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 B015698

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: OCTOBER 2027

OWNER OF OPERATOR (Co.#3250)

Pyrios Industries, Inc.
3848 Del Amo Blvd., Suite 301
Torrance, CA 90503

EQUIPMENT LOCATION (Fac.#4733)

Pyrios - Space Gun Ranch
42120 Kaderka Road
Barstow, CA 92311

Description:
SOLID FUEL ROCKET TEST STAND AND MIX LABORATORY consisting of: Static, atmospheric test stand for ground-based firing tests of Ammonium Perchlorate Composite Propellant (APCP) solid rocket motors. Solid rocket motors are mounted to the test stand vertically and remotely ignited for short-duration testing, firing orientation is directly upward. Combustion products are discharged to the atmosphere and may include hydrogen chloride, particulate matter composed of metal oxides, CO, NOx, and other minor combustion byproducts.

CONDITIONS:

1. All equipment comprising the mix lab, test stand, and motors applied to it 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 204]

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.

Fee Schedule: 7 (b)	Rating: 1 device	SIC: 3769	SCC: 20400201	Location/UTM(Km): 506E/3874N

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.

Pyrios Industries, Inc.
3848 Del Amo Blvd., Suite 301
Torrance, CA 90503

By: **COPY**
Brad Poiriez
Executive Director

UNOFFICIAL

NOTICE: If visible emissions are observed from the exhaust of any solid rocket motor mounted on this test stand, due to incomplete combustion or other causes aside from tail-off or normal operation, operation of this test stand must cease until the cause of abnormal combustion is identified.
[District Rule 204; District Rule 401; District Rule 402; District Rule 403]

3. This test stand may only be used to test solid rocket motors. This test stand shall not be used for any solid propellant other than APCP composed as specified in the application submitted on 10/8/2026.
Any use of this test stand other than outlined above is strictly prohibited. If this test stand will be used for motors utilizing other propellant systems, a permit modification application must be submitted and a modified permit must be issued prior to conducting any other tests. A Health Risk Assessment (HRA) and public noticing may be required.
[District Rule 204; District Rule 1320; District Rule 1520]

4. This test stand and mix laboratory shall not exceed the following:
a. 5757.7 pounds (2611.2 kilograms) of APCP in any year (any consecutive 12-month period) composed as specified in the application dated 10/8/2026;
b. 239.9 pounds (108.8 kilograms) of APCP in any one day (midnight to midnight) composed as specified in the application dated 10/8/2026;
c. One test per hour;
d. Two tests per calendar day; and,
e. 48 tests per calendar year.
[District Rule 204; District Rule 1320(E)(3) - Dispersion Modeling and HRA]

5. No more than one test shall be conducted per hour. Furthermore, no more than one test shall be permitted at the test stand assigned District Permit No. B015698 within an interval such that measurable exposure from one test is added to the emissions from other tests or other activities emitting significant pollutants.
[District Rule 204]

6. The meteorological conditions that are required for a test firing are as follows:
a. The minimum wind speed from any and all directions shall be greater than 5 mph
b. The maximum wind speed from any and all directions shall be less than 30 mph; and,
c. Relative humidity shall be less than 80%.
[District Rule 204; District Rule 1320(E)(3) - Dispersion Modeling and HRA]

7. The test stand under District Permit B015698 and solid rocket motors applied to it will emit hydrochloric acid (HCl). Emissions of HCl from solid rocket motors must not result in an ambient concentration of HCl exceeding 800 ppmv at the property boundaries, pursuant to Rule MD0406. The property boundary HCl concentration has been verified by dispersion modeling using worst-case scenarios based on the original application package, dated 10/8/2026; fenceline monitoring requirements have been been omitted but may be reinstated if changes occur in the propellant mass, test duration, or motor configuration.
[District Rule 204; District Rule 406; District Rule 1320(E)(3) - Dispersion Modeling and HRA]

8. The owner/operator must maintain an operations log for this equipment. This log shall be maintained current and on-site for a minimum of two (2) years and be provided to authorized personnel including District, State, and Federal authorities upon request. The log shall contain the following at a minimum:
a. Date and Time of test performed;
b. Duration of the test (in seconds);
c. Amounts of solid propellant used during each test (in pounds);
d. Consecutive 12-month totals of solid propellant used on the test stand (in pounds);
e. Consecutive 12-month totals of solid propellant generated in the mix laboratory (in pounds);
f. Meteorological conditions before each test: wind speed (in miles per hour) and relative humidity (in percent); and,
g. Times and durations of malfunctions, a description of each malfunction, and the corrective action taken for each malfunction.
[District Rule 204]

9. This solid rocket motor test stand is permitted as stationary equipment and is prohibited from being relocated, on-site or otherwise, after installation. If the test stand must be relocated, a permit modification application and dispersion modeling may be required to verify

Rule compliance.
[District Rule 204; District Rule 406; District Rule 1320(E)(3) - Dispersion Modeling and HRA]

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; 17 CCR 93400 et seq.; 40 CFR 51, Subpart A]