

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 9  
75 Hawthorne Street  
San Francisco, CA 94105**

**AUTHORIZATION TO DISCHARGE UNDER THE  
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM**

**NPDES PERMIT NO. GU0020371**

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. This permit authorizes the discharge of only those pollutants resulting from facility processes, waste streams, and operations that have been clearly identified in the permit application process.

Permittee Name	Guam Waterworks Authority
Permittee Address	Suite 200, 688 Rt. 15, Gloria B, Nelson Public Service Building Mangilao, GU 96913-6203
Facility Name	Ugum Surface Water Treatment Plant
Facility Location Address	308 Paulino Heights Drive Talofofo, GU 96932
Facility Rating	Minor

Outfall Number	General Type of Waste Discharged	Outfall Latitude	Outfall Longitude	Receiving Water
001	Clean-in-place and filter backwash wastewater	13° 19’74” N	144° 44’ 57” E	Ugum River

This permit was issued on:	Date of signature below
This permit shall become effective on:	December 1, 2021
Permit reapplication due no later than:	May 31, 2026
This permit shall expire at midnight on:	November 30, 2026

In accordance with 40 CFR § 122.21(d), the permittee 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 for the Regional Administrator:

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Tomás Torres, Director                      Date  
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  
The permittee is authorized to discharge clean-in-place and chemical enhanced backwash wastewater in compliance with the effluent limits and monitoring requirements specified in Table 1.
2. The discharge of pollutants at any point other than the outfall number 001 specifically authorized in this permit is prohibited.
3. The discharge of toxic substances in toxic amounts, including, but not limited to, pesticides, herbicides, heavy metals, and organic chemicals is prohibited.
4. The discharge shall not cause the following conditions in the receiving water:
  - a. Visible floating materials, grease, oil, scum, foam and other floating material degrading water quality or use;
  - b. Visible turbidity, deposits, or otherwise adversely affected aquatic life;
  - c. Objectionable color, odor, or taste;
  - d. Substances, conditions, or combinations that injure or are toxic or harmful to humans, animals, plants or aquatic life;
  - e. Substances, conditions or combinations inducing growth of undesirable aquatic life;
  - f. Total non-filterable suspended matter at any point to be increased more than 10% from ambient at any time, and the total concentration should not exceed 20 mg/L, except when due to natural conditions,
  - g. Temperature to deviate more than 1.0 degree Centigrade from ambient conditions;
  - h. pH outside the range of 6.5 to 9.0 standard units,
  - i. Orthophosphate concentrations to exceed 0.05 mg/L,
  - j. Nitrate-nitrogen and/or ammonia concentrations to exceed 0.2 mg/L,
  - k. Turbidity to exceed 1.0 NTU over ambient conditions; and
  - l. Concentration of dissolved oxygen to be less than 75% of saturation.
5. The discharge of any radioactive wastes and contaminated radioactive materials is strictly prohibited.

**B. Numeric Effluent Limits and Monitoring Requirements – Outfall Number 001**

**Table 1. Effluent Limits and Monitoring Requirements**

Parameter	Maximum Allowable Discharge Limits				Monitoring Requirements	
	Concentration and Loading					
	Average Monthly	Max. Daily	Instantaneous Max.	Units	Frequency	Sample Type <sup>(2)</sup>
Flow rate	(1)	(1)	—	MGD	Continuous	Metered
pH (hydrogen ion)	Between 6.5 – 9.0 at all times			Std. Units	Continuous	Grab
Turbidity	—	—	12.50	NTU	1x/discharge	Grab
Total suspended solids	30.00 6.26	45.00 9.34 <sup>(3)</sup>	— —	mg/L lbs/day	1x/discharge	Grab
Total dissolved solids	1,000.00 208.63	1,000.00 208.63 <sup>(3)</sup>	—	mg/L lbs/day	1x/discharge	Grab
Chlorine, total residual (TRC)	0.05 <sup>(4)</sup>	0.05 <sup>(4)</sup>	—	µg/L	1x/discharge	Grab
Total recoverable aluminum	— —	1.00 0.21	— —	mg/L lbs/day	1x/discharge	Grab
Metals <sup>(5)</sup>	—	—	(1)	µg/L	1st, 3rd, 5th year	Grab

Note: ‘MGD’ indicates units of Million Gallons per Day and ‘NTU’ is Nephelometric Turbidity Units.

(1) No effluent limit set but monitoring and reporting is required.

(2) Sample type is grab because the discharge occurs in batches and is typically less than 3 hours. However, if multiple batches are discharged per day, the permittee must sample each batch, and if the discharge time exceeds 3 hours, another grab sample must be analyzed.

(3) If daily flow exceeds 0.025 mgd, the maximum daily effluent for total suspended solids is 18.78 lbs/day and 417.25 lbs/day for total dissolved solids. The permittee shall report a sum value for lbs/day for the discharge events exceeding 0.025 mgd.

(4) A TRC grab sample must be taken during the course of the discharge when the concentrations of pollutants are at their highest, usually prior to the batch discharge.

(5) The permittee shall annually monitor for copper, arsenic, cadmium, chromium III, chromium VI, lead, mercury, nickel, selenium, silver, and zinc. All metals shall be reported as total recoverable metal. The permittee shall use U.S. EPA method 1631 for mercury monitoring, with a minimum level of 0.002 µg/L.

**C. Chronic Toxicity Effluent Limits and Monitoring Requirements – Outfall Number 001**

**Table 2. Effluent Limits and Monitoring Requirements for Chronic Toxicity**

Parameter	Maximum Allowable Discharge Limits			Monitoring Requirements	
	Concentration				
	Median Monthly	Maximum Daily	Units	Frequency	Sample Type
Chronic Toxicity <i>Ceriodaphnia dubia</i> reproduction, Method 1002.0, WC13B	Report <sup>(1, 2)</sup>	Report <sup>(1, 3)</sup>	Pass (0) or Fail (1), PE, in % effluent	1st, 3rd, 5th year	Grab

Parameter	Median Monthly	Maximum Daily	Units	Frequency	Sample Type
Chronic Toxicity <i>Pimphales promelas</i> growth, Method 1000.0, WCP6C	Report <sup>(1, 2)</sup>	Report <sup>(1, 3)</sup>	Pass (0) or Fail (1), PE, in % effluent	1st, 3rd, 5th year	Grab
Chronic Toxicity <i>Selenastrum capricornutum</i> growth, Method 1003.0, WGR1E	Report <sup>(1, 2)</sup>	Report <sup>(1, 3)</sup>	Pass (0) or Fail (1), PE, in % effluent	1st, 3rd, 5th year	Grab

(1) “Report” means there is no effluent limit for the coded parameter, chronic toxicity, but monitoring and DMR reporting is required. See Endnotes 2 and 3.

(2) Pass–Fail results are coded as **Pass (0)** (TST null hypothesis is rejected and the IWC is declared not toxic) and **Fail (1)** (TST null hypothesis is not rejected and the IWC is declared toxic). For this discharge, the TST null hypothesis ( $H_0$ ) at the required discharge-specific IWC is: **IWC mean response (100% effluent)  $\leq 0.75 \times$  Control mean response**. Rejection of the TST null hypothesis is determined by following the step-by-step instructions in *National Pollutant Discharge Elimination System Test of Significant Toxicity Technical Document*, Appendix B (EPA 833-R-10-004, 2010; TST Technical Document).

(3) Maximum Daily Effluent result: This is evaluated for each toxicity test conducted for determining the median monthly effluent result. If more than one toxicity test is initiated during the calendar month, then those results shall be reported attached to the DMR form, except that the one toxicity test with a **Fail (1)** and the highest **PE** shall be reported on the DMR form.

#### ***D. Sampling***

1. Samples shall be representative of the volume and quality of effluent discharged over the sampling and reporting period. All samples are to be taken during normal operating hours. The Permittee shall identify the effluent sampling location used for each discharge.
2. Samples shall be taken after any in-plant return flows and the last treatment process and prior to mixing of the effluent from the Ugum Water Treatment Facility and the receiving waters, where representative samples of the effluent discharged can be obtained.
3. For intermittent discharges, the permittee shall monitor on the first day of discharge. The permittee is not required to monitor in excess of the minimum frequency required in Table 1. If there is no discharge, the permittee is not required to monitor the effluent. For total residual chlorine, a discrete sample must be taken during the course of the discharge when the concentrations of pollutants are at their highest, usually prior to the batch discharge.

#### ***E. 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 this permit, the permittee shall utilize 40 CFR § 136 test methods with MDLs and MLs that are lower than the effluent limits in this permit. For parameters without an effluent limit, the permittee must use an analytical method at or below the level of the applicable water quality criterion for the measured pollutant. 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 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 notify EPA of any 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. The QA Manual shall be developed (or updated) within 90 days of permit issuance. 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, report results, and 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 regulatory authorities 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), 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. The permittee shall electronically submit Discharge Monitoring Reports using NetDMR (<http://www.epa.gov/netdmr>).
  8. Monthly DMRs shall be submitted quarterly, by the 28<sup>th</sup> day of the month following the previous calendar quarter. For example, the three DMR forms for January, February, and March are due on April 28<sup>th</sup>. Annual and quarterly monitoring must be conducted starting in the first complete quarter or calendar year following permit issuance. Reporting for annual monitoring is due on January 28<sup>th</sup> of the following year. A DMR 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.
  9. The permittee shall submit an electronic and paper Discharge Monitoring Report to Guam EPA as well as any other report submittals required by this permit (i.e. DMRs and receiving water monitoring results). The submittals shall be identified with WQC Order #2021-06 for NPDES Permit No. 0020371 and include the certifying representative's name, title, mailing address, and phone number. Electronic submissions shall be sent to [jesse.cruz@epa.guam.gov](mailto:jesse.cruz@epa.guam.gov) and paper copies shall be mailed to:

Guam EPA  
Attn: 401 Federal Permit Manager, NPS Program, EMAS Division  
3304 Mariner Avenue, Bldg. 17-3304  
Barrigada, Guam 96913

***F. Receiving Water Monitoring***

1. The permittee shall conduct the monitoring described in Table 3 at a location upstream and downstream of the discharge during the duration of the discharge. The upstream monitoring location (UR-1) shall be a single location immediately upstream of the outfall and the downstream monitoring location (UR-2) shall be a single location at least 200 feet downstream of the outfall. A location map is provided as factsheet attachment A.
2. The receiving water must not exceed narrative water quality standards, as described in I.A, Effluent Limits, above.
3. Receiving water monitoring results shall be submitted along with effluent monitoring information in the facility's DMR, in accordance with Part I. Section E.

**Table 3. Upstream and Downstream (UR-1 and UR-2) Water Monitoring Requirements**

Parameter	Frequency	Type
Total suspended solids (mg/L)	Once/quarter	Grab
Turbidity (NTU)	Once/quarter	Grab
Hardness (mg/L as CaCO <sub>3</sub> ) <sup>1</sup>	Once/quarter	Grab

<sup>1</sup>The permittee only needs to monitor for hardness at either UR-1 or UR-2.

**Part II. SPECIAL CONDITIONS**

**A. Permit Reopener(s)**

1. 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. The permittee shall report any noncompliance which may endanger human health or the environment. The permittee is required to provide an oral report by directly speaking with an EPA or Guam EPA staff person within 24 hours from the time the permittee becomes aware of the noncompliance. 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 to the Wastewater Enforcement Section Manager at 415-947-4179 and to Guam EPA at 671-475-1658.

The permittee shall follow up with a written submission within five days of the time the permittee becomes aware of the noncompliance. The written submission shall be emailed to [R9NPDES@epa.gov](mailto:R9NPDES@epa.gov) and/or the EPA staff person initially notified. The 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. See also provision II.D. Additional Special Conditions (CWA 401 Certification).

2. 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 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)).
3. EPA 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. Whole Effluent Toxicity Requirements

1. Instream Waste Concentration (IWC) for Chronic Toxicity

The chronic toxicity IWC required for the authorized discharge point is expressed as **100 percent (%) effluent** (i.e.,  $1/S \times 100$ , also 1 part effluent to S-1 parts dilutant or 1 part solute to 0 parts dilutant (1:0) for a total of 1 part).

2. Sampling and Monitoring Frequency

Toxicity test samples shall be collected for the authorized discharge point at the designated NPDES sampling station for the effluent (i.e., downstream from the last treatment process and any in-plant return flows where a representative effluent sample can be obtained). The total sample volume shall be determined both by the WET method used (including, for non-continuous discharges, the additional sample volume necessary to complete the toxicity test) and the additional sample volume necessary for Toxicity Identification Evaluation (TIE) studies.

The permittee shall use the test species, WET method, monitoring frequency, and sample type specified in Part I, Table 2. A split of each effluent sample for toxicity testing shall be analyzed for all other monitored parameters (conventional, non-conventional, and priority toxic pollutants), at the minimum frequency of analysis specified during the reporting period for the month by the effluent monitoring program. All toxicity tests for the month shall be initiated during that calendar month.

3. Chronic Test Species and WET Methods

For freshwater discharges to freshwater surface waters, test species and short-term WET methods for estimating the chronic toxicity of NPDES effluents are found in the fourth edition of *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* (EPA/821/R-02/013, 2002; Table IA, 40 CFR 136). The permittee shall **conduct toxicity tests with the parameter for chronic toxicity required in Part I, Table 2** (e.g., static renewal test with fathead minnow, *Pimephales promelas* (Larval Survival and Growth Test Method 1000.0); static renewal test with daphnid, *Ceriodaphnia dubia* (Survival and Reproduction Test Method 1002.0); or static non-renewal test with green alga, *Selenastrum capricornutum* (also named *Raphidocelis subcapitata*) (Growth Test Method 1003.0)).

4. Quality Assurance

- a. Quality assurance measures, instructions, and other recommendations and requirements are found in the WET methods manual(s) previously referenced. Additional requirements are specified below.
- b. **Pacific Island Territory NPDES permittees and WET sample hold time.** The WET methods manual hold time for NPDES samples used for toxicity testing begins when the 24-hour composite sampling period is completed, or the last grab sample in a series of grab samples is taken. It ends at the first time of sample use (initiation of toxicity test). 40 CFR 136.3(e) states that the WET method's 36-hour hold time cannot be exceeded unless a variance of up to 72-hours is authorized by EPA. In a June 29, 2015 inter-office memorandum, EPA Region 9 has authorized a hold time variance of up to 72-hours applicable only to Pacific Island Territory permittees **which ship the NPDES sample to the continental U.S. for toxicity testing**, with conditions.
- c. The discharge is subject to a determination of rejection or non-rejection of the TST null hypothesis ( $H_0$ ) from a chronic toxicity test at the required IWC. For statistical flowchart and procedures using the TST statistical approach see Appendix B of *National Pollutant Discharge Elimination System Test of Significant Toxicity Technical Document* (EPA 833-R-10-004, 2010; TST Technical Document). For the TST statistical approach, the associated value for "Percent (%) Effect" (also called "% Effect" or "PE") at the required IWC is calculated as:  $\% \text{ Effect} = [(Control \text{ mean response} - IWC \text{ mean response}) \div Control \text{ mean response}] \times 100$ .
- d. **Controls.** Effluent dilution water and control water should be prepared and used as specified in the applicable WET methods manual. If the dilution water is different from test organism culture water, then a second control using culture water shall also be used. If the effluent sample at the IWC is adjusted using artificial sea salts or a saltwater brine, a "salting up/brine" control shall be prepared and used as specified in the applicable WET methods manual.
- e. 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.).
- f. If the effluent toxicity test during the reporting period for the month does not meet the Test Acceptability Criteria (TAC) described in the WET method, then the permittee shall resample and retest within 14 days. The results of this retest shall only replace that effluent toxicity test that did not meet TAC during the reporting period for the month.
- g. In addition to Total Alkalinity, Conductivity, and Total Hardness, when preparing effluent samples for toxicity testing using *Ceriodaphnia dubia* reproduction Method 1002.0, the Major Ions ( $Na^+$ ,  $K^+$ ,  $Ca^{2+}$ ,  $Mg^{2+}$ ,  $Cl^-$ ,  $SO_4^{2-}$ , and  $HCO_3^-/CO_3^{2-}$

) shall be well characterized (and available for DMR reporting when requested by EPA) for the effluent IWC, dilution water, and culture water used for toxicity testing. See Mount DR, Erickson RJ, Forsman BB, and Norberg-King TJ. 2019. Chronic toxicity of major ion salts and their mixtures to *Ceriodaphnia dubia*. *Environ Toxicol Chem* 38:769-783.

- h. **Removed Toxicants (chlorine, ammonia).** If the discharged effluent is chlorinated, then chlorine shall not be removed from the effluent sample prior to toxicity testing without written approval by EPA. Ammonia shall not be removed from the effluent sample prior to toxicity testing without written approval by EPA.
6. Initial Investigation Toxicity Reduction Evaluation (TRE) Work Plan

Within 90 days of the permit effective date, the permittee shall prepare a copy of its Initial Investigation TRE Work Plan (1-2 pages). This plan shall include steps the permittee intends to follow if a Median Monthly Effluent result for chronic toxicity is reported as Fail (1) for the reporting month (see Part I, Table 2, Endnote 2), 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 TRE and Toxicity Identification Evaluation (TIE) are necessary, an indication of who would conduct these studies (i.e., an in-house expert or outside contractor).
7. Chronic Toxicity Median Monthly Effluent Result of **Fail (1)** Proceeding to TRE

If the chronic toxicity Median Monthly Effluent result is reported as **Fail (1)** for the calendar month (see Part I, Table 2, Endnote 2), then—regardless of the minimum monitoring frequency in Part I, Table 2—the permittee shall conduct effluent monitoring using no more than three chronic toxicity tests **during the next consecutive calendar month where there is a discharge** and implement its Initial Investigation TRE Work Plan.

If the chronic toxicity Median Monthly Effluent result **during this next consecutive calendar month** is **Pass (0)**, then the permittee shall return to the minimum monitoring frequency in Part I, Table 2. However, if this result is **Fail (1)**, then the permittee shall immediately 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)—and return to the monitoring frequency in Part I, Table 2.

In conjunction with TRE initiation, the permittee shall immediately 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. This work plan shall be submitted to EPA upon request and maintained onsite.

The permittee may initiate a TIE as part of a TRE to identify the causes of toxicity using, 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).

During a TRE, the chronic toxicity effluent monitoring results conducted for the TRE/TIE that meet the WET method's Test Acceptability Criteria at the IWC shall be reported on the DMR following the Endnotes in Part I, Table 2.

8. Reporting of Toxicity Monitoring Results on DMR

- a. **Report no effluent monitoring result for Chronic Toxicity.** If no toxicity test monitoring for the calendar month is required and toxicity monitoring is not conducted, then the permittee shall report "NODI(9)" (i.e., Conditional Monitoring – Not Required for This Period) on the DMR form.

**Report Median Monthly Effluent result for Chronic Toxicity.** See Part I, Table 2, Endnote 2.

**Report Maximum Daily Effluent result(s) for Chronic Toxicity.** See Part I, Table 2, Endnote 3.

- b. The permittee shall submit the full toxicity laboratory report for all toxicity testing as an attachment to the DMR for the month in which the toxicity tests are initiated. The laboratory report shall contain: all toxicity test results (raw data and statistical analyses) for each effluent and related reference toxicant tested; chain-of-custody; the dates of sample collection and initiation of each toxicity test; control performance; all results for other effluent parameters monitored concurrently with the effluent toxicity tests; and schedule and progress reports on TRE/TIE studies.

**Quality-control reporting for toxicity laboratory control group.** To assist in reviewing within-test variability, the toxicity laboratory report must include, for

each test species/WET method: quality-control charts for the mean, standard deviation and coefficient of variation of the control group. Each toxicity laboratory report attached to the DMR shall include both a graphical control chart (with a long-term average printed below the chart) and a table of control-group data for the WET method/test species. These data shall be listed in the table: sample date, type of dilution water, number of replicates (n), control mean (cM), control standard deviation (cS), and control coefficient of variation (cK). The quality-control chart and the table shall report data for the last 50 toxicity tests conducted by the laboratory. If there are more than 30 tests with a different number of replicates (e.g., 20 tests of n=10 and 30 tests of n=20), then use separate control charts and tables. The table shall also report the following summary statistics separately for cM, cS, and cK: number of observations, average, standard deviation, and percentiles (minimum, 10<sup>th</sup>, 25<sup>th</sup>, 50<sup>th</sup>, 60<sup>th</sup>, 65<sup>th</sup>, 70<sup>th</sup>, 75<sup>th</sup>, 80<sup>th</sup>, 90<sup>th</sup>, and maximum). This information is required for review of toxicity test results and the toxicity laboratory's performance of the test species/WET method by the permittee and permitting authority. Also, see test species/WET method-specific percentiles for the mean, coefficient of variation, and standard deviation of control-group data in section 3 tables of the TST Technical Document.

- c. **Notification reporting.** The permittee shall notify EPA in writing within 14 days of a Median Monthly Effluent result of Fail (1) for chronic toxicity. The permittee shall notify EPA in writing within 14 days of a Maximum Daily Effluent result of Fail (1) and  $\geq 50$  PE. The permittee shall notify the EPA in writing within 14 days of two consecutive Median Monthly Effluent results of Fail (1) for chronic toxicity. Such 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.

#### 9. Permit Reopener for Toxicity

In accordance with 40 CFR 122 and 124, this permit may be modified to include effluent limits or permit conditions to address toxicity (acute and/or chronic) 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 toxicity.

#### ***D. Additional Special Conditions (CWA 401 Certification)***

Per the CWA 401 certification (see Attachment D), Guam EPA has stipulated the following specific conditions to be included in this permit in order to comply with all provisions of the Guam EPA water quality standards:

1. GWA shall submit the following monitoring documents to Guam EPA quarterly, consistent with provision I.F.9 above:
  - a. An electronic or paper DMR,

- b. Receiving water monitoring results (Table 3: Upstream and Downstream UR-1 and UR-2 Water Monitoring Requirements),
  - c. Receiving water monitoring results at UR-1 and UR-2 for narrative water quality standards described in Part. I.4.
2. GWA shall provide the coordinates of the upstream and downstream receiving water monitoring stations (UR-1 and UR-2 to Guam EPA consistent with provision I.F.9 above.
3. Point source discharges to waterbodies under the jurisdiction of Guam EPA must be consistent with the antidegradation policy in 22 GAR §5101(b).
4. GWA shall develop and implement a Spill Prevention and Containment Plan.
5. GWA shall have adequate and appropriate spill response materials on hand to respond to emergency release of oil, petroleum, or any other material into waters of the territory.
6. Any unpermitted discharge into territorial waters or onto land with a potential for entry into territorial waters is prohibited. If this occurs, GWA shall immediately take the following actions:
  - a. Cease operations at the location of the violation or spill.
  - b. Assess the cause of the water quality problem and take appropriate measures to correct the problem and/or prevent further environmental damage.
  - c. Notify Guam EPA of the failure to comply. All petroleum spills shall be reported immediately to:
    - (i) Guam's Emergency 911 system
    - (ii) Guam EPA's 24-Hour Spill Response Team at (671) 888-6488 or during working hours (671) 300-4751
    - (iii) US Coast Guard Sector Guam (671) 355-4824
    - (iv) National Response Center 1-800-424-8802
7. GWA shall also provide notice to Guam EPA consistent with provision I.F.9 immediately upon discovery of noncompliance. (See also provision II.B. Twenty-four hour reporting of noncompliance).
8. 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. Compliance with this condition does not relieve GWA from responsibility to maintain continuous compliance with the terms and conditions of the water quality certification or the resulting liability from failure to comply.
9. Submittal or reporting of any of this information does not provide relief from any subsequent enforcement actions for unpermitted discharges to waters of the U.S.
10. 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 GWA addresses environmental problems/concerns to Guam EPA's satisfaction. Guam EPA may also levy penalties and fines. Invalidity or enforceability of one or more provisions of this certification shall not affect any other provision of this certification.

## **Part IV. STANDARD CONDITIONS**

The permittee shall comply with all EPA Region 9 Standard Conditions below.

### **A. All NPDES Permits**

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

#### **1. 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.

- a. 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.
- b. The Clean Water Act 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 Clean Water Act 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 section 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 a 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, 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.<sup>1</sup>

- c. 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 of 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.<sup>1</sup>
2. 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. Any permittee 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.

3. 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.

4. 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.

5. 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

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<sup>1</sup> The civil and administrative penalty amounts are adjusted annually for inflation pursuant to the Federal Civil Penalties Inflation Adjustment Act Improvements Act of 2015, and the current penalty amounts are set forth in 40 CFR § 19.4.

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.

6. 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.

7. Property rights; at 40 CFR § 122.41(g).

This permit does not convey any property rights of any sort, or any exclusive privilege.

8. 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.

9. 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:

- a. 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;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- d. 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.

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

- a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
  - b. 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 § 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.
  - c. Records of monitoring information shall include:
    - (1) The date, exact place, and time of sampling or measurements;
    - (2) The individual(s) who performed the sampling or measurements;
    - (3) The date(s) analyses were performed
    - (4) The individuals(s) who performed the analyses;
    - (5) The analytical techniques or methods used; and
    - (6) The results of such analyses.
  - d. Monitoring must be conducted according to test procedures approved under 40 CFR § 136 or, in the case of sludge use or disposal, approved under 40 CFR § 136 unless otherwise specified in 40 CFR § 503, unless other test procedures have been specified in the permit.
  - e. 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.
11. Signatory requirement; at 40 CFR § 122.41(k).
- a. All applications, reports, or information submitted to the Director shall be signed and certified. (See 40 CFR § 122.22.) 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.”

e. 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.

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

a. 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:

(1) 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

(2) 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).

- (3) 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;
- b. 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.
- c. 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.)
  - (1) 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.
  - (2) 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:
    - (A) The current permittee notifies the Director at least 30 days in advance of the proposed transfer date in paragraph (b)(2) of this section;
    - (B) 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
    - (C) 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.
- d. Monitoring reports. Monitoring results shall be reported at the intervals specified elsewhere in this permit.
  - (1) 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. As of December 21,

2016 all reports and forms submitted in compliance with this section must be submitted electronically by the permittee to the Director or initial recipient, as defined in 40 CFR § 127.2(b), in compliance with this section and 40 CFR § 3 (including, in all cases, subpart D to part 3), 40 CFR § 122.22, and 40 CFR § 127.

- (2) If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR § 136 or, in the case of sludge use or disposal, approved under 40 CFR § 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.
  - (3) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Director in the permit.
- e. 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.
- f. Twenty-four hour reporting.
- (1) 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 report shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The report 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. For noncompliance events related to combined sewer overflows, sanitary sewer overflows, or bypass events, these reports must include the data described above (with the exception of time of discovery) as well as the type of event (combined sewer overflows, sanitary sewer overflows, or bypass events), type of sewer overflow structure (e.g., manhole, combine sewer overflow outfall), discharge volumes untreated by the treatment works treating domestic sewage, types of human health and environmental impacts of the sewer overflow event, and whether the noncompliance was related to wet weather. As of December 21, 2020 all reports related to combined sewer overflows, sanitary sewer overflows, or bypass events submitted in compliance with this section must be submitted electronically by the permittee to the Director or initial recipient, as defined in 40 CFR §

127.2(b), in compliance with this section and 40 CFR § 3 (including, in all cases, subpart D to part 3), 40 CFR § 122.22, and 40 CFR § 127.

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

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

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

(iii) 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).)

(3) 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.

g. 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.

h. 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.

13. Bypass; at 40 CFR § 122.41(m).

a. Definitions.

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

(2) "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.

b. 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.

c. Notice.

- (1) 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.
- (2) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in paragraph (l)(6) of this section (24-hour notice).
- (3) As of December 21, 2020 all notices submitted in compliance with this section must be submitted electronically by the permittee to the Director or initial recipient, as defined in 40 CFR § 127.2(b), in compliance with this section and 40 CFR § 3 (including, in all cases, subpart D to part 3), 40 CFR § 122.22, and 40 CFR § 127. Part 127 is not intended to undo existing requirements for electronic reporting. Prior to this date, and independent of part 127, permittees may be required to report electronically if specified by a particular permit or if required to do so by state law.

d. Prohibition of bypass.

- (1) Bypass is prohibited, and the Director may take enforcement action against a permittee for bypass, unless:
  - (i) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
  - (ii) 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
  - (iii) The permittee submitted notices as required under paragraph (m)(3) of this section.
- (2) 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.

14. Upset; at 40 CFR § 122.41(n).

- a. 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.

- b. 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.
- c. 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:
  - (1) An upset occurred and that the permittee can identify the cause(s) of the upset;
  - (2) The permitted facility was at the time being properly operated; and
  - (3) The permittee submitted notice of the upset as required in paragraph (l)(6)(ii)(B) of this section (24 hour notice).
  - (4) The permittee complied with any remedial measures required under paragraph (d) of this section.
- d. Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

15. Reopener Clause; at 40 CFR § 122.44(c).

For any permit issued to a treatment works treating domestic sewage (including “sludge-only facilities”), the Director shall include a reopener clause to incorporate any applicable standard for sewage sludge use or disposal promulgated under section 405(d) of the CWA. The Director may promptly modify or revoke and reissue any permit containing the reopener clause required by this paragraph if the standard for sewage sludge use or disposal is more stringent than any requirements for sludge use or disposal in the permit, or controls a pollutant or practice not limited in the permit.

16. 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 of 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. 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.
  - f. 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.
  - 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.
17. 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).

18. Availability of Reports; pursuant to CWA § 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.

19. Removed Substances; pursuant to CWA § 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.

20. Severability; pursuant to CWA § 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.

21. Civil and Criminal Liability; pursuant to CWA § 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.

22. Oil and Hazardous Substances Liability; pursuant to CWA § 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.

23. State, Tribe, or Territory Law; pursuant to CWA § 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 § 510.

## **Attachment A: 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

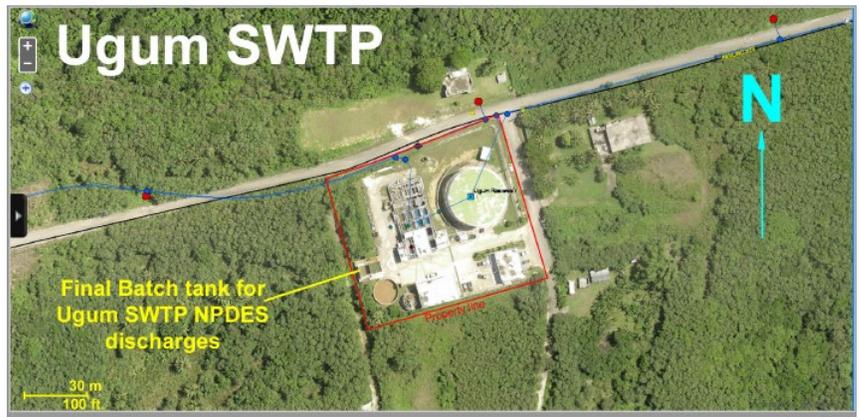
during a calendar week divided by the number of “daily discharges” measured during that week.

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 distinguishable from the method blank results, 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 10<sup>n</sup>, 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 10<sup>n</sup> nearest to 7.95 is 1 x 10<sup>1</sup> = 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.

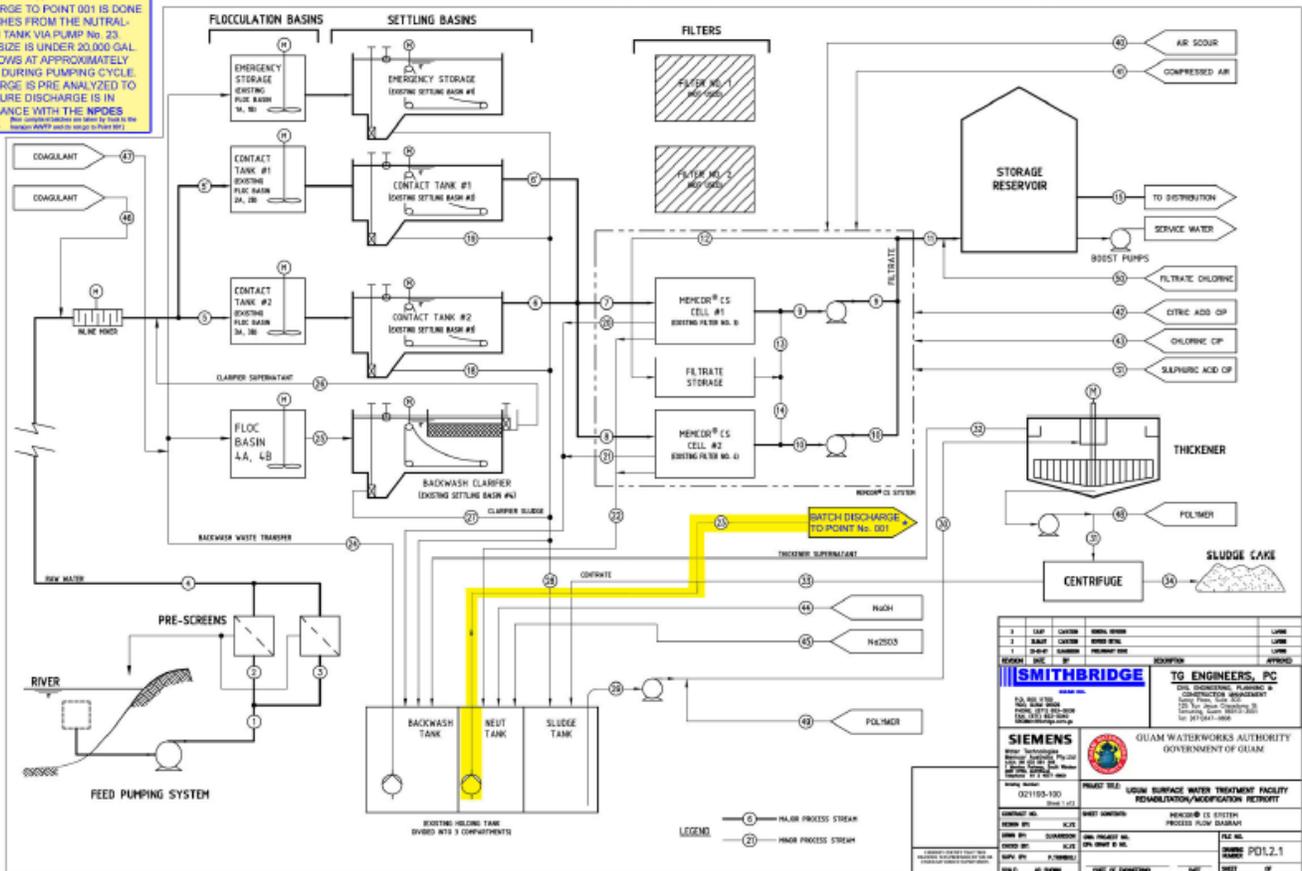
### Attachment B: Location Maps



Attachment C: Wastewater Flow Schematic

Ugum Surface Water Treatment Plant Processing Diagram

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 DISCHARGE TO POINT 001 IS DONE IN BATCHES FROM THE NEUTRALIZATION TANK VIA PUMP No. 23. BATCH SIZE IS UNDER 20,000 GAL. AND FLOWS AT APPROXIMATELY 96 GPM DURING PUMPING CYCLE. DISCHARGE IS PRE ANALYZED TO MAKE SURE DISCHARGE IS IN COMPLIANCE WITH THE NPDES PERMIT. (Per Compliance with NPDES (2012-2015) (Ugum SWTP) (2012-2015) (2012-2015))



NO.	DATE	DESCRIPTION	BY	REVISION
1	1/1/2012	ISSUE FOR PERMIT	SMITHBRIDGE	1
2	1/1/2012	ISSUE FOR PERMIT	SMITHBRIDGE	2
3	1/1/2012	ISSUE FOR PERMIT	SMITHBRIDGE	3

<b>SMITHBRIDGE</b>	<b>TG ENGINEERS, PC</b>
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<b>SIEMENS</b>	<b>GUAM WATERWORKS AUTHORITY</b>
Water Technology 1000 North West Street Suite 100 San Jose, CA 95131 Tel: (408) 253-1000 Fax: (408) 253-1001 www.siemens.com	GOVERNMENT OF GUAM
Project No: 021195-100 Sheet No: 1 of 1	Project Title: UGUM SURFACE WATER TREATMENT FACILITY RENOVATION/MODIFICATION PROJECT
Design No: 021195-100-001	Sheet Name: MEMCOR ES SYSTEM PROCESS FLOW DIAGRAM
Scale: AS SHOWN	Drawn By: POL2.1
Checked By: [ ]	Sheet No: [ ] of [ ]

## **Attachment D: Guam EPA CWA 401 Certification (Order #2021-06)**

### **WATER QUALITY CERTIFICATION CONDITIONS**

Through issuance of **WQC Order No. 2021-06** (Order), Guam EPA certifies it has reasonable assurance the activity under NPDES Permit No. GU0020371 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. Water quality certification is granted to the U.S. EPA, the entity seeking certification and the Guam Waterworks Authority, the applicant for the NPDES permit, subject to the conditions within this Order.

This Order does not constitute authorization of the permitted activities by any other local or federal agency or private person or entity. This Order does not excuse the permit holder from the obligation to obtain any other necessary approvals, authorizations or permits. This Order is not intended to waive or fulfill the requirement for certification with respect to any other federal license or permit required for any facility/activity covered by **NPDES** Permit No. GU002037 J.

The Guam EPA Administrator (Administrator) may, on the Administrator's own motion, or the application of any person, modify, suspend, or revoke the Order, if the Administrator determinesthat:

1. There is a violation of any condition of the Order;
2. The Order was obtained by misrepresentation, or failure to disclose fully all relevant facts;
3. There is an unreasonable or significant change in the scope of the proposed point sourcedischarge of pollutants from the Ugum SWTF. (22 GAR §5106 (1))

In accordance with 40 CFR 124.53(e)(3), Guam EPA has determined that no condition of the Ugum SWTF NPDES Permit may be made less stringent without violating requirements in Guam territorial law, including water quality standards.

#### **A. GENERAL CONDITIONS**

A 1. For purposes of this Order, the term "Project Proponent" shall mean the U.S. Environmental Protection Agency, the entity seeking certification, and its agents, assignees, and contractors.

A2. For purposes of this Order, the term "Project Proponent" shall also mean GWA, as the applicant for the NPDES permit.

A3. U.S. EPA shall enforce the effluent limits, monitoring requirements, and other conditions set forth in the Ugum SWTF NPDES permit and ensure that GWA complies with the conditions of the permit at all times. (40 CFR §121.11(c))

A4. All submittals required by this Order shall be sent to the Guam Environmental Protection Agency Attn: 401 Federal Permit Manager, Non-Point Source Program, EMAS Division, 3304

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Mariner Avenue, Bldg. 17-3304, Barrigada, Guam 96913, AND via email to [jesse.cruz@epa.guam.gov](mailto:jesse.cruz@epa.guam.gov). The submittals shall be identified with **WQC Order #2021- 06** for NPDES Permit No. 0020371, and include the certifying representative's name, title, mailing address and phone number. (§51060)(4) 2017 GWQS)

A5. As conditioned in the Ugum SWTF NPDES Permit, GWA shall submit the following monitoring documents to Guam EPA quarterly, consistent with provision A4 above.

- An electronic or paper Discharge Monitoring Report (DMR);
- Receiving water monitoring results (*Table 3: Upstream and Downstream (UR-1 and UR-2) Water Monitoring Requirements*); and
- Receiving water monitoring results at UR-1 and UR-2 for narrative water quality standards described in Part I.4. §51060)(4) 2017 GWQS

A6. GWA shall provide the coordinates of the upstream and downstream receiving watermonitoring stations (UR-1 and UR-2) to Guam EPA consistent with provision A4.

A7. U.S. EPA R-9 shall submit to Guam EPA a signed **Statement of Understanding of WaterQuality Certification Conditions**. (see Attachment A for an example) per condition A4. §5106(j)(4) 2017 GWQS

## **B. WATER QUALITY CONDITIONS**

B1. Point source discharge(s) to waterbodies under the jurisdiction of Guam EPA must be consistent with the antidegradation policy in 22 GAR §5101(b).

## **C. EMERGENCY/CONTINGENCY MEASURES:**

40 CFR Part 110, 40 CFR Part 117, or 40 CFR Part 302

C1. GWA shall develop and implement a Spill Prevention and Containment Plan.

C2. GWA shall have adequate and appropriate spill response materials on hand to respond to emergency release of oil, petroleum or any other material into waters of the territory.

C3. Any unpermitted discharge into territorial waters or onto land with a potential for entry into territorial waters, is prohibited. If this occurs, OWA 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.

C4. Compliance with this condition does not relieve GWA from responsibility to maintain continuous compliance with the terms and conditions of this Order or the resulting liability from failure to comply.

C5. 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. GWA shall provide notice to Guam EPA consistent with Condition A4:

- 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 GWA addresses environmental problems/concerns to Guam EPA's satisfaction. Guam EPA may also levy penalties and fines (10 GCA §47111). Invalidity or enforceability of one or more provisions of this certification shall not affect any other provision of this certification.