UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

NPDES PERMIT NO. GU0000027

In compliance with the provisions of the Clean Water Act ("CWA") (Public Law 92-500, as amended, 33 U.S.C. 1251 et seq.), the following discharger is authorized to discharge from the identified facility at the outfall location(s) specified below, in accordance with the effluent limits, monitoring requirements, and other conditions set forth in this permit:

Discharger Name	Guam Power Authority Pruvient Energy Guam, Inc.
Discharger Address	P.O. Box 21029 Barrigada, GU 96921
Facility Name	Tanguisson Power Plant
Facility Location Address	Tanguisson Point Municipality of Dededo, GU 96929
Facility Rating	Major

Outfall Number	General Type of Waste Discharged	Outfall Latitude	Outfall Longitude	Receiving Water
001	Non-contact cooling water	13˚ 32' 25" N	144˚ 48' 17" E	Tanguisson Point, Philippine Sea
001A	Low Volume Wastewater	13˚ 32' 25" N	144˚ 48' 17" E	Tanguisson Point, Philippine Sea

This permit was issued on:	June 26, 2012
This permit shall become effective on:	July 1, 2012
This permit shall expire at midnight on:	June 30, 2017

In accordance with 40 CFR 122.21(d), the discharger shall submit a new application for a permit at least 180 days before the expiration date of this permit, unless permission for a date no later than the permit expiration date has been granted by the Director.

Signed this 26th day of June, 2012, for the Regional Administrator.

//s//
Nancy Woo, Acting Director
Water Division

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Part I. EFFLUENT LIMITS AND MONITORING REQUIREMENTS

A. Effluent Limits and Monitoring Requirements

1. Effluent Limits – Outfall Number 001
   During the period beginning on the effective date of this permit and ending on the expiration date of this permit, the discharger is authorized to discharge non-contact cooling sea water in compliance with the effluent limits and monitoring requirements specified in Table 1. Compliance with these requirements is monitored at Monitoring Locations 001, 001-Influent, ZOM-W-S, ZOM-W-M, ZOM-W-B, ZOM-S-S, ZOM-S-M, ZOM-S-B, Ambient-S, Ambient-M, and Ambient-B. If there is no discharge at this outfall during any one month period, then report "C" in the "No Discharge" box on the DMR form for that month.

2. Effluent Limits – Outfall Number 001A
   During the period beginning on the effective date of this permit and ending on the expiration date of this permit, the discharger is authorized to discharge low volume wastewater in compliance with the effluent limits and monitoring requirements specified in Table 2. Compliance with these requirements is monitored at Monitoring Location 001A. If there is no discharge at this outfall during any one month period, then report "C" in the "No Discharge" box on the DMR form for that month.

3. The discharge of pollutants at any point other than the outfall numbers specifically authorized in this permit is prohibited, and constitutes a violation thereof.

4. There shall be no discharge of pollutants to the receiving water that will:

   a. Cause visible floating materials, debris, oils, grease, scum, foam, or other floating matter which degrades water quality or use;

   b. Produce visible turbidity, settle to form deposits or otherwise adversely affect aquatic life;

   c. Produce objectionable color, odor or taste, directly or by chemical or biological action;

   d. Injure or be toxic or harmful to humans, animals, plants or aquatic life;

   e. Induce the growth of undesirable aquatic life.

   f. Cause a variation of pH greater than 0.5 s.u. from ambient conditions.

   g. Cause the concentration of enterococci to exceed 35 enterococci/ 100ml based upon the geometric mean of five sequential samples taken over a thirty day period or an instantaneous reading to exceed 276 enterococci/ 100ml.

   h. Cause the concentration of orthophosphate to exceed .10 mg/l.

i. Cause the concentration of nitrate-nitrogen to exceed .50 mg/l.

j. Cause the concentration of dissolved oxygen to decrease to less than seventy-five percent saturation at any time.

k. Alter the salinity more than +10% of the ambient conditions.

l. Cause concentration of suspended matter at any point to be increased more than twenty-five percent from ambient at any time or exceed 40 mg/l.

m. Cause the turbidity values at any point to exceed 1.0 NTU over ambient conditions.

n. Contain any radioactive materials at any level.

5. There shall be no discharge of polychlorinated byphenyl compounds such as those commonly used for transformer fluid.

6. Neither free available chorine nor total residual chlorine may be discharged from Outfall 001 for more than two hours in any one day

7. Samples taken in compliance with the effluent monitoring requirements specified in Part I of this permit shall be taken at the following locations:

   a. Influent samples shall be taken after the bar screens and prior to any inplant return flow and the first industrial process, where representative samples can be obtained.

   b. Effluent samples shall be taken after inplant return flows and the last treatment process and prior to mixing with the receiving water, where representative samples can be obtained.

B. Table 1. Effluent Limits and Monitoring Requirements – Outfall Number 001

Parameter	Maximum Allowable Discharge Limits				Monitoring Requirements(2)
	Concentration and Loading				
	Average Monthly	Maximum Daily	Units	Frequency	Sample Type
Temperature (Receiving Water)	(1) (3)	(1) (3)	°C	Monthly	Discrete
Temperature(7)	(1)	(1)	°C	Continuous	Metered
Flow rate	(1)	(1)	MGD	Continuous	Calculated
pH (hydrogen ion)	Within 6.5 and 8.5 at all times.		s.u.	Weekly	Discrete
Total Suspended Solids	-	20	mg/L	Monthly	Grab
Oil and grease, total recoverable	10	15	mg/L	Monthly	Grab
Chlorine, total residual (TRC) (4)	-	7.5	µg/L	Monthly	Grab
Nitrate- Nitrogen (NO_3-N)	-	0.2	mg/L	Monthly	Grab
Enterococcus	(1)	(1)	CFU/mL	Monthly	Grab
Chronic Toxicity(7)	(5)		TUc	Annually	Composite
Priority Toxic Pollutants(6)(7)	(1)	(1)	-	Annually	Grab

(1) No effluent limits are set at this time, but monitoring and reporting is required.

(2) At minimum, at least one sample per year must be taken concurrent with annual whole effluent toxicity monitoring, antifoulant application and priority pollutant scan.

(3) The water temperature shall not be changed more than 1.0˚C from ambient conditions immediately outside the thermal zone of mixing as defined in Section 5104.E.2.b. of the Guam Water Quality Standards.

See section III.F. for specific receiving water monitoring requirements associated with temperature.

(4) If no chlorination occurs at the facility during a calendar month, the permittee does not need to conduct chlorine monitoring. In this case, the permittee shall make a note that no chlorination occurred at the facility in the comment section of the DMR.

(5) See section III.D. for specific toxicity testing requirements

(6) Priority toxic pollutants listed include all those listed in 40 CFR 401.15.

(7) Temperature, whole effluent toxicity and priority toxic pollutant monitoring shall be conducted on both the effluent at Outfall 001 and the influent at 001-Influent.

C. Table 2. Effluent Limits and Monitoring Requirements – Outfall Number 001A

Parameter	Maximum Allowable Discharge Limits Concentration and Loading				Monitoring Requirements(2)
	Average Monthly	Maximum Daily	Units	Frequency	Sample Type
Flow rate	(1)	(1)	MGD	Continuous	Continuous
pH (hydrogen ion)	Within 6.5 and 8.5 at all times.		s.u.	Weekly	Discrete
Total Suspended Solids	-	20	mg/L	Monthly	Grab
Oil and grease, total recoverable	10	15	mg/L	Monthly	Grab
Nitrate- Nitrogen (NO_3-N)	-	0.2	mg/L	Monthly	Grab
Total Copper	0.02	0.02	mg/L	Monthly	Composite
Total Iron	0.05	0.05	mg/L	Monthly	Composite
Enterococcus	(1)	(1)	CFU/mL	Monthly	Grab
Chronic Toxicity	Pass(3)		TUc	Annually	Composite
Priority Toxic Pollutants(4)	(1)	(1)	-	Annually	Grab

(1) No effluent limits are set at this time, but monitoring and reporting is required.

(2) At minimum, at least one sample per year must be taken concurrent with annual whole effluent toxicity monitoring and priority pollutant scan.

(3) All chronic WET tests must be "Pass", and no test may be "Fail". "Pass" constitutes a rejection of the null hypothesis. See section III.D. for specific requirements.

(4) Priority toxic pollutants listed include all those listed in 40 CFR 401.15.

Part II. STANDARD CONDITIONS

The permittee shall comply with all EPA Region 9 Standard Conditions included in an attachment to this permit (see Attachment A).

Part III. SPECIAL CONDITIONS

A. Permit Reopener(s)

In accordance with 40 CFR 122 and 124, this permit may be modified by EPA to include effluent limits, monitoring, or other conditions to implement new regulations, including EPA-approved water quality standards; or to address new information indicating the presence of effluent toxicity or the reasonable potential for the discharge to cause or contribute to exceedances of water quality standards.

B. Twenty-four Hour Reporting of Noncompliance

1. In accordance with 40 CFR 122.41(l)(6)(i), (ii), and (iii), the following condition is expressly incorporated into this permit. The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally[1] within 24 hours from the time the permittee becomes aware of the circumstances, to EPA and Guam EPA. The permittee shall notify EPA and Guam EPA at the following telephone numbers:

   U.S. Environmental Protection Agency, Region IX
   Pacific Islands Office (CED-6)
   (415) 972-3769

   Guam Environmental Protection Agency
   Administrator
   (671) 475-1658

2. A written submission shall also be provided within five days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times; and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

[1] Oral reporting means direct contact with an EPA and GEPA staff person. If the permittee is unsuccessful in reaching a staff person, the permittee shall provide notification by 9 a.m. on the first business day following the noncompliance.

3. The following information shall be included as information which must be reported within 24 hours under this paragraph.

   a. Any unanticipated bypass which exceeds any effluent limit in the permit (see 40 CFR 122.44(g)).

   b. Any upset which exceeds any effluent limit in the permit.

   c. Violation of a maximum daily discharge limit for any of the pollutants listed by the director in the permit to be reported within 24 hours (see 40 CFR 122.44(g)).

4. The Director may waive the written report on a case-by-case basis for reports required under paragraph B.2, if the oral report has been received within 24 hours.

C. General Monitoring and Reporting

1. All monitoring shall be conducted in accordance with 40 CFR 136 test methods, unless otherwise specified in this permit. For influent and effluent analyses required in Table 1 and 2 of this permit, the permittee shall utilize 40 CFR 136 test methods with MDLs and MLs that are lower than the effluent limits in Table 1 and 2 of this permit and the water quality criteria concentrations in the National Recommended Water Quality Criteria. If all MDLs or MLs are higher than these effluent limits or criteria concentrations, then the permittee shall utilize the test method with the lowest MDL or ML. In this context, the permittee shall ensure that the laboratory utilizes a standard calibration where the lowest standard point is equal to or less than the ML. Influent and effluent analyses for metals shall measure "total recoverable metal", except as provided under 40 CFR 122.45(c).

2. As an attachment to the first DMR, the permittee shall submit, for all parameters with monitoring requirements specified in Table 1 and 2 of this permit:

   a. The test method number or title and published MDL or ML,

   b. The preparation procedure used by the laboratory,

   c. The laboratory's MDL for the test method computed in accordance with Appendix B of 40 CFR 136,

   d. The standard deviation (S) from the laboratory's MDL study,

   e. The number of replicate analyses (n) used to compute the laboratory's MDL, and

   f. The laboratory's lowest calibration standard.

   As part of each DMR submittal, the permittee shall certify that there are no changes to the laboratory's test methods, MDLs, MLs, or calibration standards. If there are any changes to the laboratory's test methods, MDLs, MLs, or calibration standards, these changes shall be summarized in an attachment to the subsequent DMR submittal.

3. The permittee shall develop a Quality Assurance ("QA") Manual for the field collection and laboratory analysis of samples. The purpose of the QA Manual is to assist in planning for the collection and analysis of samples and explaining data anomalies if they occur. At a minimum, the QA Manual shall include the following:

    a. Identification of project management and a description of the roles and responsibilities of the participants; purpose of sample collection; matrix to be sampled; the analytes or compounds being measured; applicable technical, regulatory, or program-specific action criteria; personnel qualification requirements for collecting samples;

    b. Description of sample collection procedures; equipment used; the type and number of samples to be collected including QA/Quality Control ("QC") samples; preservatives and holding times for the samples (see 40 CFR 136.3); and chain of custody procedures;

    c. Identification of the laboratory used to analyze the samples; provisions for any proficiency demonstration that will be required by the laboratory before or after contract award such as passing a performance evaluation sample; analytical method to be used; MDL and ML to be reported; required QC results to be reported (e.g., matrix spike recoveries, duplicate relative percent differences, blank contamination, laboratory control sample recoveries, surrogate spike recoveries, etc.) and acceptance criteria; and corrective actions to be taken in response to problems identified during QC checks; and

    d. Discussion of how the permittee will perform data review and reporting of results to EPA and Guam EPA and how the permittee will resolve data quality issues and identify limits on the use of data.

4. Throughout all field collection and laboratory analyses of samples, the permittee shall use the QA/QC procedures documented in their QA Manual. If samples are tested by a contract laboratory, the permittee shall ensure that the laboratory has a QA Manual on file. A copy of the permittee's QA Manual shall be retained on the permittee's premises and available for review by EPA and Guam EPA upon request. The permittee shall review its QA Manual annually and revise it, as appropriate.

5. Samples collected during each month of the reporting period must be reported on Discharge Monitoring Report forms, as follows:

    a. For a *maximum daily* permit limit or monitoring requirement when one or more samples are collected during the month, report either:

    The *maximum value*, if the maximum value of all analytical results is greater than or equal to the ML; or
    NODI (Q), if the maximum value of all analytical results is greater than or equal to the laboratory's MDL, but less than the ML; or

NODI (B), if the maximum value of all analytical results is less than the laboratory's MDL.

b. For an *average weekly* or *average monthly* permit limit or monitoring requirement when only one sample is collected during the week or month, report either:

The *maximum value*, if the maximum value of all analytical results is greater than or equal to the ML; or
NODI (Q), if the maximum value of all analytical results is greater than or equal to the laboratory's MDL, but less than the ML; or
NODI (B), if the maximum value of all analytical results is less than the laboratory's MDL.

c. For an *average weekly* or *average monthly* permit limit or monitoring requirement when more than one sample is collected during the week or month, report:

The *average value* of all analytical results where 0 (zero) is substituted for *NODI (B)* and the laboratory's MDL is substituted for *NODI (Q)*.

6. In addition to information requirements specified under 40 CFR 122.41(j)(3) (see Section V.A.1.j(3)), records of monitoring information shall include: the laboratory which performed the analyses and any comment, case narrative, or summary of results produced by the laboratory. The records should identify and discuss QA/QC analyses performed concurrently during sample analyses and whether project and 40 CFR 136 requirements were met. The summary of results must include information on initial and continuing calibration, surrogate analyses, blanks, duplicates, laboratory control samples, matrix spike and matrix spike duplicate results, and sample condition upon receipt, holding time, and preservation.

7. If flow is not metered, the permittee shall maintain a record of all documentation and methodology used to arrive at the calculated and reported discharge flow. A log of pump activity shall be included in the documentation if used in calculating the flow.

8. All monitoring results shall be submitted in such a format as to allow direct comparison with the effluent limits, monitoring requirements, and conditions of this permit. Influent and effluent monitoring results are to be reported on EPA Form 3320-1, a pre-printed Discharge Monitoring Report form ("DMR") provided by the EPA Region 9 DMR Coordinator for NPDES. DMR forms shall be submitted by the 28th day of the month following the previous quarterly reporting period. For example, the three DMR forms for January, February, and March are due on April 28th. A DMR form must be submitted for the reporting period even if there was not any discharge. If there is no discharge from the facility during the reporting period, the permittee shall submit a DMR indicating no discharge as required. Duplicate signed copies of these, and all other reports required herein, shall be submitted to

EPA and Guam EPA at the following addresses, unless otherwise specified in this permit:

Pacific Islands Office
EPA – Region IX
75 Hawthorne Street, Mail Code CED-6
San Francisco, CA 94105

Administrator
Guam EPA
P.O. Box 22439 GMF
Barrigada, GU 96921

The Discharger has the option to submit all monitoring results in the electronic reporting format approved by EPA. The Discharger may submit DMRs electronically using EPA's NetDMR application. NetDMR is a national tool for regulated Clean Water Act permittees to submit DMRs electronically via a secure Internet application to EPA. By using NetDMR, dischargers may discontinue mailing hard copy forms under 40 CFR 122.41 and 403.12.

D. Chronic Whole Effluent Toxicity (WET) Requirements

1. Monitoring Frequency

   The permittee shall conduct annual chronic toxicity tests on 24-hour composite effluent samples. Chronic toxicity test samples shall be collected for each point of discharge at the designated NPDES sampling station for the effluent (i.e., downstream from the last treatment process and any in-plant return flows) and for the influent (after the bar screens and prior to any inplant return flow and the first industrial process). During each year of the permit, a split of each sample shall be analyzed for all other monitored parameters at the minimum frequency of analysis specified by the effluent monitoring program.

2. Marine and Estuarine Species and Test Methods

   The permittee shall conduct chronic toxicity tests with the purple sea urchin, *Strongylocentrotus purpuratus* (fertilization test method 1008.0) or the tropical collector sea urchin, *Tripneustes gratilla* (Adapted by Amy Wagner, U.S. EPA Region 9 Laboratory, Richmond, CA from a method developed by George Morrison, U.S. EPA Naragansett, RI and Diance Nacci, Science Applications International Coporation, ORD Naragansett RI, 1998)

3. Quality Assurance

   a. Quality assurance measures, instructions, and other recommendations and requirements are found in the chronic test methods manual previously referenced. Additional requirements are specified below.

b. This discharge is subject to a determination of "Pass" or "Fail" from a single-effluent concentration chronic toxicity test at the Instream Waste Concentration (IWC) (for statistical flowchart and procedures, see *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document*, Appendix A, Figure A-1). The chronic IWC for this discharge is 100 percent effluent.

c. Effluent dilution water and control water should be prepared and used as specified in the test methods manual *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms* (EPA/600/R-95/136, 1995) and, for the inland silverside, *Menidia beryllina*, *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms* (EPA/821/R-02/014, 2002). If the dilution water is different from test organism culture water, then a second control using culture water shall also be used. If the use of artificial sea salts is considered provisional in the test method, then artificial sea salts shall not be used to increase the salinity of the effluent sample prior to toxicity testing without written approval by the permitting authority.

d. If organisms are not cultured in-house, then concurrent testing with a reference toxicant shall be conducted. If organisms are cultured in-house, then monthly reference toxicant testing is sufficient. Reference toxicant tests and effluent toxicity tests shall be conducted using the same test conditions (e.g., same test duration, etc.).

e. All multi-concentration reference toxicant test results must be reviewed and reported according to EPA guidance on the evaluation of concentration-response relationships found in *Method Guidance and Recommendations for Whole Effluent Toxicity (WET) Testing (40 CFR 136)* (EPA 821-B-00-004, 2000).

f. If either the reference toxicant or effluent toxicity tests do not meet all test acceptability criteria in the test methods manual, then the permittee shall resample and retest within 14 days.

g. If the discharged effluent is chlorinated, then chlorine shall not be removed from the effluent sample prior to toxicity testing without written approval by the permitting authority.

h. pH drift during a toxicity test may contribute to artifactual toxicity when pH-dependent toxicants (e.g., ammonia, metals) are present in the effluent. To determine whether or not pH drift is contributing to artifactual toxicity, the permittee shall conduct three sets of side-by-side toxicity tests in which the pH of one treatment is controlled at the pH of the effluent while the pH of the other treatment is not controlled, as described in Section 11.3.6.1 of *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* (EPA/821/R-02/013, 2002). Toxicity is confirmed to be artifactual and due to pH drift when no toxicity above the chronic WET

permit limit or trigger is observed in the treatments controlled at the pH of the effluent. Upon this confirmation and following written approval by the permitting authority, the permittee may use the procedures outlined in Section 11.3.6.2 of the chronic freshwater test methods manual to control effluent sample pH during the toxicity test.

4. Initial Investigation TRE Work Plan

   Within 90 days of the permit effective date, the permittee shall prepare and submit to the permitting authority a copy of its Initial Investigation Toxicity Reduction Evaluation (TRE) Work Plan (1-2 pages) for review. This plan shall include steps the permittee intends to follow if toxicity is measured above the chronic WET permit limit or trigger and should include the following, at minimum:

   a. A description of the investigation and evaluation techniques that would be used to identify potential causes and sources of toxicity, effluent variability, and treatment system efficiency.

   b. A description of methods for maximizing in-house treatment system efficiency, good housekeeping practices, and a list of all chemicals used in operations at the facility.

   c. If a Toxicity Identification Evaluation (TIE) is necessary, an indication of who would conduct the TIEs (i.e., an in-house expert or outside contractor).

5. Special Toxicity Study

   Within 45 days of the permit effective date, the permittee shall conduct toxicity testing at 001, 001A and 001-Influent along with a priority pollutant scan for all three monitoring locations. The permittee shall submit the results of the testing as part of the TRE Work Plan submission. The submission shall identify potential sources of toxicity. If it is determined that the toxicity is likely attributed to influent toxicity, the permittee shall identify any pollutants in the influent that may be the source of toxicity.

   As a result of the TRE prepared in Section 4, above, the permittee may be required to conduct further investigation into the sources of toxicity. If toxicity may be attributed to anything other than the influent, the permittee may have to initiate the TRE/TIE process, below.

6. Accelerated Toxicity Testing and TRE/TIE Process

   a. If EPA determines an evaluation other than the Special Toxicity Study, mentioned above, is necessary, the permittee shall initiate a TRE using, according to the type of treatment facility, EPA manual *Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants* (EPA/833/B-99/002, 1999) or EPA manual *Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations* (EPA/600/2-88/070, 1989). In

conjunction, the permittee shall develop and implement a Detailed TRE Work Plan which shall include the following: further actions undertaken by the permittee to investigate, identify, and correct the causes of toxicity; actions the permittee will take to mitigate the effects of the discharge and prevent the recurrence of toxicity; and a schedule for these actions.

b. The permittee may initiate a TIE as part of a TRE to identify the causes of toxicity using the same species and test method and, as guidance, EPA manuals: *Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures* (EPA/600/6-91/003, 1991); *Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity* (EPA/600/R-92/080, 1993); *Methods for Aquatic Toxicity Identification Evaluations, Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity* (EPA/600/R-92/081, 1993); and *Marine Toxicity Identification Evaluation (TIE): Phase I Guidance Document* (EPA/600/R-96-054, 1996).

7. Reporting of Chronic Toxicity Monitoring Results

a. The permittee shall submit a full laboratory report for all toxicity testing as an attachment to the DMR for the month in which the toxicity test was conducted. The laboratory report shall contain: the toxicity test results; the dates of sample collection and initiation of each toxicity test; all results for effluent parameters monitored concurrently with the toxicity test(s); and progress reports on TRE/TIE investigations.

b. The permittee shall provide the actual test endpoint responses for the control (i.e., the control mean) and the IWC (i.e., the IWC mean) for each toxicity test to facilitate the review of test results and determination of reasonable potential for chronic WET by the permitting authority.

c. The permittee shall notify the permitting authority in writing within 14 days of exceedance of the chronic WET permit limit or trigger. This notification shall describe actions the permittee has taken or will take to investigate, identify, and correct the causes of toxicity; the status of actions required by this permit; and schedule for actions not yet completed; or reason(s) that no action has been taken.

8. Permit Reopener for Chronic Toxicity

In accordance with 40 CFR Parts 122 and 124, this permit may be modified to include effluent limitations or permit conditions to address chronic toxicity in the effluent or receiving waterbody, as a result of the discharge; or to implement new, revised, or newly interpreted water quality standards applicable to chronic toxicity.

E. Anti-Fouling Reporting Requirements

The permittee shall keep a log of any and all biocides, chemicals and chlorine usage for anti-fouling purposes for their once-through cooling system. The log shall identify:

1. Date, time and duration of application.

2. List and volume of chemicals used in anti-fouling.

3. Whether an NPDES effluent sample was taken during chemical application.

The permittee shall submit an annual summary of the log and chemicals applied to the cooling water to EPA along with their fourth quarter of DMR's as described in Section III.C.8., above. Additionally, the permittee shall retain copies of the log for up to five years which shall be made available to EPA upon request or inspection.

F. Receiving Water Monitoring

The permittee shall conduct monthly monitoring of the receiving water temperate at two receiving water reference stations, one located immediately to the west and one immediately to the south of the "thermal zone of mixing" establish in section 5104.E.2.b. of the Guam Water Quality Standards, and at a third ambient location located to the north of the intake channel. Three discrete samples shall be taken at each location; one at the surface, one at mid-depth, and one at the bottom. The nine sample points are described in the table 3 below:

Table 3. Receiving Water Temperature Monitoring Points

Depth	Immediately West of Zone of Mixing	Immediately South of Zone of Mixing	Ambient
Surface	**ZOM-W-S**	**ZOM-S-S**	**Ambient-S**
Mid-Depth	**ZOM-W-M**	**ZOM-S-M**	**Ambient-M**
Bottom	**ZOM-W-B**	**ZOM-S-B**	**Ambient-B**

Temperatures from both ZOM-W and ZOM-S shall not be greater than 1 °C above the comparable ambient reference temperature.

The permittee shall submit the coordinates (latitude and longitude) of the three locations and depth of each monitoring point in Table 3, above, to EPA along with the first submittal of quarterly DMR's under the issued permit as described in Section III.C.8., above.

G. Cooling Water Intake Requirements

In order to maintain a cooling water intake structure ("CWIS") demonstrating best technology available, the permittee shall:

1. Not exceed an instantaneous maximum intake velocity of 0.93 feet/second in the intake channel.

2. Minimize flow intake volume to only that which is necessary to satisfy electrical demand.

3. Regularly maintain traveling screens and other equipment and areas associated with the CWIS to ensure design performance. The permittee shall develop, regularly update and implement a CWIS maintenance manual. The manual shall include:

   a. All Standard Operating Procedures associated with CWIS maintenance.

   b. Schedule of procedures identified above necessary to ensure design performance.

   c. A running log of maintenance activities performed on the CWIS dating back at least two years, beginning at the effective date of this permit.

   The manual shall be kept on-site and available upon request by EPA or Guam EPA.

4. Comply with all requirements established by the final 316(b) Phase II rule once effective.

H. Good House Keeping Practices

Standard Operational Procedures (SOPs) for the facility shall be evaluated and updated at least once every five years. The SOPs shall, at a minimum, describe training and/or certification requirements for facility staff to operate and maintain equipment with an emphasis on the application, storage, and handling of hazardous chemicals.

Part IV. Best Management Practices and Pollution Prevention

The permittee is not authorized to discharge storm water directly to the receiving water or any other Water of the U.S. All storm water generated at the facility must be disposed of on-site according to the Best Management Practices Plan (BMPP). If on-site disposal is not feasible, the permittee shall apply separately for NPDES coverage of their stormwater discharge.

The permittee shall develop and implement a BMPP. The BMPP shall include the following elements in order to prevent the contamination of storm water originating at the facility.

A signed copy of the permittee's updated BMPP shall be submitted to EPA within 6 months after the effective date of this permit to the address in Section III.C.8., above.

A. Contents of the BMPP.

The BMPP must contain the following elements:

1. Stormwater Pollution Prevention Team

   The permittee shall identify staff members (by name or title) that comprise the stormwater pollution prevention team ("the team") as well as their individual responsibilities. The team is responsible for assisting the facility manager in developing and revising the facility's BMPP as well as maintaining control measures and taking corrective actions where required. Each member of the team shall have ready access to either an electronic or paper copy of applicable portions of this permit and the facility's BMPP.

2. Site Description

   The BMPP shall include the following:

   a. Activities at the facility: a description of the nature of the industrial activities at the facility.

   b. General location map: a general location map (e.g., U.S. Geological Survey quadrangle map) with enough detail to identify the location of the facility and receiving waters for all stormwater discharge.

   c. Site map: a map showing:

      i. The size of the property in acres;

      ii. The location and extent of significant structures and impervious surfaces;

      iii. Directions of stormwater flow (using arrows);

      iv. Locations of all receiving waters in the immediate vicinity of the facility, indicating if any of the waters are impaired and, if so, whether the waters have TMDLs established for them;

      v. Locations of all stormwater conveyances including ditches, pipes, and swales;

      vi. Locations of potential pollutant sources identified under 3.b., below.

      vii. Locations where significant spills or leaks identified under 3.c., below, have occurred;

      viii. Locations of all stormwater monitoring points;

      ix. Locations of stormwater inlets and outfalls;

x. Municipal separate storm sewer systems, where stormwater discharges to them.

xi. Locations and descriptions of all non-stormwater discharges.

xii. Locations of the following activities where such activities are exposed to precipitation:

- Fueling stations;
- Vehicle and equipment maintenance and/or cleaning areas;
- Loading/unloading areas;
- Locations used for the treatment, storage, or disposal of wastes;
- Liquid storage tanks;
- Processing and storage areas;
- Immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility.
- Transfer area for substances in bulk; and
- Machinery; and

xiii. Locations and source of run-on to the facility site from adjacent property that contains significant quantities of pollutants.

3. Summary of Potential Pollutant Sources

The permittee shall document areas where industrial materials or activities are exposed to stormwater and from which allowable non-stormwater discharges are released. *Industrial materials or activities* include, but are not limited to: material handling equipment or activities; industrial machinery; raw materials; industrial production and processes; and intermediate products, by-products, final products, and waste products. *Material handling activities* include, but are not limited to: the storage, loading and unloading, transportation, disposal, or conveyance of any raw material, intermediate product, final product or waste product. For each area identified, the description must include:

a. Activities in the area.

A list of the industrial activities exposed to stormwater (e.g., material storage; equipment fueling, maintenance, and cleaning; cutting steel beams).

b. Pollutants.
A list of all the pollutant(s) or pollutant constituents (e.g. crankcase oil, zinc, sulfuric acid, and cleaning solvents) associated with each identified activity. The pollutant list shall include all significant materials that have been handled,

treated, stored, or disposed, and that have been exposed to stormwater in the three years prior to the date the permittee prepares or amends the BMPP.

c. Spills and Leaks.

The permittee shall document where potential spills and leaks could occur that could contribute pollutants to stormwater discharges, and the corresponding outfall that would be affected by such spills and leaks. The permittee shall document all significant spills and leaks of oil or toxic or hazardous pollutants that actually occurred at exposed areas, or that drained to a stormwater conveyance, in the three years prior to the date the permittee prepares or amends the BMPP.

d. Non-stormwater discharges

The permittee shall document that they have evaluated for the presence of non-stormwater discharges and that all unauthorized discharges have been eliminated. Documentation of the evaluation must include:

i. The date of the evaluation;

ii. A description of the evaluation criteria used;

iii. A list of the outfall(s) or onsite drainage points that were directly observed during the evaluation.

iv. The different types of non-stormwater discharge(s) and source locations; and

v. The action(s) taken, such as a list of control measures used to eliminate unauthorized discharge(s), if any were identified.

e. Salt Storage

The permittee shall document the location of any storage piles containing salt used for commercial or industrial purposes.

f. Sampling Data

The permittee shall summarize all stormwater discharge sampling data collected at the facility during the previous permit term.

4. Description of Control Measures to Meet Water Quality-Based Effluent Limits

The permittee shall document the location and type of control measures installed and implemented at the facility to achieve the non-numeric effluent limits in Part I.A.5.

of this permit. This documentation shall describe how the control measures at the facility address both the pollutant sources identified in section 2, above, and any stormwater run-on that commingles with any discharges covered under this permit.

5. Schedules and Procedures

   a. Pertaining to Control Measures Used to Comply with Effluent Limits.

      The following shall be documented in the BMPP:

      i. Good Housekeeping: A schedule for regular pickup and disposal of waste materials, along with routine inspections for leaks and conditions of drums, tanks and containers;

      ii. Maintenance: Preventative maintenance procedures, including regular inspections, testing, maintenance, and repair of all industrial equipment and systems, and control measures, to avoid situations that may result in leaks, spills, and other releases, and any back-up practices in place should a runoff event occur while a control measure is off-line;

      iii. Spill Prevention and Response Procedures: Procedures for preventing and responding to spills and leaks. The permittee may reference the existence of other plans for Spill Prevention Control and Countermeasure (SPCC) developed for the facility under Section 311 of the CWA provided that the permittee keep a copy of that other plan onsite and make it available for review.

      iv. Employee Training: A schedule for all types of necessary training.

   b. Pertaining to Monitoring and Inspection.

      The permittee shall document in the BMPP procedures for performing, as appropriate, three types of inspections, including:

      i. Routine facility inspections;

      ii. Quarterly visual assessment of stormwater discharge; and

      iii. Comprehensive site inspections.

      For each type of inspection performed, the BMPP must identify:

      i. Person(s) or positions of person(s) responsible for inspection.

      ii. Schedules for conducting inspections, including tentative schedule for facilities in climates with irregular stormwater runoff discharges; and

iii. Specific items to be covered by the inspection.

6. Signature Requirements

   The permittee shall have the BMPP signed and dated by either a principal executive officer or ranking elected official.

7. Wastewater and Washwater Requirements

   The permittee shall keep a copy of this NPDES Permit with the BMPP.

B. Required BMPP Modifications.

The permittee shall modify the BMPP whenever necessary to address any instances of violation to this permit due to storm water to ensure that they do not reoccur.

C. BMPP Availability.

The permittee shall retain a copy of the current BMPP required by the permit at the facility, and it shall be immediately available to EPA; Guam EPA, the operator of an MS4 receiving discharges from the site; and representatives of the U.S. Fish and Wildlife Service (USFWS) or the National Marine Fisheries Service (NMFS). EPA may provide access to portions of the BMPP to a member of the public upon request. Confidential Business Information (CBI) may be withheld from the public, but may not be withheld from those staff cleared for CBI review within EPA, USFWS, or NMFS.

EPA encourages the permittee to post its BMPP online.

D. Additional Documentation Requirements.

The permittee shall keep the following inspection, monitoring and certification records with the BMPP that together keep records complete and up-to-date, and demonstrate a full compliance with the conditions of this permit:

1. A copy of this NPDES permit;

2. Descriptions and dates of any incidents of significant spills, leaks, or other releases that resulted in discharges of pollutants to waters of the U.S., through stormwater or otherwise; the circumstances leading to the release and actions taken in response to the release; and measures taken to prevent the recurrence of such releases;

3. Records of employee training, including date training received;

4. Documentation of maintenance and repairs of control measures, including the date(s) of regular maintenance, date(s) of discovery of areas in need of

repair/replacement, and for repairs, date(s) that the control measure(s) returned to full function, and the justification for any extended maintenance/repair schedules;

5. All inspection reports, including the Routine Facility Inspection Reports, the Quarterly Visual Assessment Reports, and the Comprehensive Site Inspection Reports;

6. Description of any corrective action taken at the site, including triggering event and dates when problems were discovered and modifications occurred;

Part V. ATTACHMENTS

Attachment A: Standard Permit Conditions

A. All NPDES Permits

1. In accordance with 40 CFR 122.41, the following conditions apply to all NPDES permits and are expressly incorporated into this permit.

   a. Duty to comply; at 40 CFR 122.41(a).

   The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the CWA and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

   Penalties for Violations of Permit Conditions: The Director will adjust the civil and administrative penalties listed below in accordance with the Civil Monetary Penalty Inflation Adjustment Rule (61 FR 252, December 31, 1996, pp. 69359-69366, as corrected in 62 FR 54, March 20, 1997, pp. 13514-13517) as mandated by the Debt Collection Improvement Act of 1996 for inflation on a periodic basis. This rule allows EPA's penalties to keep pace with inflation. The Agency is required to review its penalties at least once every 4 years thereafter and to adjust them as necessary for inflation according to a specified formula. The civil and administrative penalties following were adjusted for inflation starting in 1996.

   (1) The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use or disposal established under 405(d) of the CWA within the time provided in the regulations that established these standards or prohibitions or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.

   (2) The CWA provides that any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not to exceed $25,000 per day for each violation. The CWA provides that any person who *negligently* violates sections 301, 302, 306, 307, 308, 318, or 405 of the Act, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, or any requirement imposed in a pretreatment program approved under 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of $2,500 to $25,000 per day of violation, or imprisonment of not more than 1 year, or both. In the case of a second or

subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than $50,000 per day of violation, or by imprisonment of not more than 2 years, or both. Any person who *knowingly* violates such sections, or such conditions or limitations is subject to criminal penalties of $5,000 to $50,000 per day of violation, or imprisonment for not more than 3 years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than $100,000 per day of violation, or imprisonment of not more than 6 years, or both. Any person who knowingly violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than $250,000 or imprisonment of not more than 15 years, or both. In the case of second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than $500,000 or by imprisonment of not more than 30 years, or both. An organization, such as defined in section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than $1,000,000 and can be fined up to $2,000,000 for second or subsequent convictions.

(3) Any person may be assessed an administrative penalty by the Administrator for violating section 301, 302, 306, 307, 308, 318 or 405 of this Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402 of this Act. Administrative penalties for Class I violations are not to exceed $10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed $25,000. Penalties for Class II violations are not to exceed $10,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed $125,000.

b. Duty to reapply; at 40 CFR 122.41(b).
If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit.

c. Need to halt or reduce activity not a defense; at 40 CFR 122.41(c).
It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

d. Duty to mitigate; at 40 CFR 122.41(d).
The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

e. Proper operation and maintenance; at 40 CFR 122.41(e).
The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

f. Permit actions; at 40 CFR 122.41(f).
This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

g. Property rights; at 40 CFR 122.41(g).
This permit does not convey any property rights of any sort, or any exclusive privilege.

h. Duty to provide information; at 40 CFR 122.41(h).
The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to the Director upon request, copies of records required to be kept by this permit.

i. Inspection and entry; at 40 CFR 122.41(i).
The permittee shall allow the Director, or an authorized representative (including an authorized contractor acting as a representative of the Administrator), upon presentation of credentials and other documents as may be required by law, to:

(1) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

(2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(3) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

(4) Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the CWA, any substances or parameters at any location.

j. Monitoring and records; at 40 CFR 122.41(j).

(1) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

(2) Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR part 503), the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample measurement, report or application. This period may be extended by request of the Director at any time.

(3) Records of monitoring information shall include:

(i) The date, exact place, and time of sampling or measurements;

(ii) The individual(s) who performed the sampling or measurements;

(iii) The date(s) analyses were performed

(iv) The individuals(s) who performed the analyses;

(v) The analytical techniques or methods used; and

(vi) The results of such analyses.

(4) Monitoring must be conducted according to test procedures approved under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in 40 CFR part 503, unless other test procedures have been specified in the permit.

(5) The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than $20,000 per day of violation, or by imprisonment of not more than 4 years, or both.

k. Signatory requirement; at 40 CFR 122.41(k).

(1) All applications, reports, or information submitted to the Director shall be signed and certified. (See 40 CFR 122.22.)

(2) The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

l. Reporting requirements; at 40 CFR 122.41(l).

(1) Planned changes. The permittee shall give notice to the Director as soon as possible of any planned physical alternations or additions to the permitted facility. Notice is required only when:

(i) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b); or

(ii) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under 40 CFR 122.42(a)(1).

(iii) The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, an such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan;

(2) Anticipated noncompliance. The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

(3) Transfers. This permit is not transferable to any person except after notice to the Director. The Director may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the CWA. (See 40 CFR 122.61; in some cases, modification or revocation and reissuance is mandatory.)

(4) Monitoring reports. Monitoring results shall be reported at the intervals specified elsewhere in this permit.

(i) Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by the Director for reporting results of monitoring of sludge use or disposal practices.

(ii) If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR part 136 or, in the case of sludge use or disposal, approved under 40 CFR part 503, or as specified in the permit, the results of such monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Director.

(iii) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Director in the permit.

(5) Compliance schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

(6) Twenty-four hour reporting.

(i) The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

(ii) The following shall be included as information which must be reported within 24 hours under this paragraph.

(A) Any unanticipated bypass which exceeds any effluent limitation in the permit. (See 40 CFR 122.41(g).)

(B) Any upset which exceeds any effluent limitation in the permit.

(C) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Director in the permit to be reported within 24 hours. (See 40 CFR 122.44(g).)

(iii) The Director may waive the written report on a case-by-case basis for reports under 40 CFR 122.41(l)(6)(ii) of this section if the oral report has been received within 24 hours.

(7) Other noncompliance. The permittee shall report all instances of noncompliance not reported under 40 CFR 122.41(l)(4), (5), and (6) of this

section, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph (l)(6) of this section.

(8) Other information. Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information.

m. Bypass; at 40 CFR 122.41(m).

(1) Definitions.

(i) "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.

(ii) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

(2) Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs 40 CFR 122.41(m)(3) and (m)(4) of this section.

(3) Notice.

(i) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.

(ii) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in paragraph (l)(6) of this section (24-hour notice).

(4) Prohibition of bypass.

(i) Bypass is prohibited, and the Director may take enforcement action against a permittee for bypass, unless:

(A) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

(B) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or

maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance; and

(C) The permittee submitted notices as required under paragraph (m)(3) of this section.

(ii) The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed above in paragraph (m)(4)(i) of this section.

n. Upset; at 40 CFR 122.41(n).

(1) Definition. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent cause by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation.

(2) Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph (n)(3) of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

(3) Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

(i) An upset occurred and that the permittee can identify the cause(s) of the upset;

(ii) The permitted facility was at the time being properly operated; and

(iii) The permittee submitted notice of the upset as required in paragraph (l)(6)(ii)(B) of this section (24 hour notice).

(iv) The permittee complied with any remedial measures required under paragraph (d) of this section.

(4) Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

B. Standard Conditions Established by EPA Region 9 for All NPDES Permits

1. Duty to reapply; at 40 CFR 122.21(d).

   a. Any POTW with a currently effective permit shall submit a new application at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Director. (The Director shall not grant permission for applications to be submitted later than the expiration date of the existing permit.)

   b. All other permittees with currently effective permits shall submit a new application 180 days before the existing permit expires, except that:

      (1) the Regional Administrator may grant permission to submit an application later than the deadline for submission otherwise applicable, but no later than the permit expiration date.

2. Signatories to permit applications and reports; at 40 CFR 122.22.

   a. Applications. All permit applications shall be signed as follows:

      (1) For a corporation. By a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

      Note: EPA does not require specific assignments or delegations of authority to responsible corporate officers identified in 40 CFR 122.22(a)(1)(i). The Agency will presume that these responsible corporate officers have the requisite authority to sign permit applications unless the corporation has notified the Director to the contrary. Corporate procedures governing authority to sign permit applications may provide for assignment or delegation to applicable corporate positions under 40 CFR 122.22(a)(1)(ii) rather than to specific individuals.

(2) For a partnership or sole proprietorship. By a general partner or the proprietor, respectively; or

(3) For a municipality, State, Federal, or other public agency. By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes: (i) The chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

b. All reports required by permits, and other information requested by the Director shall be signed by a person described in paragraph (a) of this section, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

(1) The authorization is made in writing by a person described in paragraph (a) of this section;

(2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters of the company, (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) and,

(3) The written authorization is submitted to the Director.

c. Changes to authorization. If an authorization under paragraph (b) of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph (b) of this section must be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative.

d. Certification. Any person signing a document under paragraph (a) or (b) of this section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

3. Transfer of permits; at 40 CFR 122.61.

    a. Transfers by modification. Except as provided in paragraph (b) of this section, a permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued (under 40 CFR 122.62(b)(2)), or a minor modification made (under 40 CFR 122.63(d)), to identify the new permittee and incorporate such other requirements as may be necessary under CWA.

    b. Automatic transfers. As an alternative to transfers under paragraph (a) of this section, any NPDES permit may be automatically transferred to a new permittee if:

        (1) The current permittee notifies the Director at least 30 days in advance of the proposed transfer date in paragraph (b)(2) of this section;

        (2) The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and

        (3) The Director does not notify the existing permittee and the proposed new permittee of his or her intent to modify or revoke and reissue the permit. A modification under this subparagraph may also be a minor modification under 40 CFR 122.63. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in paragraph (b)(2) of this section.

4. Minor modifications of permits; at 40 CFR 122.63.
   Upon the consent of the permittee, the Director may modify a permit to make the corrections or allowances for changes in the permitted activity listed in this section, without following the procedures in 40 CFR 124. Any permit modification not processed as a minor modification under this section must be made for cause and with 40 CFR 124 draft permit and public notice as required in 40 CFR 122.62. Minor modifications may only:

    a. Correct typographical errors;

    b. Require more frequent monitoring or reporting by the permittee.

    c. Change an interim compliance date in a schedule of compliance, provided the new date is not more than 120 days after the date specified in the existing permit and does not interfere with attainment of the final compliance date requirement; or

    d. Allow for a change in ownership or operational control of a facility where the Director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit

responsibility, coverage, and liability between the current and new permittees has been submitted to the Director;

e. (1) Change the construction schedule for a discharger which is a new source. No such change shall affect a discharger's obligation to have all pollution control equipment installed and in operation prior to discharge under 40 CFR 122.29.

(2) Delete a point source outfall when the discharge from that outfall is terminated and does not result in discharge of pollutants from other outfalls except in accordance with permit limits

f. [Reserved]

g. Incorporate conditions of a POTW pretreatment program that has been approved in accordance with the procedures in 40 CFR 403.11 (or a modification thereto that has been approved in accordance with the procedures in 40 CFR 403.18) as enforceable conditions of the POTW's permits.

5. Termination of permits; at 40 CFR 122.64.

a. The following are causes for terminating a permit during its term, or for denying a permit renewal application:

(1) Noncompliance by the permittee with any conditions of the permit;

(2) The permittee's failure in the application or during the permit issuance process to disclose fully all relevant facts, or the permittee's misrepresentation of any relevant facts at any time;

(3) A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination; or

(4) A change in any condition that requires either a temporary or permanent reduction or elimination of any discharge or sludge use or disposal practice controlled by the permit (for example, plant closure or termination of discharge by connection to a POTW).

b. The Director shall follow the applicable procedures in 40 CFR 124 or 22 of this chapter, as appropriate (or State procedures equivalent to part 124) in terminating any NPDES permit under this section, except that if the entire discharge is permanently terminated by elimination of the flow or by connection to a POTW (but not by land application or disposal into a well), the Director may terminate the permit by notice to the permittee. Termination by notice shall be effective 30 days after notice is sent, unless the permittee objects within that time. If the permittee objects during that period, the Director shall follow 40 CFR 124 or applicable State procedures for termination. Expedited permit termination procedures are not available to permittees that are subject to pending

State and/or Federal enforcement actions including citizen suits brought under State or Federal law. If requesting expedited permit termination procedures, a permittee must certify that it is not subject to any pending State or Federal enforcement actions including citizen suits brought under State or Federal law. State-authorized NPDES programs are not required to use part 22 of this chapter's procedures for NPDES permit terminations.

6. Availability of Reports; pursuant to CWA section 308
   Except for data determined to be confidential under 40 CFR 2, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Regional Administrator. As required by the CWA, permit applications, permits, and effluent data shall not be considered confidential.

7. Removed Substances; pursuant to CWA section 301
   Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in a manner such as to prevent any pollutant from such materials entering waters of the U.S.

8. Severability; pursuant to CWA section 512
   The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and remainder of this permit, shall not be affected thereby.

9. Civil and Criminal Liability; pursuant to CWA section 309
   Except as provided in permit conditions on "Bypass" and "Upset", nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.

10. Oil and Hazardous Substances Liability; pursuant to CWA section 311
    Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the CWA.

11. State, Tribe, or Territory Law; pursuant to CWA section 510
    Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the operator from any responsibilities, liabilities, or penalties established pursuant to any applicable State, Tribe, or Territory law or regulation under authorities preserved by CWA section 510.

Attachment B: Definitions

1. "Average monthly discharge limitation" means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month.

2. "Average weekly discharge limitation" means the highest allowable average of "daily discharges" over a calendar week, calculated as the sum of all "daily discharges" measured during a calendar week divided by the number of "daily discharges" measured during that week.

3. "Best Management Practices" or "BMPs" are schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural, and/or managerial practices to prevent or reduce the pollution of waters of the U.S. BMPs include treatment systems, operating procedures, and practices to control: plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. BMPs may further be characterized as operational, source control, erosion and sediment control, and treatment BMPs.

4. A "composite" sample means a time-proportioned mixture of not less than eight discrete aliquots obtained at equal time intervals (e.g., 24-hour composite means a minimum of eight samples collected every three hours). The volume of each aliquot shall be directly proportional to the discharge flow rate at the time of sampling, but not less than 100 ml. Sample collection, preservation, and handling shall be performed as described in the most recent edition of 40 CFR 136.3, Table II. Where collection, preservation, and handling procedures are not outlined in 40 CFR 136.3, procedures outlined in the 18th edition of Standard Methods for the Examination of Water and Wastewater shall be used.

5. A "daily discharge" means the "discharge of a pollutant" measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the day.

6. A "daily maximum allowable effluent limitation" means the highest allowable "daily discharge."

7. A "DMR" is a "Discharge Monitoring Report" that is an EPA uniform national form, including any subsequent additions, revisions, or modifications for reporting of self-monitoring results by the permittee.

8. A "grab" sample is a single sample collected at a particular time and place that represents the composition of the discharge only at that time and place. Sample collection, preservation, and handling shall be performed as described in the most recent edition of 40 CFR 136.3, Table II. Where collection, preservation, and handling procedures are not

outlined in 40 CFR 136.3, procedures outlined in the 18th edition of Standard Methods for the Examination of Water and Wastewater shall be used.

9. The "method detection limit" or "MDL" is the minimum concentration of an analyte that can be detected with 99% confidence that the analyte concentration is greater than zero, as defined by a specific laboratory method in 40 CFR 136. The procedure for determination of a laboratory MDL is in 40 CFR 136, Appendix B.

10. The "minimum level" or "ML" is the concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed in a specific analytical procedure, assuming that all the method-specific sample weights, volumes, and processing steps have been followed (as defined in EPA's draft National Guidance for the Permitting, Monitoring, and Enforcement of Water Quality-Based Effluent Limitations Set Below Analytical Detection/Quantitative Levels, March 22, 1994). If a published method-specific ML is not available, then an interim ML shall be calculated. The interim ML is equal to 3.18 times the published method-specific MDL rounded to the nearest multiple of 1, 2, 5, 10, 20, 50, etc. (When neither an ML nor MDL are available under 40 CFR 136, an interim ML should be calculated by multiplying the best estimate of detection by a factor of 3.18; when a range of detection is given, the lower end value of the range of detection should be used to calculate the ML.) At this point in the calculation, a different procedure is used for metals, than non-metals:

    a. For metals, due to laboratory calibration practices, calculated MLs may be rounded to the nearest whole number.

    b. For non-metals, because analytical instruments are generally calibrated using the ML as the lowest calibration standard, the calculated ML is then rounded to the nearest multiple of (1, 2, or 5) x 10n, where n is zero or an integer. (For example, if an MDL is 2.5 µg/l, then the calculated ML is: 2.5 µg/l x 3.18 = 7.95 µg/l. The multiple of (1, 2, or 5) x 10n nearest to 7.95 is 1 x 101 = 10 µg/l, so the calculated ML, rounded to the nearest whole number, is 10 µg/l.)

11. A "NODI(B)" means that the concentration of the pollutant in a sample is not detected. NODI(B) is reported when a sample result is less than the laboratory's MDL.

12. A "NODI(Q)" means that the concentration of the pollutant in a sample is detected but not quantified. NODI(Q) is reported when a sample result is greater than or equal to the laboratory's MDL, but less than the ML.

Attachment C: Location Map

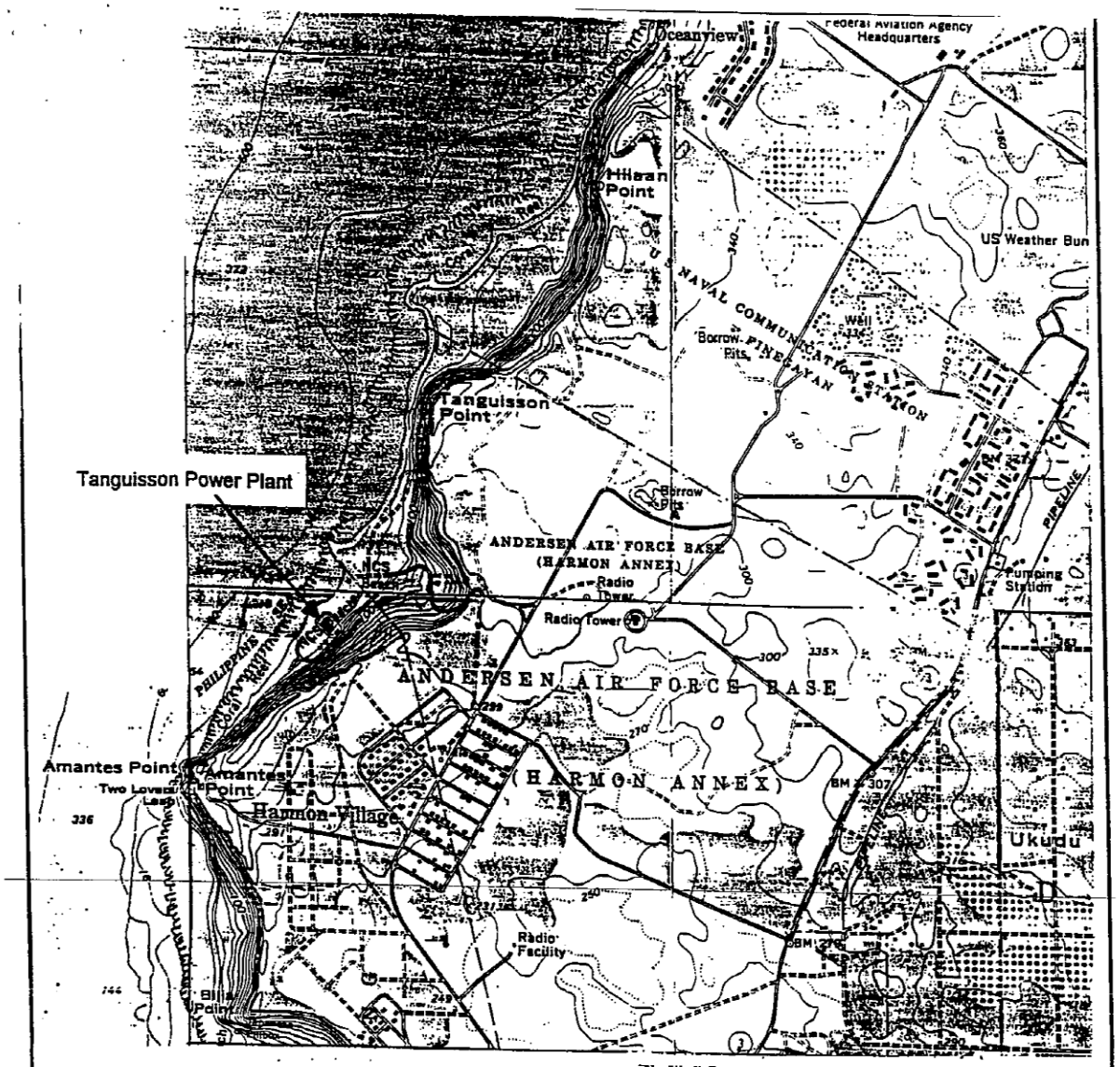


Figure 1 – Topographic Map of Tanguisson Power Plant

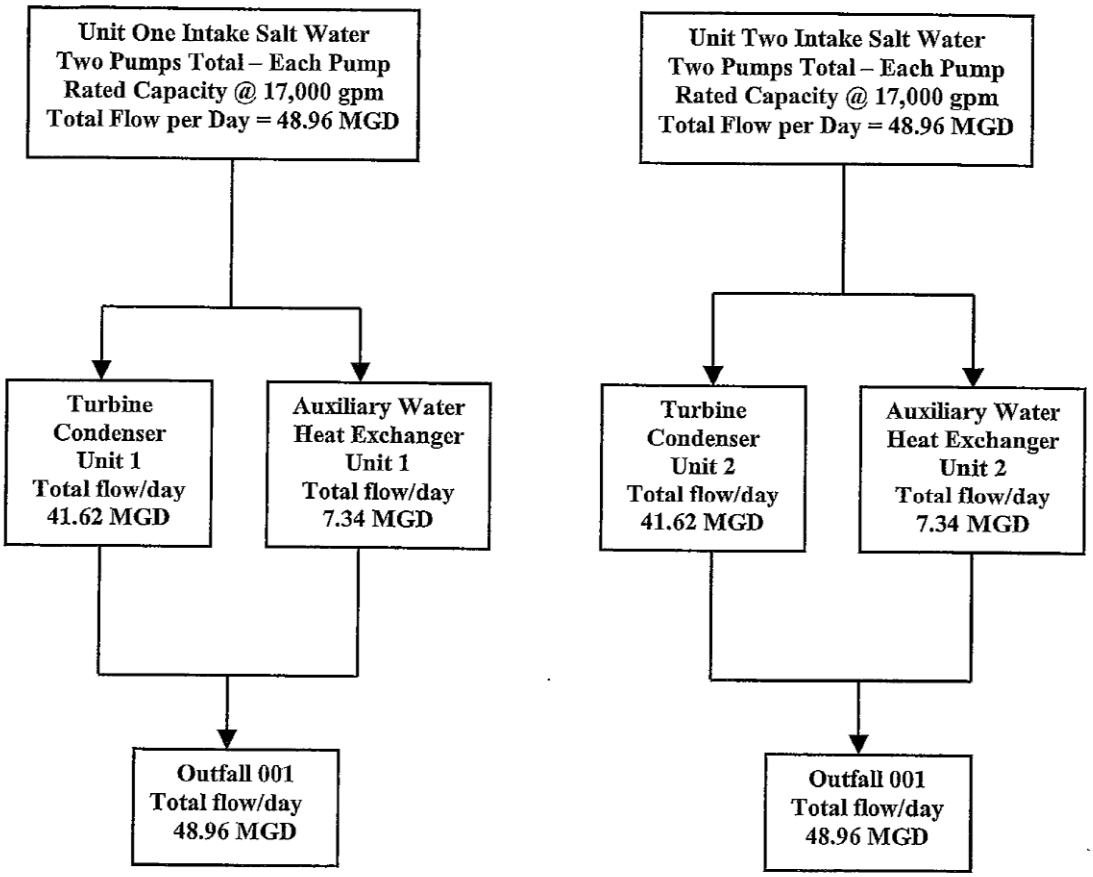
Agana, Guam Topographic Quadrangle
Dededo, Guam Topographic Quadrangle
Ritidian Point, Guam Topographic Quadrangle
Scale 1:24,000
20 foot Contour Interval

M&E Pacific, Inc.	TANGUISSON POWER PLANT SPILL PREVENTION CONTROL AND COUNTERMEASURES PLAN	SITE PLAN	

Contour Interval = 1 foot

Attachment D: Wastewater Flow Schematic

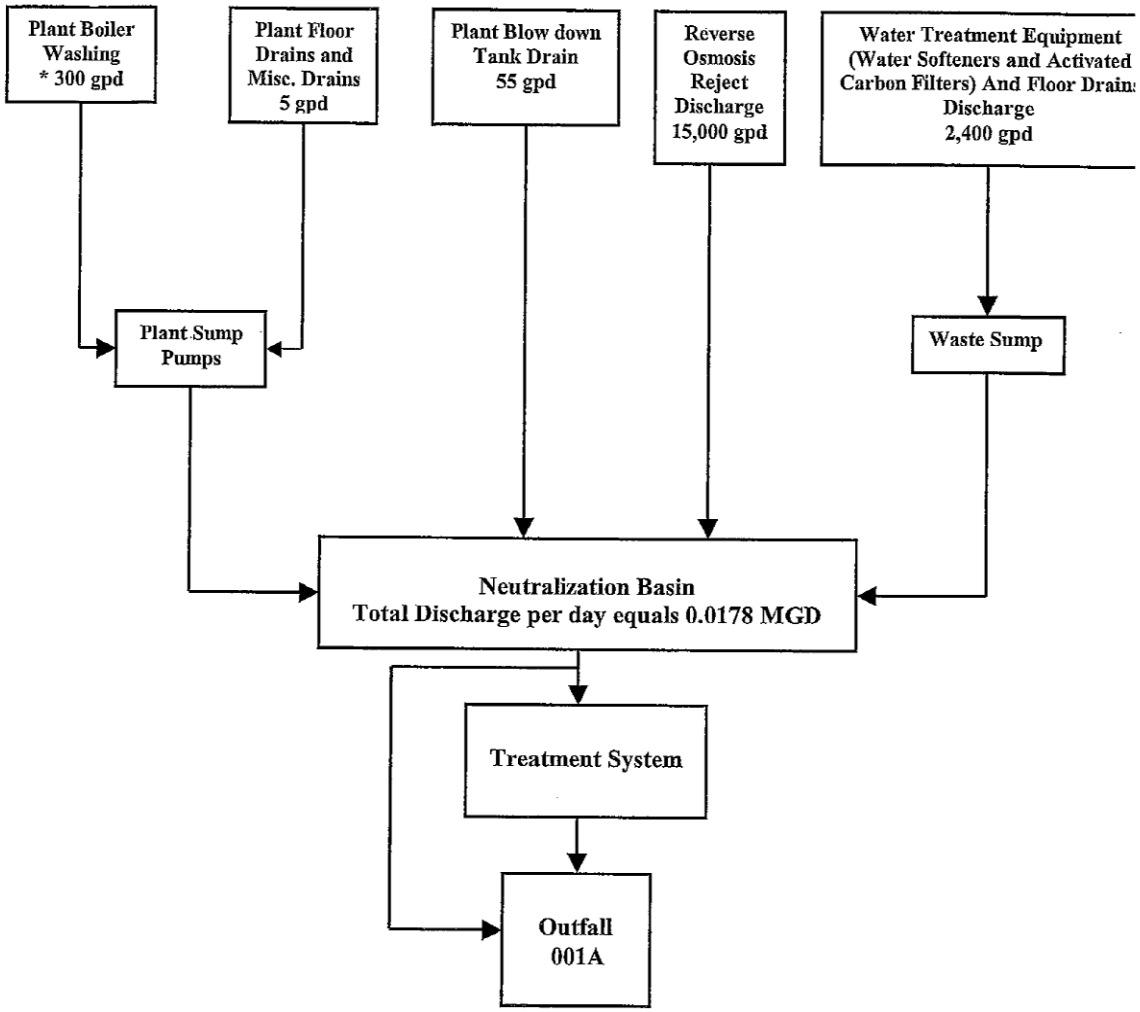
Tanguisson Power Plant Salt Water Cooling
Discharge to Outfall 001 Flow Chart
Units One and Two



Flow Calculation to outfall 001 discharge:

- Unit 1 – Two pumps total at 17,000 gpm per pump x 2 pumps = 34,000 gpm x 60 minutes = 2,040,000 gph x 24 hrs. = 48,960,000 gpd divided by 1,000,000 = 48.96 MGD.
- Unit 2 – Two pumps total at 17,000 gpm per pump x 2 pumps = 34,000 gpm x 60 minutes = 2,040,000 gph x 24 hrs. = 48,960,000 gpd divided by 1,000,000 = 48.96 MGD.
- Unit 1 at 48.96 MGD plus Unit 2 at 48.96 MGD = 97.92 MGD total discharged to outfall 001.

Tanguisson Power Plant Water Treatment Equipment Discharge and Plant Discharge Flow Chart



- * Boiler washing is scheduled during Maint. Inspections. The washing duration is 1-3 days and may occur several times a year. The total number of days of washing equals approx. one month. The maximum total volume of discharge is 10,000 gallons/year.
- Flow Calculation to 001A discharge: Boiler washing discharge + plant floor drains discharge + plant blow down discharge + RO reject discharge + water treatment equipment discharge.
- 300 gpd + 5 gpd + 55 gpd + 15,000 gpd + 2,400 gpd = 17,760 gpd divided by 1,000,000 conversion to MGD = 0.01776 MGD – rounded off to 0.0178 MGD.

Attachment E: Guam 401 Water Quality Certification