

**GUAM EPA  
TITLE V OPERATING PERMIT  
STATEMENT OF BASIS**

**Naval Facilities Engineering Command Marianas  
Finegayan, SIC Code 49**

**Permit No. FO-015A**

Facility ID: FO-015

Facility Name: Naval Facilities Engineering Command Marianas, Finegayan,  
SIC Code 49

Mailing Address: PSC 455, Box 195  
FPO AP, Guam 96540

Responsible Official: NAVFAC Marianas Commanding Officer  
Title: Commanding Officer  
Phone Number: (671) 339-5100

Contact Name: Refer to Updated Inventory Spreadsheet for pertinent info.  
Title:  
Phone Number:

Person Responsible for Recordkeeping: Refer to Updated Inventory Spreadsheet for pertinent info.  
Title:  
Phone Number:

**I. Purpose**

The purpose of this engineering evaluation is to identify all applicable requirements, determine if the facility will comply with those applicable requirements, and provide the legal and factual basis for proposed permit conditions.

**II. Facility Location**

Naval Facilities Engineering Command Marianas, Finegayan facility is located at Bldg. 115, Jackson St., NCTS, Guam.

**III. Description of Facility Operations**

The facility consists of two hot water and/or steam producing boilers and three emergency generators.

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**IV. Equipment Listing and Permitting History****IV.A. Significant Emission Units**

A listing of all permitted equipment at the facility is presented in the table below. This table also includes the Guam EPA (GEPA) permit number for those emission units with existing permits. The conditions from these permits have been incorporated into the Title V permit, which supercedes the existing GEPA permits.

<b>Emission Unit Number</b>	<b>Unit Description</b>	<b>Associated Control Equipment</b>	<b>Guam EPA Permit Number</b>
212	5.23 million British thermal units per hour (MMBtu/hr) diesel-fired boiler	N/A	NHP-736
213	5.23 MMBtu/hr diesel-fired boiler	N/A	NHP-736
218	2,500 kilowatt (kW) diesel-fired emergency generator	N/A	NSG-374
219	2,500 kW diesel-fired emergency generator	N/A	NSG-374
220	2,500 kW diesel-fired emergency generator	N/A	NSG-374

**IV.B. Insignificant Emission Units**

According to the permit application provided by the applicant there are no insignificant activities at the facility.

**V. Potential to Emit**

The annual potential to emit for each significant emission unit is presented below.

<b>Emission Unit</b>	<b>Potential to Emit (tons/year)</b>						
	<b>NO<sub>x</sub></b>	<b>CO</b>	<b>SO<sub>2</sub></b>	<b>PM<sub>10</sub></b>	<b>VOC</b>	<b>Lead</b>	<b>HAPs</b>
ID 212	3.24	0.81	23.00	0.32	9.01E-02	2.04E-04	1.28E-02
ID 213	3.24	0.81	23.00	0.32	9.01E-02	2.04E-04	1.28E-02
ID 218	60.30	13.80	20.30	1.76	1.77	0	2.63E-02
ID 219	60.30	13.80	20.30	1.76	1.77	0	2.63E-02
ID 220	60.30	13.80	20.30	1.76	1.77	0	2.63E-02
<b>TOTAL</b>	<b>187.38</b>	<b>43.02</b>	<b>106.90</b>	<b>5.93</b>	<b>5.49</b>	<b>4.08E-04</b>	<b>0.10</b>

**VI. Guam Requirements**

The following table lists the applicable requirements from the Guam Air Pollution Control Standards and Regulations (GAPCSR) and from the approved Guam State

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Implementation Plan (SIP). For rules where an applicability determination was required, a discussion is included below.

Section 1103.2	Guam Ambient Air Quality Standards
Section 1103.3	Visible Emissions
Section 1103.4	Fugitive Dust
Section 1103.10	Sulfur Oxides from Fuel Combustion
Section 1103.11	Open Burning
Section 1103.12	Control of Odors in Ambient Air
Section 1103.13	Asbestos
Section 1104	Permit Program Regulations
SIP, Section 7.5	Particulate Emissions from Fuel Combustion

**VI.A. Particulate Matter (PM) Limits for Fuel Burning Equipment**

Appendix E Chapter 7.5 of the GEPA SIP requires that for fuel burning equipment between 1 MMBtu/hr and 1,000 MMBtu/hr in size, the allowable particulate emissions shall be calculated using the following equation:

$$Y = 1.02 X^{-0.231}$$

Where:

Y = Allowable particulate emission rate (lb/MMBtu)

X = Operating rate (MMBtu/hr)

The two boilers (Units 212 and 213) and three emergency generators (Units 218, 219, and 220) are subject to this limit. The allowable PM emission rate for each unit must be determined by the permittee depending on the operating load for each unit.

**VII. Federal Requirements**

The following table lists the applicable requirements from United States Environmental Protection Agency (USEPA) regulations. For rules where an applicability determination was required, a discussion is included below.

40 CFR Part 61, Subpart M	Asbestos
40 CFR Part 69	Special Exemptions

**VII.A. New Source Performance Standards (NSPS)**

Each boiler at the facility has a maximum design heat input rating below the 10 MMBtu/hr threshold for boilers subject to NSPS subpart Dc (40 CFR Part 60, Sections 60.40c to 60.48c).

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The diesel engines at the facility were commissioned prior to June 11, 2005 and are not subject to regulations pursuant to NSPS for stationary compression ignition internal combustion engines (71 FR 39154).

**VII.B. Compliance Assurance Monitoring (CAM)**

Compliance Assurance Monitoring (CAM) is intended to provide a reasonable assurance of compliance with applicable requirements for large emission units that rely on pollution control device equipment to achieve compliance. The CAM regulations can be found in 40 CFR Part 64. CAM applicability is determined on a pollutant-specific basis.

According to these regulations, an emission unit that meets all of the following criteria is subject to CAM:

1. The unit is located at major source required to obtain Part 70 or 71 permit;
2. The unit is subject to an emission limitation for the applicable pollutant;
3. The unit uses a control device (as defined by 40 CFR 64.1) to achieve compliance;
4. The potential precontrolled emissions of an applicable pollutant from the unit are equal to or greater than the major source threshold for that pollutant; and
5. The unit is not otherwise exempted by the CAM regulations.

Regarding the first requirement, the CAM rule (in 40 CFR 64.1) states that “*Part 70 or 71 permit* shall have the same meaning as provided under [40 CFR 70 or 71] provided that it shall also refer to a permit issued, renewed, amended, revised, or modified under any federal permit program promulgated under Title V [of the Clean Air] Act.”

After receiving a special exemption from USEPA, GEPA has adopted an “alternate operating permit program” according to the requirements of 40 CFR 69.13. As a result, it was not immediately clear whether this program satisfied the definition in the CAM rule.

USEPA Region 9 was consulted on this matter, and made a determination that GEPA’s alternate operating permit program was promulgated under Title V of the Clean Air Act, so facilities located on Guam are potentially subject to CAM.

Emissions from the diesel-fired boilers (Units 212 and 213) and the emergency generators (Units 218, 219, and 220) at the facility are not controlled and are less than all of the major source thresholds.

**Conclusion:** None of the emission units at the facility are subject to CAM.

**VIII. Periodic Monitoring and Recordkeeping**

Requirement	Requirement Condition #	Existing Monitoring/ Recordkeeping	Monitoring/ Recordkeeping Added to Permit	Monitoring/ Recordkeeping Condition #
PM emission limit for boilers and emergency generators	II.B.1.a		Opacity monitoring	II.D.6
Opacity limits for boilers and emergency generators	II.B.1.b		Opacity monitoring	II.D.6
Preventative maintenance for boilers and emergency generators	II.C.1		Maintenance recordkeeping	II.E.5
Fuel sulfur content limit for boilers	II.C.2	Fuel sulfur content recordkeeping		II.E.2
Fuel sulfur content limit for emergency generators	II.C.3	Fuel sulfur content recordkeeping		II.E.2
Limitations on emergency generator operation	II.C.4		Hours of operation recordkeeping	II.E.3
Reasonable precautions against airborne fugitive dust	II.C.5	None		N/A
Fugitive dust discharge limitations	II.C.6	None		N/A

**IX. Streamlining Applicable Requirements:**

Consistent with USEPA policy, overlapping or redundant requirements may be streamlined when these are incorporated in a Title V permit. In this process, the most stringent of the overlapping requirements is determined and included in the Title V permit (while the source of authority for this condition lists all related requirements, including those that have been streamlined). Streamlining allows the permit conditions to be listed in a clear and concise manner while ensuring compliance with all applicable requirements. The following section contains a description of streamlining that has been performed in this permit.

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**Condition II.C.2 – Fuel Oil Sulfur Content Limitation for Boilers**

GEPA Permit NHP-736 states that the fuel oil used in the diesel-fired boilers (Units 212 and 213) shall not exceed 1% sulfur content (maximum) by weight at any time and the average over the past twelve month period (including the last month reading) shall not exceed 1.0% sulfur content by weight. GAPCSR Section 1103.10 states that no person shall burn fossil fuel containing in excess of 2.0% sulfur by weight. Since the requirement in the GEPA permit is more stringent, the 1.0% sulfur limit was included in the permit.