

# South Coast Air Quality Management District

## Statement of Basis

### Proposed Title V Renewal Permit

**Facility Name:** E.M.E. Inc/Electro Machine & Engineering  
**Facility ID:** 45938  
**SIC Code:** 3471  
**Equipment Location:** 431 East Oaks Street  
Compton, CA 90221-1044

**Application #(s):** 477794  
**Application Submittal Date(s):** 02/01/08

**AQMD Contact Person:** Hamed Mandilawi, Senior Engineer  
**Phone Number:** (909) 396-3275  
**E-Mail Address:** hmandilawi@aqmd.gov

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#### 1. Introduction and Scope of Permit

Title V is a national operating permit program for air pollution sources. Facilities subject to Title V must obtain a Title V permit and comply with specific Title V procedures to modify the permit. This permit replaces the facility's other existing permits. Title V does not necessarily include any new requirements for reducing emissions. It does, however, include new permitting, noticing, recordkeeping, and reporting requirements.

Pursuant to Title V of the federal Clean Air Act and AQMD Rule 3004(f), a Title V permit shall expire five years from the date of issuance unless such permit has been renewed. Accordingly, each facility is required to submit a Title V renewal application and requested the AQMD to renew their Title V permit. The proposed permit incorporates updates to the facility information provided in the facility's Title V renewal application and all rules and regulations that are currently applicable to the facility.

The AQMD implements Title V through Regulation XXX – Title V Permits, adopted by the AQMD Governing Board in order to comply with EPA's requirement that local air permitting authorities develop a Title V program. Regulation XXX was developed with the participation of the public and affected facilities through a series of public workshops, working group meetings, public hearings and other meetings.

The Title V major source threshold for a particular pollutant depends on the attainment status of the pollutant. NO<sub>2</sub>, SO<sub>2</sub>, CO, and lead are in attainment with federal standards. The status for PM-10 is serious nonattainment. The status for ozone is currently extreme nonattainment.

A Title V renewal permit is proposed to be issued to cover the operations of E.M.E. Inc/Electro Machine & Engineering located at 431 East Oaks Street, Compton, CA 90221-1044. This facility is subject to Title V requirements because it is a major source.

## **2. Facility Description**

This is an existing facility that is engaged in the business of aerospace parts manufacturing. The facility operates eight spray booths, six ovens, an aluminum etch line, a passivation line, a sulfuric acid anodizing line, a chromic acid anodizing line, two abrasive blasting cabinets, an abrasive blasting room, a diesel fired emergency internal combustion engine, a natural gas fired internal combustion engine, and other supporting equipment. Particulate matters emissions from the abrasive blasting operations are controlled by an air pollution control equipment baghouse, chromium emissions from an anodizing tank is controlled by an air pollution control equipment consisting of a mesh pad and HEPA filters, particulate emissions from an etch tank is controlled by an air pollution control equipment scrubber, and the CO, NOx, and VOC emissions from the natural gas fired internal combustion engine are controlled by an air pollution control equipment non-selective catalytic converter.

## **3. Construction and Permitting History**

The facility has been in constant operation with a Title V permit at this location since 2003. Numerous permits to construct and or permits to operate have been issued to the facility since July of 2003. An initial Title V permit was issued to the facility on July 31, 2003 and several permit revisions were subsequently issued to this facility.

## **4. Regulatory Applicability Determinations**

Applicable legal requirements for which this facility is required to comply are required to be identified in the Title V permit (for example, Section D, E, and H of the proposed Title V permit). Applicability determinations (i.e., determinations made by the District with respect to what legal requirements apply to a specific piece of equipment, process, or operation) can be found in the Engineering Evaluations. This facility is not subject to any NSPS requirements and is not a major source for Hazardous Air Pollutants.

## **5. Monitoring and Operational Requirements**

Applicable monitoring and operational requirements for which the facility is required to comply are identified in the Title V permit (for example, Section D, F, and J and Appendix B of the proposed Title V permit). Discussion of any applicable operational requirements can be found in the Engineering Evaluations. All periodic monitoring requirements were developed using strict adherence to the following applicable guidance documents: SCAQMD Periodic Monitoring Guidelines for Title V Facilities (November 1997); CAPCOA/CARB/EPA Region IX Periodic Monitoring Recommendations for Generally Applicable Requirements in SIP (June 1999); and CAPCOA/CARB/EPA Region IX Recommended Periodic Monitoring for Generally Applicable Grain Loading Standards in the SIP: Combustion Sources (July 2001).

The emissions from the natural gas fired internal combustion engine is vented to air pollution control equipment non-selective catalytic reduction system. The uncontrolled NOx emissions from the engine prior to control is greater than the major source threshold for NOx of 10 tons per year. As a result, the control equipment is subject to the Compliance Assurance Monitoring (CAM) requirements of 40 CFR Part 64. Permit conditions have been added to satisfy the CAM requirements. Such permit conditions were developed using the design criteria and other pertinent requirements identified in 40 CFR 64- Compliance Assurance Monitoring and Technical Guidance Document and in the August 1998 Revised Draft CAM.

The PM emission from the two abrasive blasting cabinets and abrasive blasting room are vented to an air pollution control equipment baghouse, the PM emissions from an anodizing tank are controlled by and air pollution control equipment consisting of a mesh pad and HEPA filter, and the PM emissions from an etch tank is controlled by a scrubber. However, since the PM10 emission vented to the baghouse, mesh pad/HEPA filter, and scrubber is less than 70 tons per year each, the Compliance Assurance Monitoring (CAM) requirements of 40 CFR Part 64 is not applicable to the above air pollution control equipment.

## 6. Permit Features

### Permit Shield

A permit shield is an optional part of a Title V permit that gives the facility an explicit protection from requirements that do not apply to the facility. A permit shield is a provision in a permit that states that compliance with the conditions of the permit shall be deemed compliance with all identified regulatory requirements. To incorporate a permit shield into the Title V permit involves submission of applications for change of conditions for each equipment affected by the permit shield. Permit shields are addressed in Rule 3004 (c). This facility has not applied for a permit shield.

### Streamlining Requirements

Some emission units may be subject to multiple requirements which are closely related or redundant. The conditions may be streamlined to simplify the permit conditions and compliance. Emission limits, work practice standards, and monitoring, recordkeeping, and reporting requirements may be streamlined. Compliance with a streamlined condition will be deemed compliance with the underlying requirements whether or not the emission unit is actually in compliance with the specific underlying requirement. This facility has not applied for any streamlined conditions.

## 7. Summary of Emissions and Health Risks

**Criteria Pollutant Emissions (tons/year)**  
**Annual Reported Emissions for Reporting Period 2005/2006**

Pollutant	Emissions (tons/year)
NOx	0.5
CO	0.41
VOC	14.54
PM	0.63

SO <sub>x</sub>	0.002
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**Toxic Air Contaminants Emissions (TAC)  
Annual Reported Emissions for Reporting Period 2005/2006**

The Following TACs Were Reported	Emissions (lbs/yr)
Ammonia	153
hexavalent chromium	0.545
Formaldehyde	5.02
Benzene	0.108
1,3 Butadiene	0.024
vinyl chloride	0.001
PAH	0.001

**Health Risk from Toxic Air Contaminants**

The facility is subject to review by the Air Toxics Information and Assessment Act (AB2588). The Final Facility Health Risk was approved in 2001 with the following risk factors.

Cancer Risk	0.04 in one million
Acute Hazard Index	0.0
Chronic Hazard Index	<0.01

**8. Compliance History**

As noted, the facility has been in constant operation with a Title V permit since 2003. The facility has been subject to both self-reporting requirements and AQMD inspections. The facility has had no citizen complaints filed, Notices to Comply or Notices of Violation issued in the last two years. The facility is currently operating in compliance with all applicable rules and regulations.

**9. Compliance Certification**

By virtue of the Title V permit application and issuance of this Title V renewal permit, the reporting frequency for compliance certification for the facility shall be annual.