

# South Coast Air Quality Management District

## Statement of Basis

### Proposed Title V Renewal Permit

<b>Facility Name:</b>	US Govt., Veterans Affairs Medical Center, Long Beach
<b>Facility ID:</b>	13990
<b>SIC Code:</b>	8062
<b>Equipment Location:</b>	5901 East 7 <sup>th</sup> Street Long Beach, CA 90822
<b>Application #(s):</b>	572242
<b>Application Submittal Date(s):</b>	02/06/2015
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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 SCAQMD 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 SCAQMD 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 SCAQMD implements Title V through Regulation XXX – Title V Permits, adopted by the SCAQMD 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>, and CO are in attainment with federal standards. The status for Federal

PM-10 is attainment, State PM-10 is nonattainment. The status for lead is non-attainment (Los Angeles Co.). The status for ozone is currently extreme nonattainment.

A Title V renewal permit is proposed to be issued to cover the hospital operations of US Govt. , Veterans Affairs Medical Center, 5901 East 7<sup>th</sup> Street, Long Beach, CA 90822. This facility is subject to Title V requirements because it is a major source.

## **2. Facility Description**

This is an existing facility that operates a medical center. The facility provides hospital care and other medical services to its military veterans. This facility is operating 16 diesel fueled ICEs driving emergency electrical generators, 3 natural gas fueled boilers with fuel oil stand-by fuel selective catalytic reduction systems, one spray booth and one fuel dispensing equipment.

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

The facility has been in constant operation at this location since 1924. Numerous permits to construct and or permits to operate have been issued to the facility since the first application permits were filed in 1982. An initial Title V permit was issued to the facility on 3/21/2001, renewal issued 09/08/2010, and there has been three subsequent permit revisions issued to this facility in the last five years. The facility submitted the Title V renewal application within the mandated time frames and is therefore covered by an application shield.

## **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 as follows.

### **Federal Regulations**

#### **Boilers**

Natural Gas Fired/fuel oil back up

The three 39.9 MMBTU/hr boilers are designed to burn both natural gas and fuel oil. Fuel oil will only be burned during periods of natural gas curtailment and during periodic maintenance testing. The boilers are each vented to SCR to meet the Rule 1146 NOx emissions limit of 5 ppmv.

#### **40 CFR PART 60, Subpart Dc-Standards of Performance for Small Industrial-Commercial-Institutional steam generating Units**

The boilers were installed after 1989, thus are subject to the provisions of this Regulation. The boilers have the applicable permit conditions that are required by this Regulation.

#### **40 CFR Part 63, Subpart JJJJJ—National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources**

This NESHAP applies to all boilers located at an area source of HAP emissions. The boilers use fuel oil as a stand-by fuel. The boilers have permit conditions limited the annual testing on fuel oil to less than 48 hours per calendar year, thus are not subject to this Regulation.

Boiler HAP Emissions

Pollutant	Maximum Heat Input (MMBTU/hr)	AB-2588 Emission Factor (lb/MMSCF)	HAP Emissions (lb/hr)	HAP Emissions (lbs/yr)
Acetaldehyde	39.9	4.30E-03	0.0002	10.3832
Acrolein	39.9	2.70E-03	0.0001	9.7878
Benzene (including benzene from gasoline)	39.9	8.00E-03	0.0003	5.8801
Ethyl benzene	39.9	9.50E-03	0.0003	2.4674
Formaldehyde	39.9	1.70E-02	0.0006	0.0659
Hexane (n-)	39.9	6.30E-03	0.0002	0.0480
Naphthalene	39.9	3.00E-04	1E-05	0.0510
PolyCyclic Aromatic Hydrocarbon (PAHs)	39.9	1.00E-04	5E-06	0.0421
Propylene	39.9	7.31E-01	0.0262	0.0923
Toluene (methyl benzene)	39.9	3.66E-02	0.0013	0.0793
Xylene	39.9	2.72E-02	0.001	0.0421
HAP PTE				28.9391

The above is based on 24 hr/dy, 365 dy/yr at max boiler load.

The total HAP emissions is 29 lb/yr \* 3 boilers = 87 or 0.04 TPY < 25 TPY.

The applicant operates emergency ICEs, spray booth and gasoline facility, assume the HAPs emissions from this equipment are nil compared to the boilers.

**Emergency engines**

The applicant operates 16 existing emergency engines. 10 of the emergency engines were installed prior to 2006 and are institutional as defined by section 63.6675 and are exempt for RICE NESHAP, 40 CFR Subpart ZZZZ per section 63.6585 (f). The hospital is an area source of HAPs. The applicant operates 6 emergency engines installed after 2006 that are subject to 40 CFR 60 subpart III.

**Gasoline storage and dispensing system**

NESHAPS for Gasoline Dispensing Facilities – 40 CFR Part 63 Subpart CCCCCC

The applicant is operates a gasoline storage and dispensing system that is used to fuel the various vehicles at the facility. The annual gasoline throughput is low and the District’s Rule 461 requirements are more stringent than this Regulation. SCAQMD will add a permit condition requiring the equipment comply will the applicable provisions of this regulation.

## 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 medical center has three 39.9 million btu per hour boilers. Each boiler is vented to SCR and the NOx is limited to 5 ppmv. The uncontrolled NOx emissions from each boiler is listed below:

Pollutant	R1 EF Value	EF Unit	Reference	mmbtu	lb/hr	lb/day	30DA	Lb/year
NOx	30	Ppmv	Vendor	39.9	1.45	34.87	34.87	12,692 (6.3 tons)

The R1 NOx emissions will be based on the maximum firing rate of the boiler, operating at 24 hr/dy, 365 days per year.

There are five emergency internal combustion engines that are equipped with diesel particulate filters (DPF). The engines are limited to 200 hours per year and the uncontrolled PM emissions are well below the thresholds. Therefore, CAM requirements of 40 CFR Part 64 do not apply to any of the permitted emissions sources at this facility.

## 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 2013**

Pollutant	Emissions (tons/year)
NOx	3.280
CO	5.906
VOC	2.618
PM	3.008
SOx	0.042

**Toxic Air Contaminants Emissions (TAC) (lbs/yr)  
Annual Reported Emissions for Reporting Period 2013**

Pollutant Description	Annual Emissions
1,3-Butadiene	0.378
Acetaldehyde	2.560
Acrolein	1.323
Ammonia	453.176
Arsenic	0.006
Asbestos	0.002
Benzene	1.151
Cadmium	0.006
Chromium (VI)	0.000
Copper	0.016
Diesel engine exhaust, particulate matter	57.675
ETHYL BENZENE	0.996
FLUOROCARB (CL)	76.000
Formaldehyde	108.554
HEXANE	0.703
Hydrochloric acid	0.765
Lead (inorganic)	0.034
Manganese	0.012
Mercury	0.008
Naphthalene	0.086
Nickel	0.016
PAHs, total, with components not reported	0.183
Selenium	0.009
Toluene	3.937
Xylenes	1298

## Health Risk from Toxic Air Contaminants

The facility is being tracked by the Air Toxics Information and Assessment Act (AB2588).

### 8. Compliance History

As noted, the facility has been in constant operation since 1924. The facility has been subject to both self-reporting requirements and SCAQMD inspections.

The Hospital was issued the following Notice of Violation (NOV) as shown in the table below:

NOV No.	Issue Date	Violation	Status
P56989	09/19/2013	Boilers did not meet the Rule 1146 NOx emissions limits	closed
P56982	09/02/2014	1) Failure to submit the ACC and 2nd SAM for the 2012 Compliance Year 2) Failure to meet the new 9 ppm NOx limit and failure to submit applications per Compliance Plan 3) Failure to submit a Rule 1415 Registration Plan	closed

The District filed a Order of Abatement, case no. 4280-3 to allow the applicant to remove the existing boilers and installed the new boilers with SCR in a timely fashion. The case was heard on 2/10/2015 and 5/27/2015 and was approved.

No further compliance activity is noted for this facility

### 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.