Vapor Scrubbing System under District Permit C014534.

[District Rule 1302 and 1320]

5. The owner/operator shall conduct at a minimum weekly inspections of the vent lines, valves, seals, and appurtenant equipment to ensure there are no leaks. This system inspection shall include a weekly leak check using a portable/hand held hydrocarbon detector when fuel is present in the system.

[District Rule 1302]

6. The owner/operator must maintain an operations log for this equipment. This log shall be maintained current, kept for a total of two (2) years and be provided to authorized personnel upon request. The log shall contain the following at a minimum:

a. Date and Time of test performed;

b. Amounts of fuel and oxidizer used during each test;

c. Results of all weekly system inspections as required by Condition 5; and

d. Times and durations of malfunctions, a description of each malfunction, and the corrective action taken for each malfunction.

[District Rules 1302]

7. In the event of a malfunction of any emissions related part of this test stand, the equipment must be shut down as soon as safely possible and shall not be restarted until all malfunctions have been corrected. Equipment breakdowns shall be reported to the District in accordance with District Rule 430.

[District Rules 430 and 1302]

8. 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]