



AHENSIAN PRUTEKSION LINA'LA GUÅHAN

LOURDES A. LEON GUERRERO, GOVERNOR OF GUAM • JOSHUA F. TENORIO, LIEUTENANT GOVERNOR OF GUAM  
WALTER S. LEON GUERRERO, ADMINISTRATOR

**IN THE MATTER OF GRANTING A  
WATER QUALITY CERTIFICATION TO  
Guam Power Authority for USEPA NPDES  
PERMIT No. GU0020001**

) **WQC ORDER #1907-05**  
) Cabras Power Plant; USEPA NPDES  
) PERMIT No. GU0020001  
) Route 11 Cabras Island,  
) Piti, Guam 96915

TO: John M. Benavente, P.E.  
General Manager  
Guam Power Authority  
Ste. 100, GBNPSB, 688 Route 15  
Mangilao, Guam 96913-6203

Contact Person: Norbert Madrazo, Engineering Supervisor – Planning and Regulatory Section

On, August 13, 2019, the United States Environmental Protection Agency (EPA) requested a Clean Water Act Section 401 Water Quality Certification (WQC), in support of the Guam Power Authority's (GPA) application for the renewal of its National Pollutant Discharge Elimination System (NPDES) permit (#GU0020001), to authorize the discharge of effluent from the Cabras Power Plant. The terms of the existing NPDES permit (issued on December 19, 2012) are beyond their expiration date and are administratively extended until the issuance of a new permit.

A public notice regarding the preliminary decision to issue a Section 401 WQC was distributed by Guam EPA pursuant to the provisions of 22 Guam Administrative Rules and Regulations §5106(i) on August 30 and 31, 2019.

## **FACILITY DESCRIPTION**

The Cabras Power Plant (the "facility") is located on Cabras Island on the west side of Guam, facing the Philippine Sea. The facility historically had four fossil-fueled electrical generating units: two steam turbine generators (Units 1 and 2), with rated output of 66 megawatts (MW) each, and two diesel engine generators (Units 3 and 4), with rated output of 39.3 MW each. In August 2015, an explosion and fire at Unit 4 resulted in damages to the unit rendering it beyond repair. Significant damage was also done to Unit 3 that rendered it inoperable. Neither Unit 3 nor Unit 4 has operated since that time. The current combined cooling water design intake flow (DIF) for Units 1 and 2 is 172.8 million gallons per day (MGD), with an actual intake flow (AIF) of 154 MGD.

All units share a common intake structure located on the Piti Canal. Cooling water for the facility is withdrawn from the open ocean and Piti Bay through the Tepungan Channel and Piti Canal. Seawater entering the cooling water intake structure passes through traveling water screen assemblies with mesh size of 3/8

inches. The design intake velocity across the traveling screens for Units 1 and 2 is approximately 2.5 feet per second.

The facility discharges into Piti Channel, which empties into Apra Harbor, which is connected to the Philippine Sea.

The permittee stated in an October 27, 2016 letter to EPA that the facility will shut down all units by December 2021. The proposed NPDES permit term coverage is five years, in case closure of the facility is delayed. However, the proposed permit also includes a reopener stating that the permit may be modified or terminated if the facility closes or ceases power generation operations.

## DESCRIPTION OF RECEIVING WATER

Piti Channel is designated as category M-3 (“Fair”). Water in this category is intended for general, commercial and industrial use, while allowing for protection of aquatic life, aesthetic enjoyment and compatible recreation with limited body contact. Specific intended uses include the following: shipping, boating and berthing, industrial cooling water, and marinas. Piti Channel was listed as assessed and not impaired in Guam EPA’s 2018 Integrated Report.

Piti Channel empties into Apra Harbor 3, a marine bay and category M-3 water body, about 0.42 square miles in size. According to the 2018 305(b) Assessment Report, available data for Apra Harbor 3 indicate that some, but not all of the designated uses are supported.

Beaches throughout Guam are listed as impaired for enterococcus. TMDLs for Guam’s northern and southern beaches were adopted in December 2013 and February 2015, respectively, and include waste load allocations (“WLAs”) for all permitted wastewater treatment facilities in Guam. For facilities discharging into M-3 waters, WLAs for Enterococcus are 35 CFU/100 mL (based upon the geometric mean of samples taken in any thirty day interval) and the Statistical Threshold Value (STV) of 130 CFU/100 (should not be exceeded more than 10 percent of the samples taken during the same thirty (30) day interval).

## AUTHORITIES

The Guam EPA Administrator is the designated issuing authority for § 401 Water Quality Certifications. (22 GAR §5106).

Guam EPA has examined NPDES Permit No. GU0020001 pursuant to applicable laws, statutes and regulations under 33 U.S.C. § 1341, 10 GCA §47109(a), 10 GCA §45106, 22 GAR §5106, and the following:

1. Conformance with applicable water quality-based, technology-based, and toxic or pretreatment effluent limitations as provided under 33 U.S.C. §§ 1311, 1312, 1316, and 1317, 1318, and 1343 (FWPCA §§ 301, 302, 303, 306, and 307)
2. Conformance with the state water quality standards contained in 22 GAR Chapter 5 and authorized by 33 U.S.C. § 1313 and by 10 GCA §45106, 10 GCA §47108, and with other applicable federal or territorial laws
3. Conformance with the provision of using all known, available and reasonable methods to prevent and control pollution of territorial waters as required by 22 GAR Chapter 10 and 10 GCA Chapter 47

## WATER QUALITY CERTIFICATION CONDITIONS

Through issuance of this Order, Guam EPA certifies it has reasonable assurance the activity under NPDES PERMIT #GU0020001 as proposed and conditioned will be conducted in a manner that will not violate applicable water quality standards and other appropriate requirements of territorial law. In view of the foregoing and in accordance with 33 U.S.C. § 1341, 10 GCA Chapter 45, 10 GCA Chapter 47, and 22 GAR Chapter 5, water quality certification is granted to the Applicant, subject to the conditions within this Order.

Section 401 water quality certification does not authorize the Applicant to exceed applicable territorial water quality standards as described in 22 GAR Chapter 5. Furthermore, nothing in this certification shall absolve the Applicant from liability for contamination and any subsequent cleanup of marine waters, fresh surface waters, ground waters, or sediments occurring as a result of project operations.

### A. General Conditions:

- A1. For purposes of this Order, the term "Applicant" shall mean Guam Power Authority (GPA) and its agents, assignees, and contractors.
- A2. All submittals required by this Order shall be sent to Guam Environmental Protection Agency's Main Office, Attn: 401 Federal Permit Manager, Non-Point Source Program, EMAS Division, 3304 Mariner Avenue, Bldg. 17-3304, Barrigada, Guam 96913, AND via email to [taryn.mesa@epa.guam.gov](mailto:taryn.mesa@epa.guam.gov) and cc: [jesse.cruz@epa.guam.gov](mailto:jesse.cruz@epa.guam.gov). The submittals shall be identified with WQC Order #1907-05 and include the Applicant name, project name, and the project contact's name and phone number.
- A3. Discharges authorized by this Order are limited to the discharges described in the following document:
  - USEPA REGION IX Draft Authorization to Discharge under: NPDES Permit No. GU0020001

The Applicant will be out of compliance with this Order and must reapply with an updated CWA §401 WQC form and an NPDES permit if the information contained in this document is voided by subsequent changes not authorized by this Order.
- A4. Within 30 days of receipt of an updated §401 Application or EIA/EIS short form, Guam EPA will determine if the revision(s) requires a new water quality certification and public notice or if a modification to this Order is required.
- A5. This Order shall be subject to amendment or modification if and to the extent that existing water quality standards are made more stringent, or new water quality standards are approved by USEPA and adopted by Guam EPA.
- A6. The applicant shall provide to Guam EPA a copy of all final and local permits within two weeks of receipt, per condition A2 above.
- A7. Copies of this Order shall be on file at the facility and readily available for reference by Guam EPA personnel, the facility superintendent, managers and lead workers, contractors, and federal and local government inspectors.

- A8. In accordance with 10 GCA Chapter 47 §47107, the Applicant shall provide prompt access to the facility and all mitigation sites, to the Administrator or his authorized representative for the purpose of inspecting the facility for compliance with this Order. The inspection may be conducted with or without advance notice to the Applicant, at the discretion of the Administrator, but shall be conducted at reasonable times unless an emergency dictates otherwise.
- A9. Guam EPA retains authority to issue additional orders if Guam EPA determines further actions are necessary to implement the water quality laws of the territory. Further, Guam EPA retains continuing jurisdiction to make modifications hereto through supplemental order if additional impacts are identified (e.g., violations of water quality standards, downstream erosion, etc.), or if additional conditions are necessary to further protect water quality.
- A10. The Applicant shall provide to Guam EPA a signed statement (see Attachment A for an example) that s/he has read and understands the conditions of this Order and any permits, plans, documents, and approvals referenced herein. The signed statement shall be submitted to Guam EPA per Condition A2 at least seven (7) days after receiving this order.
- A11. The Applicant shall ensure all facility employees, contractors, and other workers with authority to direct work have read and understand the conditions of this Order and any permits, plans, documents, and approvals referenced in the Order.
- A12. This Order does not authorize direct, indirect, permanent, or temporary impacts to waters of the territory (including wetlands) or related aquatic resources, except as specifically provided for in conditions of this Order.

**Antidegradation Review**

- A13. This discharge has been determined to be consistent with the anti-degradation policy as stated in 22GAR §5101(b).

**B. Water Quality Conditions:**

- B1. Mitigation and/or additional monitoring may be required if site inspections indicate water quality standards have not been met.

**C. Project Conditions**

**General Conditions:**

- C1. The applicant shall conduct daily inspections of facility operations and take immediate corrective actions or engineering measures to address non-compliance with water quality standards and/or environmental protection requirements and notify the Guam EPA within 24 hours from the time the applicant becomes aware of the non-compliance.
- C2. The Applicant shall within 1 year after the issuance of the Cabras Power Plant NPDES Permit meet with Guam EPA to review additional data collected to address compliance to applicable water quality standards.
- C3. The Applicant shall submit for Guam EPA approval a Sampling and Analysis Plan identifying the coordinates and locations of the sampling points for (1) the Outfall 001 Effluent Limits and

Monitoring Requirements (2) the Outfall 101 Effluent Limits and Monitoring Requirements and (3) the Monthly Receiving Water Temperature Monitoring Requirements.

- C4. The Applicant shall conduct receiving water quality monitoring, per NPDES Permit GU0020001 Part I.F., and submit quarterly results to Guam EPA as described in condition A2.
- C5. The Applicant shall conduct monthly water quality monitoring of the ponding basin which receives stormwater discharge from Cabras 1 & 2, and submit quarterly results to Guam EPA per condition A2.
- C6. The Applicant shall implement Best Judgement and Best Management Practices to prevent or minimize water quality degradation.

#### **In-Water Conditions:**

- C7. The zone of mixing for the Piti/Cabras Power Plant combined is the Piti Channel, from the power plants to a distance three hundred (300) feet back from where the channel joins the harbor proper, and from there to a depth of about one (1) meter or 3.28 feet to a line from the GORCO Pier and the Navy Fuel Pier on Dry Dock Island. [22 GAR §5104(e)(2)(C); GWQS]
- Outfall 001 – Located at 13° 27' 52.1" N, 144° 41' 12.71" E
    - Receiving water is the Piti Channel, Apra Harbor
      - GWQS classification is M-3 Fair
    - Receiving Water Monitoring will be conducted as outlined in the NPDES permit GU0020001
- C8. This Order prohibits a bypass, which is the intentional diversion of waste streams from any portion of the facility. Guam EPA may take enforcement action against the Applicant for a bypass unless it adheres to the Bypass conditions as identified in the USEPA NPDES Permit GU0020001.
- Any bypass of the treatment facility, which is not included in the effluent monitored above, is to be monitored for flow and all other parameters, except chronic whole effluent toxicity. For parameters other than flow, at least one grab sample per day shall be monitored. Daily flow shall be monitored or estimated, as appropriate, to obtain reportable data. All monitoring results shall be reported to Guam EPA.
- C9. There shall be no discharge of floating solids or visible foam in other than trace amounts.
- C10. The effluent shall not cause a visible sheen in receiving water.

#### **Emergency/Contingency Measures:**

- C11. The Applicant shall develop and implement a Spill Prevention and Containment Plan for all aspects of this project.
- C12. The Applicant shall have adequate and appropriate spill response materials on hand to respond to emergency release of effluent discharge or any other material into waters of the territory.
- C13. Overflow identification: The permittee shall identify all effluent or stormwater discharges, at locations not authorized as permitted outfalls covered by this permit. The Applicant shall submit, the

following information for each discharge event at each source that occurs during the reporting period covered by the Discharge Monitoring Report (DMR):

- The cause of the discharge;
- Duration and volume (estimate if unknown);
- Description of the source, e.g. manhole cover, pump station;
- Type of collection system that overflowed, i.e. combined or separate;
- Location by street address, or any other appropriate method;
- Date and Time of event;
- The ultimate destination of the flow, e.g. surface water body, land use location, via municipal separate storm sewer system to a surface water body, (show location on a USGS map or copy thereof); and
- Corrective actions or plans to eliminate future discharges.

C14. Any unpermitted discharge into territorial waters or onto land with a potential for entry into territorial waters, is prohibited. If this occurs, the Applicant shall immediately take the following actions:

- Cease operations at the location of the violation or spill.
- Assess the cause of the water quality problem and take appropriate measures to correct the problem and/or prevent further environmental damage.
- Notify Guam EPA of the failure to comply. All petroleum spills shall be reported immediately to:
  1. Guam's Emergency 911 system
  2. Guam EPA's 24-Hour Spill Response Team at (671) 888-6488 or during working hours (671) 300-4751
  3. US Coast Guard Sector Guam (671) 355-4824
  4. National Response Center 1-800-424-8802
- Submit a detailed written report to Guam EPA within five days of noncompliance that describes the nature of the event, corrective action taken and/or planned, steps to be taken to prevent a recurrence, results of any samples taken, and any other pertinent information.

C15. Compliance with this condition does not relieve the Applicant from responsibility to maintain continuous compliance with the terms and conditions of this Order or the resulting liability from failure to comply.

C16. Submittal or reporting of any of this information does not provide relief from any subsequent enforcement actions for unpermitted discharges to waters of the United States.

#### **D. Timing Requirements**

D1. This Order is valid for five (5) Years from Date of Certification, unless otherwise approved by the Guam EPA Administrator.

**E. Reporting and Notification Requirement Conditions**

E1. Applicant shall provide notice to Guam EPA per Condition A2:

- Immediately upon discovery of noncompliance with the provisions of this Order.

E2. A Notice of Violation/Work Stop Order will be issued if certification conditions are not adhered to or when significant or sustained water quality degradation occurs. Work or discharge shall be suspended or halted until the applicant addresses environmental problems/concerns to Guam EPA's satisfaction. Guam EPA may also levy penalties and fines (10 GCA §477111). Invalidity or enforceability of one or more provisions of this certification shall not affect any other provision of this certification.

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### APPLICANT RIGHT TO APPEAL

You have a right to appeal this Order to the Guam EPA Board of Directors, or request a hearing within 30 days of the date of receipt of this Order. Failure to appeal this Order constitutes a waiver of your right to a hearing. Any appeal will proceed pursuant to the provisions of 5 GCA Chapter 9, as provided by 22 GAR §5106(i)(7). Unless a written request for a hearing signed by or on behalf of the person named as Applicant in the accompanying order, is delivered or mailed to the agency within 30 days after this order is signed, Guam EPA may proceed upon the Notice of Intent to Appeal without a hearing. The request for hearing may be made by delivering or mailing the enclosed form entitled Notice of Intent to Appeal (Appendix B) as provided in §9205 to the address below.

To appeal you must do both of the following within 30 days of the date of receipt of this Order:

- File your appeal and a copy of this Order with the Guam EPA Board of Directors (see address below). Filing means actual receipt by the Guam EPA Board of Directors during regular business hours.
- Serve a copy of your appeal and this Order to the Administrator in paper form - by mail or in person at the address below. Email or facsimile is not accepted.

### ADDRESS INFORMATION

Guam EPA Board of Directors

3304 Mariner Avenue, Bldg. 17-3304, Barrigada, Guam 96913

### GUAM EPA CONTACT INFORMATION

Please direct all questions about this Order to:

**Taryn N. Mesa**

Biologist I, EMAS Division  
(671) 300-4784

[Taryn.mesa@epa.guam.gov](mailto:Taryn.mesa@epa.guam.gov)

OR

**Jesse T. Cruz**

EMAS Division Administrator  
(671) 300-4795

[Jesse.cruz@epa.guam.gov](mailto:Jesse.cruz@epa.guam.gov)

### SIGNATURE

\_\_\_\_\_  
**WALTER S. LEON GUERRERO**  
ADMINISTRATOR

\_\_\_\_\_  
DATE



**APPENDIX A**

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## Statement of Understanding of Water Quality Certification Conditions

Cabras Power Plant NPDES PERMIT No. GU0020001  
Guam Power Authority  
Water Quality Certification Order #1907-05

As the Applicant for the Cabras Power Plant NPDES PERMIT No. GU0020001, I have read and understand the conditions of the Guam Environmental Protection Agency 401 WQC Order #1907-05, and any permits, plans, documents, and approvals referenced in the Order.

I have and will continue to ensure that all project engineers, contractors, and other workers at the project site with authority to direct work have read and understand the conditions of this Order and any permits, plans, documents, and approvals referenced in the Order.

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Title

\_\_\_\_\_  
Phone Number

\_\_\_\_\_  
Company Name

**APPENDIX B**

DRAFT

**NOTICE OF INTENT TO APPEAL**

I, \_\_\_\_\_, have received WQC Order # \_\_\_\_\_  
dated \_\_\_\_\_, listing the Water Quality Certification Conditions for my proposed project  
\_\_\_\_\_.

I request a hearing with the Guam EPA Board of Directors. The basis for this hearing and appeal are the following:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

[Additional Sheets maybe attached if more space is required.]

Mailing address: \_\_\_\_\_  
\_\_\_\_\_  
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\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Title

\_\_\_\_\_  
Phone Number

\_\_\_\_\_  
Company Name

**GUAM EPA CASE NO. :** \_\_\_\_\_