UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION IX 75 Hawthorns Street

75 Hawthorne Street San Francisco, CA 94105

AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

NPDES PERMIT NO. GU0020222

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.

Discharger Name	Guam Waterworks Authority	
Discharger Address	578 North Marine Corps Drive	
	Tamuning, Guam 96913	
Facility Name	Agat-Santa Rita Waste Water Treatment Plant	
Facility Location	Route 2 Ga'an Point	
Address	Agat, Guam 96928	
Facility Rating	Major - POTW	

Outfall	General Type of	Outfall	Outfall	Receiving Water
Number	Waste Discharged	Latitude	Longitude	
001	Secondary-Treated	13° 24' 48" N	144° 38' 30" E	Philippine Sea
	Domestic Wastewater			

This permit was issued on:	
This permit shall become effective on:	
This permit shall expire at midnight on:	
	e discharger shall submit a new application for a ion date of this permit, unless permission for a date is been granted by the Director.
Signed this day of	, <2016>, for the Regional Administrator.
	Tomás Torres, Director
	Water Division

TABLE OF CONTENTS

Part I. EFFLUENT LIMITS AND MONITORING REQUIREMENTS	33
A. Effluent Limits and Monitoring Requirements	3
B. Table 1. Effluent Limits and Monitoring Requirements – Outfall Number 001	4
C. Sampling	5
D. General Monitoring and Reporting	6
E. Receiving Water Monitoring	10
Part II. STANDARD CONDITIONS	12
Part III. SPECIAL CONDITIONS	12
A. Permit Reopener(s)	
B. Twenty-four Hour Reporting of Noncompliance	
C. Chronic Whole Effluent Toxicity (WET) Requirements	
D. Biosolids	
E. Fats Oils and Grease (FOG) Program	
F. Sanitary Sewer Overflows	23
G. Asset Management	24
Part IV. ATTACHMENTS	26
Attachment A: Standard Permit Conditions	26
A. All NPDES Permits	
B. Specific Categories of NPDES Permits	
C. Standard Conditions Established by EPA Region 9 for All NPDES Permits	
Attachment B: Definitions	20
Attachment C: Location Map	
Attachment D: Wastewater Flow Schematic	
Attachment E. Ammonia Data Log	
Attachment F. pH-Dependent Ammonia Objectives with Dilution	47

Part I. EFFLUENT LIMITS AND MONITORING REQUIREMENTS

A. Effluent Limits and Monitoring Requirements

- Effluent Limits Outfall Number 001
 The permittee is authorized to discharge secondary treated domestic wastewater in compliance with the effluent limits and monitoring requirements specified in Table 1.
 Compliance with these requirements is monitored at the effluent and influent.
- 2. The discharge of pollutants at any point other than the outfall to the Philippine Sea specifically authorized in this permit is prohibited.
- 3. The discharge of toxic substances, including, but not limited to, pesticides, heavy metals, and organic chemicals, in toxic amounts outside of the approved mixing zone is prohibited.
- 4. Except as authorized in Table 1 of this permit, the discharge shall not cause the following conditions in the receiving water outside of the approved mixing zone:
 - a. Visible floating materials, grease, oil, scum, foam and other floating material which degrades water quality or use;
 - b. Visible turbidity, deposits, or otherwise adversely affected aquatic life;
 - c. Objectionable color, odor or taste;
 - d. Conditions that are toxic or harmful to humans, animals, plants, or aquatic life;
 - e. Growth of undesirable aquatic life;
 - f. Temperature to deviate more than 1.0 degree Centigrade from ambient conditions;
 - g. Turbidity to exceed 1.0 NTU over ambient conditions;
 - h. 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. Table 1. Effluent Limits and Monitoring Requirements – Outfall Number 001

	Maximum Allowable Discharge Limits				Monitoring	
Parameter ⁽³⁾	Concentration and Loading))	Require	nents ⁽²⁾
i arameter	Average Monthly	Average Weekly	Maximum Daily	Units	Frequency	Sample Type
Flow rate	$0.75^{(4)}$	1	(1)	MGD	Continuous	Metered
Temperature	(1)	l	(1)	°C	Weekly	Discrete
	30	45	-	mg/L		
Biochemical oxygen	400	600		lbs/day	*** 11	24 hr
demand (5-day)	Average monthly percent removal shall not be less than 85%. (5)		%	Weekly	Composite	
	30	45	-	mg/L		
	400	600		lbs/day		24 hr
Total suspended solids		nonthly percent removal be less than 85%. (5)		%	Weekly	Composite
pH ⁽⁸⁾	Within 6.5	and 8.5 at	all times.	S.U.	Weekly	Discrete
Oil and grease, total recoverable	10	_	15	mg/L	Monthly	Discrete
Chlorine, Total Residual ⁽⁶⁾	_	_	301	μg/L	Monthly	Discrete
Enterococci ⁽⁷⁾	35	1	104	CFU/ 100mL	Monthly	Discrete
Ammonia (as N) ⁽⁸⁾	(1)	1	(1)	mg/L	Quarterly	24 hr Composite
Ammonia Impact Ratio ⁽⁸⁾	1.0	_	(1)	Ratio	Quarterly	Calculated
Nitrate-nitrogen	_	_	(1)	mg/L	Quarterly	24 hr Composite
Orthophosphate (PO ₄ -P)	_	_	(1)	mg/L	Quarterly	24 hr Composite
Copper	_	_	111	μg/L	Quarterly	24 hr Composite
Nickel	_	_	307	μg/L	Quarterly	24 hr Composite
Zinc	45.8	_	95.0	μg/L	Quarterly	24 hr Composite
Aluminum	_	ı	7,390	μg/L	Quarterly	24 hr Composite
Chlordane	.0022	_	.09	μg/L	Annually	24 hr Composite
Dieldrin	.00014	_	.71	μg/L	Annually	24 hr Composite

Whole Effluent	Pass ⁽⁹⁾		Pass/	Annually	24 hr
Toxicity (Chronic)	1 ass		Fail	Ailliually	Composite
Priority Pollutant		(1)	~/T	Once/permit	24 hr
Scan ⁽¹⁰⁾		, · · · · · · · · · · · · · · · · · · ·	μg/L	term	Composite

- (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. Monitoring must include a sufficiently sensitive analytical method. See section I.D. for specific requirements.
- (3) All limitations for metals are applied as total recoverable.
- (4) Flow rate limit may be revised upon completion of upgraded facility. Once construction is complete, the permittee shall notify EPA and GEPA of the completion of the upgrade and of the new treatment capacity. A revised monthly average flow limit may be adjusted to meet the average capacity. Monthly average flow limit shall be adjusted to be no greater than 1.6 MGD.
- (5) Both the influent and the effluent shall be monitored.
- (6) Total Residual Chlorine effluent limitation and effluent monitoring requirement is effective upon implementation of a disinfection system using chlorination; the permittee shall notify EPA and GEPA at least 30 days prior to operation of a disinfection system.
- (7) Enterococcus effluent limitation units are set as 30-day geometric mean, in lieu of average monthly, and instantaneous maximum, in lieu of maximum daily.
- (8) The Ammonia Impact Ratio (AIR) is calculated as the ratio of the ammonia value in the effluent and the applicable ammonia standard from section 5103.C.3. in the Guam WQS multiplied by the dilution factor. See Attachment E for a sample log to help calculate and record the AIR values and Attachment F for pH-dependent, dilution-adjusted water quality objectives. The AIR is the ammonia effluent limit and must be reported in the DMRs in addition to the ammonia and pH values. Monitoring for pH and ammonia must be conducted concurrently in order for the AIR to be calculated properly.
- (9) All chronic WET tests must be "Pass", and no test may be "Fail". "Pass" constitutes a rejection of the null hypothesis. See section III.C. for specific requirements.
- (10) For a listing of all priority toxic pollutants see 40 CFR 131.36. Priority Toxic Pollutants Scan shall be conducted on the fourth year of the permit term and concurrent with whole effluent toxicity test.

C. Sampling

- 1. Samples and measurements shall be representative of the volume and nature of the monitored discharge.
- 2. Samples shall be taken at the following locations:
 - a. Influent samples shall be taken after the last addition to the collection system and prior to inplant return flow and the first treatment process.

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

D. 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 or the amount of the pollutant is high enough that the method detects and quantifies the level of pollutant in the discharge. 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). See Attachment B for clarification on definition of MDL and ML.
- 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 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, 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*).

Refer to Attachment B for further clarification on definitions of NODI(B) and 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. 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. 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. Monthly DMR forms shall be submitted by the 28th day of the month following the previous reporting period. DMRs shall be reported quarterly. For example, the three DMR forms for January, February, and March are due on April 28th. Monitoring and reporting schedules are as follows:

Sampling Frequency	Monitoring Period Begins On	Monitoring Period	DMR Due Date
Continuous	Permit effective date	Continuous	28 th day of the month following calendar quarter.
Once/Day	Permit effective date	Midnight through 11:59 p.m.	28 th day of the month following calendar quarter.
Once/Week	Permit effective date	Sunday through Saturday	28 th day of the month following calendar quarter.

Once/Month	Permit effective date	First day of the calendar month through last day of the calendar month	28 th day of the month following calendar quarter.
Once/Quarter	Closest of January 1, April 1, July 1, or October 1 following (or on) permit effective date	January 1 through March 31 April 1 through June 30 July 1 through September 30 October 1 through December 31	28 th day of the month following calendar quarter
Once/Year	January 1 following permit effective date	January 1 through December 31	January 28, each year

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.

- 8. The permittee shall electronically submit compliance monitoring data and reports using the electronic reporting tools provided by EPA Region 9 (NetDMR and NeT). Reports shall also be sent to Guam EPA (Maricar.Queznon@epa.guam.gov). The reports that must be electronically reported using NetDMR and NeT are:
 - Discharge Monitoring Reports (DMRs); and
 - Biosolids/Sewage Sludge Report.

NetDMR is accessed from the internet at http://www.epa.gov/netdmr and NeT is accessed from the internet at http://www.epa.gov/compliance/national-pollutant-discharge-elimination-system-npdes-electronic-reporting-tool-net-fact.

- **9.** The permittee may seek an electronic reporting waiver from EPA Region 9. To obtain an electronic reporting waiver, a permittee must first submit an electronic reporting waiver request to EPA Region 9 (see address below). The waiver request should contain the following details:
 - Facility name;
 - NPDES permit number (if applicable);
 - Facility address;
 - Name, address and contact information for the owner, operator, or duly authorized facility representative; and
 - Brief written statement regarding the basis for claiming such a temporary waiver.

EPA Region 9 will either approve or deny this electronic reporting waiver request within 120 days. The duration of a temporary waiver may not exceed 5 years, which is the normal period for an NPDES permit term. The permittee must re-apply for a new temporary waiver after the temporary waiver expires. Approved electronic

reporting waivers are not transferrable. Only permittees with an approved reporting waiver request may submit monitoring data and reports on paper to EPA Region 9 for the period that the approved reporting waiver request is effective.

Permittees with an approved and effective electronic reporting waiver must submit monitoring data and reports to EPA Region 9 using the address below. These submissions must use the forms provided by EPA Region 9 and must be submitted to EPA and Guam EPA in accordance with the section 7 above. The permittee must sign and certify all submissions in accordance with the requirements of Part V.A.1.k. of this permit ("Signatory Requirement"). The permittee must submit the legible originals of these documents to the EPA Region 9 at the following address:

EPA REGION 9 NPDES Data Team (ENF 4-1) 75 Hawthorne Street San Francisco, CA 94105

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

E. Receiving Water Monitoring

The permittee may conduct receiving water monitoring in conjunction with the Navy. Receiving water monitoring must be conducted to apply for new and existing dilution credit in future permit issuances. In order to apply for dilution, the permittee shall collect quarterly monitoring samples at Tipalao Bay 1 ("TB1"), TB2, and TBC. The locations of each of the monitoring stations are listed below:

Table 2. Receiving Water Monitoring Locations.

Station Name	Description
Tipalao Bay 1 (TB1)	120-130 feet south of the discharge
Tipalao Bay 2 (TB2)	120-130 feet north of the discharge
Tipalao Bay Control (TBC)	At least 1,000 meters southeast of
	Outfall 001, or outside of Tipalao Bay.

Monitoring at each location shall include at least one surface, one mid-depth, and one bottom grab. All samples shall be water column samples; surface and bottom grabs shall be within two meters of the surface and sea floor, respectively. Pollutants with effluent limits that currently incorporate dilution include: copper, nickel and aluminum. Receiving water whole effluent toxicity monitoring is not required in order to receive dilution credit.

The permittee shall retain and submit all receiving water monitoring data as part of the next permit application package. Receiving water data shall also be made available upon request by EPA or Guam EPA.

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)

- 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.
- 2. In accordance with 40 CFR 122.44(c), EPA may promptly modify or revoke and reissue any permit issued to a treatment works treating domestic sewage (including "sludge only facilities") to incorporate any applicable standard for sewage sludge use or disposal promulgated under section 405(d) of the CWA, 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.

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 and 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 oral notification by 9 a.m. Chamorro Standard Time on the first business day following the noncompliance. The permittee shall notify EPA and Guam EPA at the following telephone numbers:

U.S. Environmental Protection Agency Wastewater Section, Enforcement Division (ENF-3-1) (415) 972-3577

Guam Environmental Protection Agency Administrator (671) 475-1658

The permittee shall follow up with a written submission within five days of the time the permittee becomes aware of noncompliance. 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.

- 2. The following shall 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.
- 3. EPA may waive the written report of noncompliance on a case-by-case basis, if the oral report has been received within 24 hours. The report of noncompliance requirement may be superseded by an explicit agreement with EPA as part of ongoing enforcement work.

C. Chronic Whole Effluent Toxicity (WET) Requirements

1. Monitoring Frequency

The permittee shall conduct a yearly static non-renewal toxicity test with the purple sea urchin, *Strongylocentrotus purpuratus* (Fertilization Test Method 1008.0). The permittee shall attempt to ensure a total holding time from collection of the last portion of the composite sample until arrival at the laboratory of not more than 36 hours. In according with an internal EPA memo on toxicity hold time for the pacific islands, however EPA is allowing an extension to the Permittee of the holding time due to the difficulty in getting samples from Guam to an approved laboratory. The extended holding time shall not exceed 72 hours.

2. Marine and Estuarine Species and Test Methods

Species and short-term test methods for estimating the chronic toxicity of NPDES effluents using the purple sea urchin are found in the first edition of *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; methods manual) and applicable water quality standards; also see 40 CFR Parts 122.41(j)(4) and 122.44(d)(1)(iv) and 40 CFR Part 122.21(j)(5)(viii) for POTWs.

3. "Pass" or "Fail" Determination

The permittee shall use an Instream Waste Concentration (IWC) of 2.5 percent effluent for chronic toxicity testing. This is based on the amount of dilution determined available in the receiving water (39.2:1). To calculate either "Pass" or "Fail", the permittee shall follow the instructions in National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document, Appendix A (EPA 833-R-10-003, 2010). For any one toxicity test, the WET permit limit that must be met is rejection of the null hypothesis (Ho): IWC (2.5 percent effluent) mean response $\leq 0.75 \times$ Control mean response A test result that rejects the null hypothesis is reported as "Pass" on the DMR form. A test result that does not

reject this null hypothesis is reported as "Fail" on the DMR form. If a test result is reported as "Fail", then the permittee shall follow the Accelerated Toxicity Testing and TRE/TIE Process, below, of this permit.

4. 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 IWC (for statistical flowchart and procedures, see *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document*, Appendix A, Figure A-1).
- 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). 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.

5. 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).

6. Accelerated Toxicity Testing and TRE/TIE Process

- a. If the chronic WET permit limit or trigger is exceeded and the source of toxicity is known (e.g., a temporary plant upset), then the permittee shall conduct one additional toxicity test using the same species and test method. This toxicity test shall begin within 14 days of receipt of a test result exceeding the chronic WET permit limit or trigger. If the additional toxicity test does not exceed the chronic WET permit limit or trigger, then the permittee may return to the regular testing frequency.
- b. If the chronic WET permit limit or trigger is exceeded and the source of toxicity is not known, then the permittee shall conduct six additional toxicity tests using the same species and test method, approximately every two weeks, over a 12-week period. This testing shall begin within 14 days of receipt of a test result exceeding the chronic WET permit limit or trigger. If none of the additional toxicity tests exceed the chronic WET permit limit or trigger, then the permittee may return to the regular testing frequency.

- c. If one of the additional toxicity tests (in paragraphs 6.a or 6.b) exceeds the chronic WET permit limit or trigger, then, within 14 days of receipt of this test result, 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.
- d. 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 report on the DMR for the month in which the toxicity test was conducted: "Pass" or "Fail" (based on the Welch's t-test result) and the calculated "percent mean response at IWC", where:

percent mean response at IWC = ((Control mean response – IWC mean response) \div Control mean response)) \times 100

- b. 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.
- 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.

D. Biosolids

"Biosolids" means non-hazardous sewage sludge, as defined in 40 CFR 503.9. Sewage sludge that is hazardous, as defined in 40 CFR 261, must be disposed of in accordance with the Resource Conservation and Recovery Act.

1. General Requirements

- a. All biosolids generated by the permittee shall be used or disposed of in compliance with the applicable portions of:
 - (1) 40 CFR 503 for biosolids that are land applied, placed in a surface disposal site (dedicated land disposal site, monofill, or sludge-only parcel at a municipal landfill), or incinerated;
 - (2) 40 CFR 258 for biosolids disposed of in a municipal solid waste landfill (with other material);
 - (3) 40 CFR 257 for all biosolids use and disposal practices not covered under 40 CFR 258 or 503.

40 CFR 503, Subpart B (land application) sets requirements for biosolids that are applied for the purpose of enhancing plant growth or for land reclamation. 40 CFR 503, Subpart C (surface disposal) sets requirements for biosolids that are placed on the land for the purpose of disposal.

The permittee is responsible for assuring that all biosolids produced at its facility are used or disposed of in accordance with these rules, whether the permittee uses or disposes of the biosolids, itself, or transfers the biosolids to another party for further treatment, use, or disposal. The permittee is responsible for informing subsequent preparers, appliers, and disposers of the requirements that they must meet under these rules.

- b. Duty to mitigate: The permittee shall take all reasonable steps to prevent or minimize any biosolids use or disposal which has a likelihood of adversely affecting human health or the environment.
- c. No biosolids shall be allowed to enter wetlands or other waters of the United States.
- d. Biosolids treatment, storage, use, or disposal shall not contaminate groundwater.
- e. Biosolids treatment, storage, use, or disposal shall not create a nuisance such as objectionable odors or flies.

- f. The permittee shall assure that haulers transporting biosolids off site for treatment, storage, use, or disposal take all necessary measures to keep the biosolids contained. All haulers must have spill clean-up procedures. Trucks hauling biosolids that are not classified as Class A, as defined at 40 CFR 503.32(a), shall be cleaned as necessary after loading and after unloading so as to have no biosolids on the exterior of the truck body or wheels. Trucks hauling biosolids that are not Class A shall be tarped. Trucks hauling biosolids that are not Class A may not be used for hauling food or feed crops after unloading the biosolids, unless the permittee submits, for EPA approval, a hauling description of how trucks will be thoroughly cleaned prior to adding food or feed.
- g. If biosolids are stored over two years from the time they are generated, then the permittee must ensure compliance with all surface disposal requirements under 40 CFR 503, Subpart C, or must submit a written notification to EPA and Guam EPA with the information under 40 CFR 503.20(b) demonstrating the need for longer temporary storage. During temporary storage (of any length of time) for biosolids that are not Class A, whether on the facility site or off-site, adequate procedures must be taken to restrict public access and access by domestic animals.
- h. Any biosolids treatment, disposal, or storage site shall have facilities adequate to: divert surface runoff from adjacent areas, protect the site boundaries from erosion, and prevent any conditions that would cause drainage from the materials at the site to escape from the site. Adequate protection is defined as protection from at least a 100-year storm event and from the highest tidal stage that may occur.

2. Inspection and Entry

The EPA, Guam EPA, or an authorized representative thereof, upon presentation of credentials, shall be allowed by the permittee, directly or through contractual arrangements with their biosolids management contractors, to:

- a. Enter upon all premises where biosolids produced by the permittee are treated, stored, used, or disposed of, either by the permittee or another party to whom the permittee transfers the biosolids for treatment, storage, use, or disposal;
- b. Have access to and copy any records that must be kept under the conditions of this permit or 40 CFR 503, by the permittee or another party to whom the permittee transfers the biosolids for further treatment, storage, use, or disposal; and
- c. Inspect any facilities, equipment (including monitoring and control equipment), practices, or operations used in biosolids treatment, storage, use, or disposal by the permittee or another party to whom the permittee transfers the biosolids for treatment, use, or disposal.

3. Monitoring

- a. Biosolids shall be monitored for the following constituents, at the frequency specified in paragraph 3.b: arsenic, cadmium, chromium, copper, lead, mercury, molybdenum, nickel, selenium, zinc, organic nitrogen, ammonia-nitrogen, and total solids. This monitoring shall be conducted using the methods in Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (EPA publication SW-846), as required in 40 CFR 503.8(b)(4). All results must be reported on a 100% dry weight basis. Records of all analyses must state on each page of the laboratory report whether the results are expressed in "100% dry weight" or "as is".
- b. The constituents in paragraph 3.a shall be monitored at the following frequency, based on the volume of sewage solids generated per year:

Volume Generated (dry metric tons per year)	Monitoring Frequency *
>0 - <290	Once per year
290 - <1,500	Four times per year
1,500 - <15,000	Six times per year
≥15,000	12 times per year

^{*} If biosolids are removed for use or disposal on a routine basis, then monitoring should be scheduled at regular intervals throughout the year. If biosolids are stored for an extended period of time prior to use or disposal, then monitoring may occur either at regular intervals, or prior to use or disposal corresponding to tonnage accumulated during the period of storage.

c. Class 1 facilities (facilities with pretreatment programs or other facilities designated as Class 1 by the Regional Administrator) and Federal facilities with >5 mgd influent flow shall sample biosolids twice per year for pollutants listed under CWA section 307(a), using best practicable detection limits. Although the permittee is required to implement a pretreatment program due to the size of GWA's combined system, bi-annual biosolids sampling is required only for facilities receiving waste streams from industrial users.

4. Landfill Disposal

Biosolids placed in a municipal landfill shall be tested by the Paint Filter Liquids Test (Method Number 9095 in SW-846) at the frequency indicated in paragraph 3.b, above, or more often if necessary, to demonstrate that there are no free liquids.

The permittee must dispose of biosolids in a municipal landfill and is not permitted to land apply or surface dispose of biosolids without further authorization.

5. Notification and Reporting

- a. The permittee, either directly or through contractual arrangements with their biosolids management contractors, shall comply with the following notification requirements:
 - (1) Notification of noncompliance: The permittee shall notify EPA and Guam EPA of any noncompliance within 24 hours, if the noncompliance may seriously endanger health or the environment. For other instances of noncompliance, the permittee shall notify EPA and Guam EPA, in writing, within five working days of becoming aware of the noncompliance. The permittee shall require their biosolids management contractors to notify EPA and Guam EPA of any noncompliance within these same timeframes.
- b. The permittee shall submit an annual Biosolids/Sewage Sludge Report to the EPA Region 9 Biosolids Coordinator and Guam EPA by February 19 of each year for the period covering the previous calendar year, in accordance with section .I.D.8., General Monitoring and Reporting, of this permit. This report shall include:
 - (1) The amount of biosolids generated that year and the amount of biosolids accumulated from previous years, in dry metric tons.
 - (2) Results of all pollutant monitoring required in the Monitoring section, above, reported on a 100% dry weight basis.
 - (3) Demonstrations and certifications of pathogen reduction methods and vector attraction reduction methods, as required in 40 CFR 503.17 and 503.27.
 - (4) Names, mailing addresses, and street addresses of persons who received biosolids for storage, further treatment, or disposal in a municipal waste landfill, or for other use or disposal methods not covered above, and the tonnages delivered to each.

E. Fats Oils and Grease (FOG) Program

The permittee shall develop and implement a comprehensive FOG Program to implement and enforce grease control measures. The measures shall be applied across all collection systems owned and operated by the permittee. The FOG Program documentation shall be available to EPA and Guam EPA upon request. At a minimum, the permittee shall conduct the following:

1. Ordinance.

The permittee shall ensure municipal ordinances are in place to control FOG. At a minimum, the ordinance shall specify:

- a. Allowable types of connections;
- b. Suitable uses of the equipment;

- c. Appropriate sizing criteria;
- d. Proper sampling box installation; and
- e. Minimum schedules for cleaning.

2. Baseline Assessment.

The permittee shall ensure a baseline assessment of all known SSOs over a 10 year period has been conducted by evaluating work orders, complaints and local knowledge of sewer blockages to identify geographical areas of repeated problems for FOG discharges. These areas shall be prioritized for outreach, inspections, and enforcement. The permittee shall supplement the Baseline Assessment by TV/video inspection of sewer mains. The areas where sewer lines are found to contain visible accumulations of fats, oils and grease shall be prioritized for outreach, inspections, and enforcement. At each location where fats, oils, and grease are identified in the sewer lines, the permittee shall implement a targeted strategy to identify, inspect, and monitor the establishments discharging FOG to the sewer system.

3. Food Service Establishment Database within priority areas.

The permittee shall maintain a database of Food Service Establishments (FSE) discharging to the sewer system that are upgradient of the priority areas identified in the Baseline Assessment. FSEs include any facility preparing and/or serving food for commercial use or sale, such as restaurants, cafes, lunch counters, cafeterias, hotels, hospitals, convalescent homes, factory or school kitchens, catering kitchens, bakeries, grocery stores with food preparation, food packaging, meat cutting and preparation (excluding grocery stores with only food warming operations), and meat packing facilities. The database shall include, at a minimum:

- a. FSE name, address, phone number, and manager name;
- b. Property owner, address, and phone number;
- c. Type of food served;
- d. Health Department license number;
- e. Monthly average water use;
- f. Seating capacity or approximate number of employees;
- g. Type of grease removal equipment and capacity;
- h. Current FOG disposal method;
- i. Name of contracted grease hauler;
- j. Interceptor cleaning frequency;
- k. Dates of GWA inspections;
- 1. Results of GWA inspections;
- m. History of compliance;
- n. Outreach program; and
- o. Other information, as necessary.

The permittee shall update the database annually.

4. Outreach Program

- a. The permittee shall conduct an outreach program to FSEs, restaurant associations, grease haulers, grease recyclers, and any municipal agencies that are responsibilities for controlling FOG. The outreach materials should include, at a minimum:
 - i. Acceptable FOG handling and disposal practices;
 - ii. Required operation and maintenance of grease traps;
 - iii. FOG disposal and/or recycling methods; and
 - iv. Instructions on how to properly operate and maintain grease traps and interceptors.
- b. The permittee shall conduct an outreach program to all residential customers explaining the proper disposal of oil and greases and the negative impacts from dumping grease down the drain. Outreach shall consist of, at a minimum:
 - i. Leaflet materials with water bills and/or sewer bills which describe measures to control and properly dispose of FOG wastes;
 - ii. Doorhangers distributed to all residences within 1,000 feet of any identified SSO;
 - iii. Materials on GWA's website; and
 - iv. Public service announcement or other methods of outreach to specific communities, especially priority and hotspot areas previously identified.

5. Inspection Program

The permittee shall maintain an inspection program to evaluate, track and enforce its ordinance to control FOG. The inspection program shall, at a minimum, include:

- a. An inspection protocol to inspect priority areas and areas of known SSOs. Inspection may be coordinated with Health Department Inspections.
- b. A standard inspection checklist form to be used by GWA.
- c. A training program for GWA FOG inspectors.
- d. A formal enforcement response plan, including Education, Verbal Warning, Follow-up Inspections, Notice of Violation, Administrative Fines, Reinspection Fees, Violations, Cost Recovery for GWA-provided clean-ups and/or termination of water/wastewater service.

6. Annual Report

The permittee shall provide an annual report to EPA by February 19 of each year for the period covering the previous calendar year. This report may be combined with the FOG reports from other facilities and include, at a minimum:

- a. A copy of updated FSE database;
- b. A description of SSOs or sewage clogging and area prioritization;
- c. A summary of outreach performed;
- d. A summary of inspection reports;
- e. A discussion of the budget and staffing levels for the previous and current years; and
- f. An analysis of the program's performance over the past year, including, but not limited to, the reduced number of sewer blockages and SSOs, improved POTW performance, and any reduction in the number of collection system hot spots.

F. Sanitary Sewer Overflows

- 1. A Sanitary Sewer Overflow (SSO) is an overflow, spill, release, or diversion of wastewater from a sanitary sewer collection system designed to carry only sewage and prior to reaching the treatment plant. Sanitary sewer overflows include a) overflows or releases of wastewater that reach waters of the US, b) overflows or releases of wastewater that do not reach waters of the US, and c) wastewater backups into buildings that are caused by blockages or flow conditions in a sanitary sewer other a building lateral. SSOs are generally caused by high volumes of infiltration and inflow (I/I), pipe blockages, pipe breaks, power failure, and insufficient system capacity.
- 2. All Sanitary Sewer Overflows are prohibited as unauthorized discharges from the collection system.
- 3. Sanitary Sewer Overflow identification: The permittee shall identify all wastewater discharges, at locations not authorized as permitted outfalls, that occur prior to the headworks of the wastewater treatment plant covered by this permit. The permittee shall submit, with the scheduled DMR Form, the following information for each discharge event at each source that occurs during the reporting period covered by the DMR Form:
 - a. The cause of the discharge;
 - b. Duration and volume (estimate, if unknown);
 - c. Description of the source (e.g., manhole cover, pump station, etc.);
 - d. Type of collection system that overflowed (i.e., combined or separate);
 - e. Location by street address, or any other appropriate method;
 - f. Date(s) and time(s) of event;

- g. The ultimate destination of the flow, e.g., surface water body, land use location, via municipal separate storm sewer system to a surface water body (show location on a USGS map or copy thereof); and
- h. Corrective action taken and steps taken or planned to eliminate reoccurrence of discharge.

The permittee shall refer to Part III.B of this permit which contains information about reporting unpermitted discharge events. 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.

G. Asset Management

The permittee shall develop an asset management program to cover all wastewater assets owned by the permittee, including wastewater treatment plants and collection system assets. The permittee shall:

- 1. Procure, populate, and utilize asset management and/or work order management software within two years of permit issuance. The software shall:
 - a. Inventory all critical assets valued over \$5,000 into a single database. Assets may include, but are not limited to, sewer lines, manholes, outfalls, pump stations, force mains, catch basins, and wastewater treatment facility assets. Each entry shall include:
 - (1) Name and identification number.
 - (2) Location (GPS coordinate or equivalent identifier).
 - (3) Current performance/condition.
 - (4) Purchase and installation date.
 - (5) Purchase price.
 - (6) Replacement cost.
 - (7) Quantitative consequence of failure.
 - (8) Quantitative likelihood of failure.
 - b. Automate work order production and tracking.
 - c. Prioritize system maintenance and rehabilitation projects.
- 2. Create and submit to EPA an Asset Management Plan ("AMP") within three years of permit issuance. The AMP shall be updated and re-evaluated every five years. The components of the AMP shall include:
 - a. **Rehabilitation and Replacement Plan**. The plan shall identify and prioritize upcoming asset rehabilitation and replacement projects costing greater than \$5,000 and outline a proposed schedule for completion of each project.

- b. **Maintenance Plan**. The plan shall identify individual or categories of maintenance activities and frequency with which they are performed. The plan shall estimate ongoing and projected cost of maintenance activities.
- c. **System Map**. A sewer collection system map shall incorporate assets from the asset management inventory. The map shall be color-coded to identify maintenance and rehabilitation priorities.
- d. **Funding**. The plan shall create an accounting of current and projected funding sources, relevant expenses and financial reserves. Expenses may include operational, administrative, interest, or capital expenses. Funding sources may include federal, state, local or private grants, loans, or bonds, as well as connection and user fees.
- e. **System Projections**. Evaluate growth projections of population and service area and potential vulnerabilities resulting from climate change over the next 30 years.

Part IV. ATTACHMENTS

Attachment A: Standard Permit Conditions

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.

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.

- (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 note 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.
- 1. Reporting requirements; at 40 CFR 122.41(1).

- (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. Specific Categories of NPDES Permits

In accordance with 40 CFR 122.42, the following conditions, in addition to those set forth at 40 CFR 122.41, apply to all NPDES permits within the category specified below and are expressly incorporated into this permit.

- a. Publicly owned treatment works; at 40 CFR 122.42(b).
 - (1) All POTWs must provide adequate notice to the Director of the following:
 - (1) Any new introduction of pollutants into the POTW from an indirect permittee which would be subject to section 301 and 306 of the CWA if it were directly discharging those pollutants; and

- (2) Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
- (3) For purposes of this paragraph, adequate notice shall include information on (i) the quality and quantity of effluent introduced into the POTW, and (ii) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.
- (2) The following condition has been established by EPA Region 9 to enforce applicable requirements of the Resource Conservation and Recovery Act. Publicly owned treatment works may not receive hazardous waste by truck, rail, or dedicated pipe except as provided under 40 CFR 270. Hazardous wastes are defined at 40 CFR 261 and include any mixture containing any waste listed under 40 CFR 261.31 through 261-33. The Domestic Sewage Exclusion (40 CFR 261.4) applies only to wastes mixed with domestic sewage in a sewer leading to a publicly owned treatment works and not to mixtures of hazardous wastes and sewage or septage delivered to the treatment plant by truck.

C. 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. 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.

- 4. 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.

5. 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. (1) Change the construction schedule for a permittee which is a new source. No such change shall affect a permittee'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.
- 6. 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 40 CFR 122.22, as appropriate (or State procedures equivalent to 40 CFR 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.
- 7. 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.

8. 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.

9. 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.

10. 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.

11. 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.

12. 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 selfmonitoring 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:

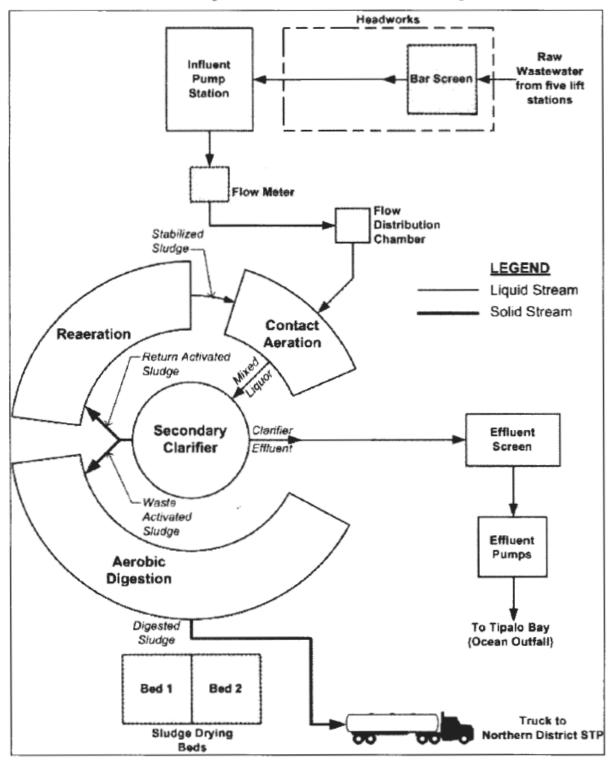
- a. For metals, due to laboratory calibration practices, calculated MLs may be rounded to the nearest whole number.
- b. For non-metals, because analytical instruments are generally calibrated using the ML as the lowest calibration standard, the calculated ML is then rounded to the nearest multiple of $(1, 2, \text{ or } 5) \times 10$ n, where n is zero or an integer. (For example, if an MDL is $2.5 \,\mu\text{g/l}$, then the calculated ML is: $2.5 \,\mu\text{g/l} \times 3.18 = 7.95 \,\mu\text{g/l}$. The multiple of $(1, 2, \text{ or } 5) \times 10$ n nearest to 7.95 is $1 \times 101 = 10 \,\mu\text{g/l}$, so the calculated ML, rounded to the nearest whole number, is $10 \,\mu\text{g/l}$.)
- 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.
- 13. A "POTW" means a treatment works as defined by section 212 of the Clean Water Act, which is owned by a State or municipality (as defined by section 502(4) of the Act). The definition includes any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage or industrial wastes of a liquid nature. It also includes sewers, pipes and other conveyances only if they convey wastewater to a POTW Treatment Plant. The term also means the municipality as defined in section 502(4) of the Act, which has jurisdiction over the Indirect Discharges to and the discharges from such treatment works.

Attachment C: Location Map

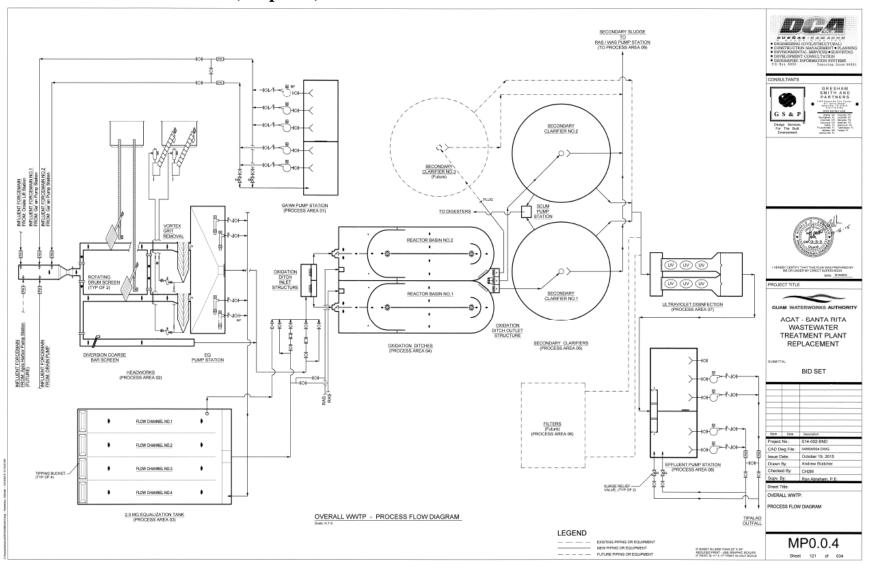


Attachment D: Wastewater Flow Schematic (Existing)

Agat-Santa Rita STP Schematic Flow Diagram



Wastewater Flow Schematic (Proposed)



Attachment E. Ammonia Data Log

A	В	C	E	F
Date of Sample	Ammonia Concentration In Effluent (mg/L N)	Effluent pH (s.u.)	Ammonia Objective with Dilution. (From Attachment F)	Ammonia Impact Ratio (AIR) (Column B
	(g, 2 1 1)		,	/Column E)

Please copy and complete for each quarter of each year for the permit term. Permittee may sample more frequently and record any additional results. Attach any additional pages as necessary.

Attachment F. pH-Dependent Ammonia (as N) Objectives with Dilution.

pН	Objective	Objective with
		39.2:1 Dilution
6.5	3.48	140
6.6	3.43	138
6.7	3.36	135
6.8	3.29	132
6.9	3.19	128
7	3.08	124
7.1	2.96	119
7.2	2.81	113
7.3	2.65	107
7.4	2.47	99.3
7.5	2.28	91.6
7.6	2.08	83.4
7.7	1.87	75.1
7.8	1.66	66.8
7.9	1.46	58.7
8	1.27	51.1
8.1	1.09	44.0
8.2	0.94	37.6
8.3	0.80	32.0
8.4	0.67	27.1
8.5	0.57	22.9