



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

B014222

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: JUNE 2025

OWNER OF OPERATOR (Co. #2694)

American Quartz Group, Inc.
2957 Lenwood Road
Barstow, CA 92311

EQUIPMENT LOCATION (Fac. #4116)

American Quartz Group, Inc.
2957 Lenwood Road
Barstow, CA 92311

Description:

POLYESTER RESIN OPERATIONS (PROCESS LINE 01) consisting of: Process Line 01 (PL01): Employed in the manufacture of cast polymer products, utilizing semi-closed molding techniques. Consists of: Raw materials storage and batching system: Silica: Ten (10) silica powder storage silos (capacity of 10 cubic meters each), ten (10) silica powder weigh hoppers, two (2) silica powder batch silos (capacity of 80 cubic meters each), two (2) silica sand (grit) batch silos (capacity of 10 cubic meters each), and fifteen (15) enclosed conveyors. Polyester Resin: One (1) shared 12,000 gallon capacity reserve polyester resin storage tank, serving both PL01 and PL02 (PL02 permitted under MDAQMD permit no. B014223), one (1) 7,400 gallon capacity resin storage tank, dedicated to PL01, and two (2) 793 gallon capacity resin day tanks. Resin storage and day tanks are exempt from permitting, pursuant to MD Rule 219(E)(15)(c). Pigment preparation room, where polymerization initiation and coupling agents are mixed with pigments; One (1) organic waste gas purification plant, permitted under MDAQMD permit no. C014224, serving PL01 and PL02; One (1) baghouse, dedicated to PL01, permitted under MDAQMD permit no. C014225; Two (2) rotary mixers (capacity of 2.4 cubic meters each); One (1) curing oven, permitted under MDAQMD permit no. B014226; Associated conveyors/distributors with lump breakers, a molding press, a vertical cooling oven, and a polishing station.

EQUIPMENT

Capacity	Equipment Description
26417.2	Ten (10) silica powder storage silos (capacity of 10 cubic meters each)
0	Ten (10) silica powder weigh hoppers
42267.5	Two (2) silica powder batch silos (capacity of 80 cubic meters each)
5283.4	Two (2) silica sand (grit) batch silos (capacity of 10 cubic meters each)
0	Fifteen (15) enclosed conveyors

Fee Schedule: 5 (b)

Rating: 90221 gallons

SIC: 3281

SCC: 30800736

Location/UTM(Km): 491E/3857N

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
Air Pollution Control Officer

Capacity	Equipment Description
12000	One (1) shared 12,000 gallon capacity reserve polyester resin storage tank, serving both PL01 and PL02 (PL02 permitted under MDAQMD permit no. B014223) (exempt from permitting, pursuant to MD Rule 219(E)(15)(c))
7400	One (1) 7,400 gallon capacity resin storage tank, dedicated to PL01 (exempt from permitting, pursuant to MD Rule 219(E)(15)(c))
1585	Two (2) resin day tanks (capacity of 3 cubic meters each) (exempt from permitting, pursuant to MD Rule 219(E)(15)(c))
1268	Two (2) rotary mixers (capacity of 2.4 cubic meters each)

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(s) for this permit.

[District Rule 1302(C)(2)(a)]

2.This facility shall be operated and maintained in compliance with all applicable District Rules, including but not limited to, District Rule 442 - Usage of Solvents, and 1162 - Polyester Resin Operations.

[District Rules 204, 442 and 1162]

3.VOC emissions from this process line (e.g. resin storage, resin mixing, ring mixer, distributor, lump breaker, homogenizer, press and curing oven) shall be captured and routed to the organic waste gas purification plant permitted under MDAQMD permit no. C014224.

[District Rule 1162(C)(1)(c)(ii)]

4.The owner/operator shall maintain a log for the facility, which, at a minimum, contains the information specified below:

- Current list of manufacturer, type, and quantity (in pounds, gallons, etc.) of all materials used in the cast polymer process (preparation, production, thinning, cleanup or other), including the weight percentage of monomer and overall VOC content for all polyester resin materials and fillers used;
- Records of all solvent usage, including type, quantity, and VOC content of all cleaning material used and stored;
- Volatile Organic Compound (VOC), Hazardous Air Pollutant (HAP), and Toxic Air Contaminant (TAC) contents of each type of resin, gel coat, coating and solvent in pounds per gallon, grams per liter, percent (weight/weight), etc.;
- Calculated monthly criteria pollutant, HAP, and TAC emissions from the transfer, storage and usage of materials employed in the manufacture of cast polymer products at this facility;
- Records of the monthly production rates (number of batches, slabs per batch, batching specifications, total consumption of materials) and other operational data (hours and days of operation) used to determine monthly criteria, HAP and TAC emissions;
- Safety Data Sheets (SDS) for all materials used in the cast polymer process;
- Daily records of key system operating parameters and maintenance procedures, demonstrating continuous operation and compliance of the air pollution control equipment permitted under MDAQMD permit no. C014224; and,
- Verification that the total emissions during the twelve (12) month consecutive period are below the facility limits found within condition 13.

These records shall be retained on-site for a minimum period of five (5) years and be made available for review upon request by District, State or Federal personnel.

[District Rules 442, 1162, 1301 and 1303 and 40 CFR 70.6 (a)(3)(B)]

5.This facility shall not use cleaning solvents that contain HAPs, except that styrene may be used as a cleaner in closed systems, and organic HAP containing cleaners may be used to clean cured resin from application equipment. Application equipment includes any equipment that directly contacts resin. The provisions of this condition do not apply to mold sealing and release agents, or mold stripping and cleaning solvents.

[District Rule 1162(C)(6)]

6.This facility must keep containers that store VOC and/or HAP-containing materials closed or covered except during the addition or removal of materials. Bulk VOC and/or HAP-containing material storage tanks may be vented as necessary for safety.

[District Rule 1162(C)(5)]

7.All fresh or spent solvents, waste solvent cleaning materials such as cloth, paper, coating, adhesive catalyst and thinners shall be stored or disposed of in closed, non-absorbent and non-leaking containers. The containers shall remain closed at all times except when depositing or removing the contents of the containers or when the container is emptied.

[District Rules 442 and 1162(C)(7)(a)]

8.This facility must use mixer covers with no visible gaps present in the mixer covers, except that gaps of up to 1 inch are permissible around mixer shafts and any required instrumentation. Containers of 5 gallons or less may be open when active mixing is taking place, or during periods when they are in process (i.e., they are actively being used to apply resin).

[District Rule 1162(C)(5)]

9.This process line shall operate concurrently with the baghouse permitted under MDAQMD permit no. C014225 and the organic waste gas purification plant permitted under MDAQMD permit no. C014224. In the event of a malfunction of any emissions related part of this operation or associated control equipment, or in a natural gas shortage or curtailment episode, this process line must be shut down as soon as safely possible and shall not be restarted until all malfunctions have been corrected and/or approved fuel supply has been restored. Equipment breakdowns shall be reported to the District in accordance with District Rule 430.

[District Rules 430 and 480]

10.The facility shall not discharge VOCs into the atmosphere from all VOC containing materials, Emissions Units, equipment or processes that are not subject to District Rule 1162, in excess of 1190 pounds per month. This includes, but is not limited to, coatings, modifiers, sealants, release agents, polymerization initiators, pure monomers, and catalysts.

[District Rule 442(C)(1)]

11.All conveying equipment shall be fully enclosed and the particulate matter (PM) generated from this process line shall be captured and routed to the baghouse permitted under MDAQMD permit no. C014225.

[District Rules 1303 and 1320]

12.Visible emissions from this process line 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. Any emissions of air contaminants or other material from this process line shall not be discharged in such quantities which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. Additionally, the owner/operator shall not cause or allow the emissions of fugitive dust from any transport, handling, construction or storage activity so that the presence of such dust remains visible in the atmosphere beyond the property line of the emission source.

[District Rules 204, 401, 402 and 403]

13.The entire facility shall not emit any of the Regulated Pollutants listed below in excess of the following limits in any consecutive 12 month period to remain below the USEPA's Synthetic Minor - 80% (SM-80) threshold:

- a. Oxides of Nitrogen (NOx): 20 tons per consecutive twelve (12) month period, measured as NO₂;
- b. Oxides of Sulfur (SOx): 20 tons per consecutive twelve (12) month period;
- c. Volatile Organic Compounds (VOC): 20 tons per consecutive twelve (12) month period;
- d. Carbon Monoxide (CO): 80 tons per consecutive twelve (12) month period;
- e. Hydrogen Sulfide (H₂S): 8 tons per consecutive twelve (12) month period;
- f. Lead (Pb): 0.48 tons per consecutive twelve (12) month period;
- g. Particulate Matter 10 microns and less (PM₁₀): 14.5 tons per consecutive twelve (12) month period;
- h. Any single Hazardous Air Pollutant (HAP): 8 tons per consecutive twelve (12) month period; and,
- i. All HAPs combined: 20 tons per consecutive twelve (12) month period.

Compliance with these limits shall be demonstrated through the submission of a facility-wide Comprehensive Emission Inventory (CEI) for all emitted Regulated Air Pollutants. Exceedance of these emission limits may trigger offsets, BACT, National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR Part 63, Subpart WWWW, Reinforced Plastic Composites Production, and/or require submission of a Title V permit application.

[District Rules 1302 and 1303]

14.A facility wide Comprehensive Emission Inventory (CEI) Plan and Report 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]