



**GOVERNMENT OF PUERTO RICO
OFFICE OF THE GOVERNOR
ENVIRONMENTAL QUALITY AREA**



Air Quality Area

**STATEMENT OF BASIS
HOSPITAL INTERAMERICANO DE MEDICINA AVANZADA
H/N/C HIMA
CAGUAS, PUERTO RICO
PFE-TV-8026-13-0708-0344**

The Puerto Rico Environmental Quality Board (EQB) is issuing a draft Title V permit pursuant to Code of Federal Regulation Title 40 (40 CFR) Part 70 and Part VI of the Regulations for the Control of Atmospheric Pollution (RCAP) for the Hospital Interamericano de Medicina Avanzada H/N/C HIMA. HIMA is located in the Luis Muñoz Marín Avenue, Esq. Degetau, Mariolga Urbanization in Caguas, Puerto Rico. EQB received a Title V permit application on July 7, 2008. On October 16, 2008, the Air Quality Area acknowledged that the application was complete.

The emission sources included in this draft permit are two boilers, six electric generators and two fuel storage tanks. Hospital Interamericano de Medicina Avanzada is a major source for atmospheric pollutants because it has the potential to emit more than 100 tons per year of nitrogen oxides (NO_x), which is a criteria atmospheric pollutant. This facility is not a major source of hazardous air pollutant emissions.

The allowable emissions authorized under this permit are mentioned below. The source shall certify annually that its actual emissions do not exceed the allowable emissions. This certification shall be based on the actual hours of operation of the previous calendar year and using the emission factors of AP-42 (Compilation of Air Pollutant Emission Factors).

Criteria Pollutant	Allowable Emissions (tons /year)
PM	7.44
SO ₂	90.68
NO _x	114.35
CO	25.34
VOC	3.61
HAP	0.037

The following table summarizes the applicability¹ of HIMA with regards to the principal air pollution regulatory programs:

Regulatory Program	Applicability
RCAP- Rules 403, 406, 410	Yes
Hazardous Air Pollutants Limits	No
NSPS (40 CFR Part 60, Subpart IIII)	No
NSPS (40 CFR Part 60, Subpart JJJJ)	No
NSPS (40 CFR Part 60, Subpart Kb)	No
NSPS (40 CFR Part 60, Subpart Dc)	No
NESHAP (MACT- 40 CFR Part 63, Subpart W)	No
NESHAP (MACT- 40 CFR Part 63, Subpart ZZZZ)	Yes
NESHAP (MACT - 40 CFR Part 63, Subpart JJJJJ)	Yes
NESHAP (MACT - 40 CFR Part 63, Subpart DDDDD)	No
Title V (40 CFR Part 70) and RCAP Part VI	Yes

A summary of the emission units, the applicable requirements and the rationale for these requirements are provided below.

EU-1: Two boilers The capacity of each boiler is 250 hp. Each one consumes Num. 5 fuel oil at a rate of 69.5 gallons per hour. Since the units are less than 300 hp, these units are not affected by the New Source Performance Standards (NSPS) for Electric Utility Steam Generating Units and Industrial- Commercial – Institutional Steam Generating Units in 40 CRF Part 60 Subpart Dc. Because the two boilers at the site are existing boilers that use fuel oil, the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers Area Source in 40 CFR Part 63 subpart JJJJJ are applicable. Specifically, the facility is required to perform biennial tune-ups, and to perform a one-time energy assessment to each boiler. All of these requirements have been included in the permit.

EU-2: Six electric generators: This unit consists of three electric generators of 2220 hp and three of 2922 hp. The generators consume Num. 2 fuel oil (diesel) at different consumption rates. Since the electric generators were constructed before April 1, 2006, they are not affected by the NSPS for Stationary Compression Ignition Internal Combustion Engine in 40 CRF Part 60 Subpart IIII. Because all six engines were installed at the facility after June 12, 2006, the engines are subject to the NESHAP for Reciprocating Internal Combustion Engines (RICE MACT) contained in 40 CFR Part 63 Subpart ZZZZ. Subpart ZZZZ establishes that these engines meet the requirements of subpart ZZZZ by meeting

¹ *Is important to mention that not all of the permit conditions need to be explained in this document, because the legal and factual bases for the conditions are self-evident as stated in the Title V Operating Permit. This means, that all the applicable requirements are cited in the Title V permit with a reference to the requirement. For example: if the restriction came from a construction permit, the condition will cite the construction permit number, if it came from the regulation it will cite the RCAP specific rule, and if the restriction came from a federal standard, the condition will cite the federal standard or regulation. If the restriction came from the emissions calculation and a cumulative increase, the condition will establish that. Also, state only requirements are clearly identified.*

the requirements of 40 CFR, part 60 subpart IIII, however none of the engines are subject to 40 CFR, Part 60, subpart IIII.

EU-1 and EU-2 units are also subject to following RCAP limitations.

- PM emission limit: Rule 406 of the RCAP establishes an emission limit of 0.3 lb of particulate matter per MMBtu of heat input demonstrated by the performance of a stack test during the first year of the permit.
- Sulfur content: Rule 410 of the RCAP provides for sulfur content limit in fuel. The fuel used shall not have a sulfur content of more than 0.8% by weight for unit EU-1 and 0.5% by weight for unit EU-2. The permit requires the sulfur content to be monitored daily and reported to the Board monthly.
- Opacity: As required by Rule 403 of the RCAP, the units shall not discharge visible emissions of opacity of up to 20% in 6-minutes average. The permit requires one opacity reading to each stack of each combustion turbine during the first year of the permit.

EU-3: Two fuel storage tanks: Each one with a capacity of 60,000 gallons. Tank 1 will store diesel and tank 2 will store fuel oil Num. 5. Each tank is limited to store 60,000 gallons per year and have inspections requirements. Since both tanks have a capacity greater than 75 m³ but less than 151 m³ and a vapor pressure less than 15.0 kPa (2.18 psia), they are not affected by the NSPS for Volatile Organic Liquid Storage Vessels in 40 CFR Part 60 Subpart Kb.

All the monitoring, record keeping, and reporting provisions are applicable pursuant to Rule 603 of the RCAP that requires that these elements shall be included in the Title V permit issued.

As established in Appendix B of the RCAP, HIMA provided a list of insignificant activities (onw propane storage tank, two electric dryers, and a wood shop) because of size or production rate.

EQB found that Hospital Interamericano de Medicina Avanzada H/N/C HIMA satisfies the requirements of Part VI of the RCAP.